

Santa Clara Valley Urban Runoff Pollution Prevention Program

Statement of Qualifications
to Design, Review and/or Certify
Storm Water Treatment
Measures and Hydromodification
Control Facilities

SUBMITTED TO:

Vishakha Atre
Santa Clara Valley Urban Runoff Pollution
Prevention Program (SCVURPPP)
1021 S. Wolfe Rd., Suite 185
Sunnyvale, CA 94086

August 16, 2024

P2644.000.0000

ENGEO
— Expect Excellence —

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Project No.
P26440.000.000

August 16, 2024

Vishakha Atre
Santa Clara Valley Urban Runoff Pollution Prevention Program
1021 S. Wolfe Road, Suite 185
Sunnyvale, CA 94086

Subject: Santa Clara Valley Urban Runoff Pollution Prevention Program
Storm Water Treatment Measures and Hydromodification Control Facilities

TRANSMITTAL LETTER

Dear Vishakha Atre:

We are pleased to present the following statement of qualifications to remain on the Qualified Consultants List and continue to provide the necessary services to design or review of proposed stormwater treatment measures and hydromodification control facilities for new development and redevelopment projects, and/or to inspect these facilities during and after installation.

We have provided numerous third-party review services for stormwater compliance in the SCVURPPP service area since 2006, and routinely provide similar services in other regions throughout Northern and Southern California.

We have updated the section titled "Key Personnel" in the following SOQ to reflect recent changes in our team since our last submittal.

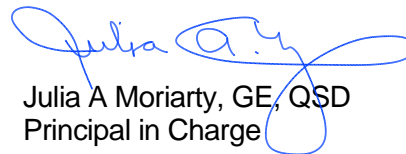
We look forward to our continued SCVURPPP involvement in the future. As I remain the primary contact for the program, please call me at (925) 570-7980 or e-mail me at jbuck@engeo.com if you have any questions.

Sincerely,

ENGEO Incorporated



Jonathan D. Buck, GE, LEED AP, QSD
Project Manager



Julia A Moriarty, GE, QSD
Principal in Charge

FIRM CONTACT INFORMATION

ENGEО is an employee-owned, award-winning firm of geotechnical and civil engineers, geologists, hydrologists, environmental scientists, construction quality assurance representatives, and laboratory testing specialists. Founded in 1971, our offices are located in California, Nevada, Washington, Guam, New Zealand, and Australia.

ENGEО HEADQUARTERS

2010 Crow Canyon Place, Suite 250
San Ramon, CA 94583
(925) 866-9000 phone
www.engeo.com

LOCAL OFFICE LOCATION

2350 Mission College Blvd, Suite 800
Santa Clara, CA 95054
(925) 866-9000 phone
www.engeo.com

PRIMARY CONTACT PERSON

Jonathan Buck, GE, LEED AP, QSD
Associate
2010 Crow Canyon Place, Suite 250
San Ramon, CA 94583
(925) 570-7980
jbuck@engeo.com

KEY PERSONNEL

We have assembled a team of key personnel with proven experience on similar projects. Our staff of professionals has the necessary qualifications based on education, training, and experience to meet the requirements and scope of work identified in the RFQ. We maintain a flexible staff and have available resources to handle any size of project. While this contract will be managed from our Santa Clara office, we can mobilize staff from any of our other nearby offices, including San Ramon, Oakland, San Francisco, and Lathrop to meet your needs. The following pages present brief bios of our key personnel.





JONATHAN BUCK, GE, LEED AP, QSD
ASSOCIATE ENGINEER

ROLE: Project Manager and Client Contact

Jon brings more than 25 years of experience in the civil engineering industry related to geotechnical and water resources engineering. He specializes in stormwater and erosion control management, creek stabilization and restoration, geomorphology of creek bed and banks, geotechnical feasibility of earth dams and engineered slopes, deep foundation systems for bridge structures, hydrologic analysis of watersheds and wetlands, and complex permitting and regulatory issues.

Jon is a recognized authority on Low Impact Development Standards, Stormwater Quality Design Manuals, and BMPs. He has been involved in the design, construction, and modeling of low-impact development stormwater management best management practices since 2002 and has been involved in the negotiation and development of construction standards for these types of landscape features with various Regional Water Quality Control Boards. He has worked with the San Francisco Bay Regional Water Quality Control Board to verify the efficacy of several modeling methods used in hydromodification management in RWQCB Region 2, where these standards first began in the State of California. He also continues to work in RWQCB regions outside of Region 2 to assess the feasibility of new standards in regard to infiltration feasibility and hydro modification risk. He has been providing third-party stormwater review services for San Francisco Bay Area cities since 2006.

EDUCATION

MS Civil Engineering
Arizona State University
2002

BS Civil Engineering
Arizona State University
2001

BS Urban Planning
Arizona State University
1992

**REGISTRATIONS &
CERTIFICATIONS**

Geotechnical Engineer,
CA-GE 2958

Civil Engineer, CA-CE
67302

CASQA QSD Certified, CA
00230

LEED AP, CA

TRAINING COMPLETED

- American Society of Civil Engineers, Low Impact Development Applications for Water Resources Management, 2022
- Santa Clara Valley Urban Runoff Pollution Prevention Program Annual C3 Workshop, April 2023
- Stormwater University, Climate Change Impacts to Stormwater, 2022
- Stormwater University, New Institutional Stormwater Permitting Requirements for California Watersheds
- CASQA QSD/P Certification Training and Biennial Renewals (2009 CGP and 2022 CGP)



JULIA MORIARTY, GE, QSD
PRINCIPAL

ROLE: Principal in Charge

Since joining ENGEO in 1994, Julia has been providing technical input and oversight for geotechnical design, mitigation, and implementation of geotechnical parameters; field recommendations; technical reviews; and project management for master-planned, mixed-use, and residential developments, as well as infrastructure, transportation, energy, and flood control developments. Julia has been reviewing third party stormwater management compliance letters for the SCVURPPP agency since 2012.

EDUCATION

BS Civil Engineering
California State University,
Chico 1994

REGISTRATIONS & CERTIFICATIONS

Geotechnical Engineer,
CA-GE 2679
Civil Engineer, CA-CE
58128
CASQA QSD/P Certified,
CA 00210

She has been the lead geotechnical and stormwater consultant for several large projects that have collectively included more than 100 million cubic yards of earthwork; hundreds of miles of roadway/utility improvements; public infrastructure, including water tanks, bridges, tunnels, detention basins, and infiltration ponds; military base reuse projects; golf courses with associated lakes, cart bridges and tunnels, and maintenance and clubhouse facilities; commercial and retail centers; community centers; and public buildings, including police and fire stations.

TRAINING COMPLETED

- CASQA QSD/P Certification Training and Biennial Renewals (2009 CGP and 2022 CGP)

PROOF OF TRAINING

We have included the proof of training documents in the Appendix.

URBAN STORMWATER MANAGEMENT UNDERSTANDING

We are a recognized leading authority in the practical implementation of the construction and post-construction stormwater management in the Regional Water Quality Control Board, Region 2 area as well as areas outside of the San Francisco Bay region. We stay well informed of the constantly evolving regulatory requirements surrounding federal and state permitting compliance for surface water management and wetlands mitigation issues and offer seminars to keep our staff and clients aware of potential developments.

Our comprehensive post-construction stormwater management services include best management practice design and implementation. Stormwater experience and capabilities include:

- Expertise with bioretention cells, water quality and detention ponds, and infiltration devices.
- Design and implementation of permeable pavements, including porous cement concrete, pervious asphalt concrete, interlocking pavers, and paver blocks.

- Design and implementation of Silva Cells and proprietary technologies that can be used for certain Special Projects.
- Working closely with Regional Water Quality Control Board staff and local officials to assess geotechnical issues that may constrain the implementation of post-construction stormwater facilities for certain sites. Our licensed geotechnical and geologic professionals are uniquely qualified for this purpose.
- Closely following changes to the current San Francisco Bay Municipal Regional Permit (Order No. R2-2022-0018) which was recently updated in May 2022 from the former MRP issued in 2015. This permit provides a framework for stormwater management requirements in the San Francisco Bay region and may be slightly modified to meet SCVURPPP objectives. The changes for implementation of stormwater management measures became effective for new projects starting July 1, 2023. The permit was also amended in October 2023 for items related to stormwater management.

HYDROMODIFICATION CONTROL MEASURES UNDERSTANDING

Continuous simulation modeling (CSM) is often used to demonstrate the adequacy of the sizing of Best Management Practice Water Quality and Hydromodification Management facilities. Continuous simulation models use recorded hourly rainfall data from actual rain gages collected over a series of consecutive water years, which provides a real-time simulation of BMP performance using a variety of actual storms with varying durations and intensities. The CSM provides a much more accurate indicator of long-term BMP performance than event-based calculations based on general regionalized hydrologic models (i.e. a 1-inch, 24-hour event). Bay Area Hydrology Model (BAHM) 2023 is currently used as a continuous simulation model that meets the hydromodification modelling requirements outlined in the MRP.

The output can be used to size outfall structures or to size water quality or hydromodification BMPs as follows:

1. The output demonstrates that the water quality BMP treats, on average, a certain percentage of rainfall occurring on site annually. 85 is generally the percentage used in water quality modeling as described in current stormwater practice.
2. The output demonstrates that the hydromodification BMP reduces post-project flows and durations to pre-project levels.

Since 2006, we have used BAHM to demonstrate compliance with San Francisco Bay Regional hydromodification requirements. We have used BAHM 2023 on two recent projects, the Diablo Road Bicycle Trail project in the Town of Danville and a large residential project located near the City of Pleasanton.

ON-SITE THIRD-PARTY INSPECTIONS UNDERSTANDING

THIRD-PARTY COMPLIANCE

We actively perform reviews of stormwater management plans. We work with applicants to achieve compliance with current San Francisco Bay Area Municipal Regional Permit Provision C.3 requirements through meetings and written comments, as necessary. Generally, City and County officials are consulted during the review process if complex issues arise. In the last several years, we have provided third-party reviews for numerous projects including:

- Gayle Manor, Los Altos
- Palo Alto Square, Palo Alto
- Audi of Palo Alto, Palo Alto
- Tarob Court, Milpitas
- Centre Point, Milpitas
- Metro Corporate Center, Milpitas
- Tyrella Avenue, Mountain View
- Lawrence Station, Santa Clara
- Mission Park Market Place, Santa Clara
- Catalina Development, Santa Clara
- Santa Clara Square Retail, Santa Clara
- Corvin Drive, Santa Clara
- Digital Reality Data Center, Santa Clara
- Tahoe Way, Santa Clara
- Kaiser Parking Lot, Santa Clara
- Santana Terrace, Santa Clara
- Emerson Development, Santa Clara
- Intel Campus, Block 643, Santa Clara
- Extra Space Storage, Sunnyvale
- Hampton Inn and Suites, Sunnyvale
- Las Palmas Development, Sunnyvale
- Sunnyvale Business Park, Sunnyvale
- Anadalusia (San Aleso Avenue), Sunnyvale
- Estates at Sunnyvale, Sunnyvale
- 166 E. Fremont Ave, Sunnyvale
- 871 E. Fremont Ave, Sunnyvale
- 475 North Fair Oaks, Sunnyvale
- 777 W. Middlefield Road Mountain View
- North Loop Road, Alameda
- Raiders Training Facility, Alameda
- Alameda US Food and Drug Lab, Alameda
- Alameda Landing, Alameda
- Harbor Bay Parkway, Alameda
- VF Outdoor South, Alameda
- Alameda Point, Alameda



THIRD-PARTY INSPECTION REVIEW

For over 50 years, we have been installing and inspecting subsurface drainage systems, earth embankments, pavement systems, and flood control facilities. We have also specialized in designing and inspecting BMPs, incorporating the latest advances in post-construction stormwater management. This includes permeable pavements, water quality ponds, bioretention cells, biofiltration swales, media filter systems, infiltration trenches, and prefabricated bioretention planters. We have worked with the San Francisco Bay Regional Water Quality Control Board about the efficacy of geotechnical materials used in the design of post-construction stormwater features when the standard details of current stormwater management practices were in their infancy.

Among the many projects for which we have observed the construction of stormwater facilities whether designed by us or by the project civil engineer, we have specifically performed on-site third-party inspections of installed post-construction stormwater treatment measures for the following relevant projects:

- Santa Clara Square Retail, Santa Clara
- Alameda Landing, Alameda
- Water Emergency Transportation Agency, Alameda
- Lawrence Station, Santa Clara
- Audi Dealership, Palo Alto
- Fallon Village, Dublin
- Grand Marina, Alameda
- Bayport, Alameda
- Stacey and Witbeck Harbor Bay Business Park, Alameda
- Cadwallader Residential Project, San Jose



PROJECT EXPERIENCE

FARIA PRESERVE SAN RAMON, CA



The Faria Preserve property is roughly 250 acres of land previously used for cattle grazing. The development consists of 256 residential lots, 182 townhomes and 302 apartment units, access roads, utilities, and a detention basin at the outfall of the existing creek system traversing the middle of the property discharging to the south. The project will include parks, community areas, and a city parcel. The development would increase peak hydrologic runoff flows and volumes into downstream receiving waters if otherwise unmitigated.

We prepared the Stormwater Control Plan to comply with 2015 San Francisco Bay Municipal Regional Permit Provision C.3. Guidelines. We designed stormwater management features including bioretention and detention basins which cleanse post-project stormwater runoff prior to discharge and reduce stormwater quantities of smaller flows up to the 10-year recurrence interval to pre-project levels. The treatment and hydromodification control facilities were sized using a combination of the Contra Costa County IMP Sizing Calculator, Alameda County Flow and Volume Sizing Calculator, Bay Area Hydrology Model, and HEC-HMS.

The stormwater management plan was approved by the San Francisco Bay Regional Water Quality Control Board. In addition to preparing the Stormwater Control Plan, we are providing geotechnical design and consultation, environmental engineering consultation, water resources services including regional hydrology studies and regulatory agency permitting, geologic hazard abatement district consultation, construction SWPPP preparation and implementation, geotechnical oversight for landslide and compressible soil grading mitigation, geotechnical construction observation and testing for earthwork and site improvement activities and special inspections.

REFERENCE

Bridgit Koller
Lennar Corporation
(formerly CalAtlantic Homes)
(925) 327-8348

PERSONNEL

Jonathan Buck, GE, LEED AP, QSD
Julia Moriarty, GE, QSD

LUND RANCH II
PLEASANTON, CA



We prepared the Stormwater and Hydromodification Management Plan for the approximately 200-acre Lund Ranch II Project located in Pleasanton, California. The proposed project will be developed into approximately 43 single-family residential lots arranged along a series of proposed neighborhood roads and courts. A significant portion of the site is to be retained as open space, which preserves the majority of an onsite creek system that traverses the property. We designed multiple bioretention basins and a combined bioretention/detention basin for the project to provide water quality treatment and flow control in accordance with the 2015 San Francisco Bay Regional Water Quality Control Board Municipal Regional Permit (MRP) and the Alameda County Clean Water Program requirements. The Bay Area Hydrology Model (BAHM) was used to design the flow control components of the bioretention and detention basins and the Alameda County Combination Flow and Volume Sizing method was used to design the water quality components of the bioretention basins. Additionally, we outlined appropriate site design and source control measures for the project and prepared a site-specific Operations and Maintenance Manual.

REFERENCE

Steve Savage
Toll Brothers Communities, Inc.
(925) 249-6032

PERSONNEL

Jonathan Buck, GE, LEED AP, QSD

1790-1792 WARBURTON AVENUE
SANTA CLARA CA



We prepared the Stormwater Plan for this infill project located in Santa Clara, California. The site redeveloped the land into two separate townhome buildings, each consisting of 6 residential units with attached garages, pervious asphalt, and landscaping. This final project consisted of 41% impervious and 59% pervious surfaces. Best Management Practices included self-retaining areas and pervious pavements. We also prepared the Operations and Maintenance Manual for the project. Challenges included providing enough pervious pavement to meet the SCVURPPP requirements for the project given the limited space, as well as providing appropriate setbacks between stormwater BMPs and foundations.

REFERENCE

Patrick Toohey
1900 Warburton LLC
925-683-4869

PERSONNEL

Jonathan Buck, GE, LEED AP, QSD
Julia Moriarty, GE, QSD

INTEREST, AVAILABILITY, AND COMMITMENT

We look forward to providing our continued hydrologic expertise to the Santa Clara Valley Urban Runoff Pollution Prevention Program. We are available to begin work as soon as we receive notice to proceed. With our office located in Santa Clara, we will ensure a prompt response to the Valley's needs and requests for services.

Appendix

Proof of Training

SCVURPPP Annual C3 Workshop

April 25, 2023

List of Attendees

| | First Name | Last Name | Agency |
|-----|-------------------|------------------|--------------------------|
| 136 | Zhenzhen | Jiang | County of Santa Clara |
| 137 | Ermias | Gizaw | County of Santa Clara |
| 138 | Ed | Duazo | County of Santa Clara |
| 139 | Jackson | Zhang | County of Santa Clara |
| 140 | Melinda | Lin | County of Santa Clara |
| 141 | Felix | Lopez | County of Santa Clara |
| 142 | Darrell | Wong | County of Santa Clara |
| 143 | David | Boyd | County of Santa Clara |
| 144 | Don | Harmon | County of Santa Clara |
| 145 | Jess | Tanciangco | County of Santa Clara |
| 146 | Yu-Wen | Huang | County of Santa Clara |
| 147 | Paul | Pascoal | County of Santa Clara |
| 148 | Richard | Ramos | County of Santa Clara |
| 149 | Herbert | Naraval | County of Santa Clara |
| 150 | Emily | Chen | County of Santa Clara |
| 151 | Gavin | Finley | County of Santa Clara |
| 152 | Stephen | Koren | County of Santa Clara |
| 153 | Hien | Nguyen | County of Santa Clara |
| 154 | Christine | Li | County of Santa Clara |
| 155 | Ronald | Short | County of Santa Clara |
| 156 | Steven | Wilson | County of Santa Clara |
| 157 | David | Barry | County of Santa Clara |
| 158 | Husam | Aburabi | CSG Consultants |
| 159 | Michelle | Bocalan | CSG Consultants |
| 160 | Homayoun | Ariasp | CSG Consultants |
| 161 | Hal | Williams | CSG Consultants |
| 162 | Babak | Kaderi | CSG Consultants |
| 163 | Catherine | Chan | CSG Consultants |
| 164 | Lawrence | Lau | CSG Consultants |
| 165 | Jay | Gonzales | CSG Consultants |
| 166 | Mario | Camorongan | CSG Consultants |
| 167 | Sandra | Meditch | CSG Consultants |
| 168 | Mark | Lander | CSG Consultants |
| 169 | Mehdi | Sharifi | CSG Consultants, Inc. |
| 170 | Randy | Rettig | ENGEO |
| 171 | Jonathan | Buck | ENGEO Inc |
| 172 | Yvana | Hrovat | Haley and Aldrich |
| 173 | Austin | Lin | JMH Weiss |
| 174 | Randall | West | Lea & Braze Engineering |
| 175 | John | Halbom | Lea & Braze Engineering |
| 176 | Kit | Gordon | Los Altos Hills resident |
| 177 | Joe | Streeper | Mark Thomas |
| 178 | Harfateh | Grewal | Mark Thomas |
| 179 | Daniel | Nunes | Mission Engineers, Inc. |
| 180 | Oscar | Osuna | Osuna Engineering Inc. |

CERTIFICATE OF TRAINING

CALIFORNIA CONSTRUCTION GENERAL PERMIT

QUALIFIED SWPPP DEVELOPER (QSD) AND QUALIFIED SWPPP PRACTITIONER (QSP)

Jonathan Buck

Dec 09, 2022 - Dec 13, 2024

Certificate # 00230



California Stormwater Quality Association and
California Construction General Permit Training Team



certifies that

jonathan buck

has earned **0.1 Continuing Education Unit (CEU)**
or **1.0 Professional Development Hour (PDH)**

by successfully completing

Climate Change Impacts to Stormwater

on **October 1, 2022**

Jim Semple
Group Publisher

Jeremiah Woolsey
Continuing Education Director

Robin Pugh
*Continuing Education
Coordinator*



You may use this Certificate to apply for Professional Development Hours with your state's governing certification agency. Please Note: it's your responsibility to pursue credit. We cannot guarantee credit will be awarded.



certifies that

jonathan buck

has earned **0.1 Continuing Education Unit (CEU)**
or **1.0 Professional Development Hour (PDH)**

by successfully completing

New Institutional Stormwater Permitting Requirements for California Watersheds

on **October 1, 2022**

Jim Semple
Group Publisher

Jeremiah Woolsey
Continuing Education Director

Robin Pugh
*Continuing Education
Coordinator*



You may use this Certificate to apply for Professional Development Hours with your state's governing certification agency. Please Note: it's your responsibility to pursue credit. We cannot guarantee credit will be awarded.



This certificate is presented to
Jonathan Buck

in recognition of successful completion of
PDH: 10.0

Low Impact Development (LID) Applications for Water Resource Management (LID14)

October 10, 2022

and for demonstrating a commitment to engineering excellence through lifelong learning.

A handwritten signature in black ink, appearing to read "John A. Casazza", is positioned above a horizontal line.

John A. Casazza
Managing Director, Continuing Education

Florida Provider Number:
0003826
Florida Course Number:
0000443

Please retain this certificate for your continuing education records.
1801 Alexander Bell Drive, Reston, VA 20191-4400 Phone: (800) 548-2723



CERTIFICATE OF TRAINING

CALIFORNIA CONSTRUCTION GENERAL PERMIT

QUALIFIED SWPPP DEVELOPER (QSD) AND QUALIFIED SWPPP PRACTITIONER (QSP)

Julia Moriarty

Oct 17, 2022 - Dec 29, 2024

Certificate # 00210



California Stormwater Quality Association and
California Construction General Permit Training Team

