

Approved Service Order
 (Non-Capital Projects)

Cover Page

1a. Intentionally Omitted **1b.** AC Contract No.: 32001 (GILES OC-000369)

2. Approved Service Order No. 2

3. Consultant's Name: Cornerstone Earth Group

4. Project Name: Site Management Implementation Plan and Vapor Intrusion Mitigation System, SJFD Training Facility ("Project")

5. Project Location: 1591 - 1661 Senter Road

6. The Consultant and the City will implement this Approved Service Order in accordance with the Master Agreement, this cover page and Attachments "A" (Tasks), "B" (Terms and Conditions), and "C" (Compensation Table), which are incorporated herein by references.

7. Budget/Fiscal:

a. Current unencumbered amount in Master Agreement:	\$	995,750
b. Maximum Service Order Compensation for this Approved Service Order:	\$	65,865
c. New unencumbered balance in Master Agreement (7.a – 7.b):	\$	929,885

d. **Appropriation Certification:** I certify that an unexpended appropriation in the amount of the Maximum Service Order Compensation is available in the following fund(s) and that such fund(s) will be encumbered to pay for this Approved Service Order.

Fund: 001 (Dept 57) Appn: 417L RC: 202153 Amount: \$ 65,865

Authorized Signature:  Date: _____
 Christy Ngo (8/9/2021)
 Email: christy.ngo@sanjoseca.gov

8. Division Analyst Approval:  Date: _____
 Mathew Chacko (8/9/2021)
 Email: mathew.chacko@sanjoseca.gov

9. Consultant Approval:  Date: _____
 cheiny@cornerstoneearth.com (8/9/2021)
 Email: cheiny@cornerstoneearth.com

10. Approval as to Form (City Attorney):

Service Order Form Approved by the Office of the City Attorney
 (Maximum Service Order Compensation is \$100,000 or less, and the provisions of the service order form are not altered.)

Approved as to Form: _____ Date: _____
 (Sr.) Deputy City Attorney

11. City Director Approval:  Date: _____
 Napp Fukuda (8/9/2021)
 Email: napp.fukuda@sanjoseca.gov

Attachment A: Tasks

The Consultant shall provide the services and deliverables set forth in this **Attachment A**. The Consultant shall provide all services and deliverables required by this **Attachment A** to the satisfaction of the City's contract manager.

General Description of Project for which Consultant will Provide Services: The Site is located between Tenth Street and Senter Road south of Alma Road and currently consists of a former Union Pacific Railroad spur, an existing covered parking lot, and an existing office building. The planned Fire Training Center will consist of the demolition of the covered parking lot and replacement of two new office buildings in the southeastern portion of the Site. The former railroad spur portion of the Site will consist of a paved parking lot, structures for fire training purposes, and a lined bioretention basin. The existing parking lot area of the Site (portion of APN 477-38-007) is referred to as Parcel 1, and the former railroad spur area of the Site (APN 477-38-16) is referred to as Parcel 2. The Consultant understands that construction will begin in March 2021.

The Consultant prepared a *Site Assessment Workplan* (Workplan) to further evaluate environmental conditions at Parcel 1. The Consultant implemented the Workplan in December 2020 and results were included in the SMP dated February 11, 2021. Soil vapor results collected from the 5-foot and 15-foot probes installed at one location contained carbon tetrachloride at concentrations above the commercial Environmental Screening Level (ESL, Regional Water Quality Control Board [Water Board], 2019) of 68 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The DEH requested additional soil vapor quality evaluation in the area of this previous sample location as a condition of approval of the SMP. The SMP also included protocols for contractors while handling soil, collection of soil samples from the bioretention basin after excavation, observation and collection of soil samples during removal of the 15,000-gallon closed-in-place underground storage tank (UST), soil sampling protocols for import or export soil, and contingency procedures. The DEH approved the SMP on February 12, 2021.

In addition, due to the levels of carbon tetrachloride, a Vapor Intrusion Mitigation System (VIMS) will be designed and installed under DEH oversight. The VIMS will consist of a physical barrier and below ground passive venting system to prevent vapors from entering on-site buildings.

The purpose of the work presented in this proposal is to implement the February 11, 2021 SMP approved by the DEH on February 12, 2021, consisting of 1) general observation during construction and bioretention basin soil sample collection; 2) preparation of a SMP Completion Report and 3) design, coordination and regulatory approval of a vapor intrusion mitigation system.

Task No. 1: Observation and Sampling During Grading

- A. Services:** The Consultant will prepare a health and safety plan for use by Consultant's personnel while on Site. The health and safety plan will be maintained on-Site by the Consultant's field personnel. The Consultant health and safety plan is not intended for use by others on-Site. Each contractor should prepare their own health and safety plan that is specific to their tasks. The Consultant cannot be responsible for the health and safety of others on-Site or for the contents of their health and safety plan.

The SMP contains protocols for the contractor to implement during grading and other subsurface work. Such protocols include dust control, stockpile management, and soil disposal profiling. The Consultant

will observe grading and excavation work performed by the contractor on a part-time basis to document compliance with the SMP. The Consultant cost assumes up to 10 Site visits of up to 4-hour each. These Site visits are in addition to Site visits performed under Tasks 1 and 2. The Consultant will inform the City of any deviations from the SMP that are observed during our Site visit. The Consultant cannot provide direction or recommendation to the contractor.

Separate from the Site observations, the SMP requires the collection of soil samples from the bottom of the bioretention basin once excavated to the design elevation. In accordance with the SMP, the Consultant will collect discrete soil samples from the bottom of the bioretention basin after excavation at a frequency of one per every 500 square feet. Samples will be collected from the upper approximately 1/2 foot of soil and from a depth of approximately 2 to 3 feet. Based on plans reviewed by the Consultant, the Consultant assumes up to 20 soil samples will be required from the bioretention basin. The bioretention basin bottom will be subdivided using a grid and samples will be collected from the approximate center of each grid. The 20 samples will be analyzed for the contaminants of concern (COC – lead and arsenic) identified in the SMP. The deeper samples will be placed on hold at the laboratory for possible future analysis. The 20 soil samples will be analyzed on a standard 5-business day laboratory response time; however, the actual response will depend on the laboratory's workload.

Based on the project plans, excess soil will be generated during construction that will require off-Site disposal. The SMP provides protocols for disposal profiling of this soil. Disposal profiling has not yet been performed and the Consultant understands that the grading contractor is responsible for performing this task. As such, sampling and analysis for off-Site disposal is not included in this proposal. Task 4 includes consulting time to assist the City in reviewing sampling plans and/or disposal profiling information provided by the contractor, as well as providing the Consultants opinion or recommendations based on these submittals. Note that the Consultant cannot sign disposal manifests.

B. Deliverable: Laboratory Testing Results

C. Completion Time: The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: _____.
- On or before: Completion of Grading

Task No. 2: Site Management Plan Completion Report

A. Services: The Consultant will prepare a SMP Completion Report following the completion of subsurface construction. The SMP will include results from the Consultants Site observations, UST removal observations and sampling results, results of the bioretention basin samples, results of soil disposal profile sampling and waste disposal manifests/documentation, and any other information for events related to implementation of the SMP. The SMP Completion Report will also include a summary of the additional soil vapor quality evaluation performed under a previous service order. The SMP Completion Report will be transmitted to the City for review. After addressing any comments, the Consultant will submit the final SMP Completion Report to the DEH for their review. The Consultant anticipates that the DEH will provide comments to the first report submittal. The Consultant costs assume addressing one round of comments and submittal of a revised SMP Completion Report. The final report will also be uploaded to Geotracker per DEH requirements.

B. Deliverable: SMP Completion Report

C. Completion Time: The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: _____.
- On or before: 15 Business Days after Completion of Grading.

Task No. 3: Pre-Installation Activities

- A. Services:** Consultant will provide pre-construction consultation services consisting of review of submittals for compliance with design documents, ongoing coordination with the City, design team and construction team, and responding to requests for information (RFIs). The contractor is required to submit certified Shop Drawings before any materials are delivered to the Site. The Shop Drawings will include all details of fabrication, assembly, installation, descriptive literature, bulletins, catalog cut sheets of the components, complete manufacturer's specifications and materials of construction, and manufacturer's current recommended method of installation for materials provided. Consultant will review these submittals, product specifications and drawings for general compliance with the project design and assist with responding to contractor RFIs. Grading, trenching, plumbing, electrical, and foundation plans will be reviewed prior to construction in preparation to implement our scope of services outlined in Task 4.
- B. Deliverable:** Specifications and Drawings
- C. Completion Time:** The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: October 30, 2021.
- On or before: _____.

Task No. 4: Field Observation – Buildings 1 and 2

- A. Services:** During construction, Consultant will perform periodic observation activities to document installation of the vapor intrusion mitigation measures and confirm these activities are performed in general accordance with the approved engineering drawings. As part of this process, observation forms documenting Site activities will be completed and made available for the duration of the project.

Please note the presence of our field representative(s) will be solely for the purpose of providing observation services to the installation of vapor mitigation components. Observation of waterproofing components must be provided by others as determined by the Architect and their waterproofing consultant. Consultant's work will not include supervision or direction of the work by the installation contractor. Neither the presence of our field representative nor the observation by Consultant shall excuse the contractor in any way for defects in their work.

Consultant's field observation budget assumes up to 10 days of sub-slab observation (80 staff hours) and up to 3 days of above-slab observation (24 staff hours). These assumptions are based on professional experience for similar sized buildings; however, the contractor has not provided a construction schedule to Consultant. Once the contractor provides this schedule, Consultant will review our assumptions and will notify the City if revisions to our assumptions and budget will be required.

Observation of Sub-Slab VIMS Components

Consultant assumes that a minimum 48-hour notification will be provided by the general contractor. Consultant's field observation of VIMS components will consist of the following:

- 1) Utility conduit placement before trench plug installation (as shown in the VIMS drawings that were part of the coordination plan set).
- 2) Low-permeability utility trench plug installation (as shown in the VIMS drawings that were part of the coordination plan set).
- 3) Sub-grade preparation.
- 4) Geotextile placement prior to installation of vapor membrane system.
- 5) Vertical utilities in slab for adequate separation (prior to placement of vapor barrier);
- 6) Gas permeable aggregate layer over geotextile following subgrade preparation.
- 7) Installation of perimeter air intake pipes, sub-slab collection pipe network, and riser "stub-outs".
- 8) Placement of monitoring probes within aggregate layer and routing of tubing to monitoring station.
- 9) The sub-slab vapor barrier.
- 10) Coupon sampling and smoke/pressure testing activities, before and after rebar placement, completed by the certified installer.
- 11) Placement of foundation concrete over the vapor membrane system.

Observation of Vertical VI Mitigation System Components

Following placement of the slab-on-grade, Consultant will perform periodic part-time observation activities to help confirm the vertical vent risers and roof exhausts are installed in general accordance with the approved engineering drawings. Consultant assumes that the contractor will provide a minimum 48-hour notification to Consultant. Consultant's field observation services for the vertical construction items will consist of the following:

- 1) Sealant applied at pipe annulus of utilities penetrating the concrete slab.
- 2) During, and at the completion of, the vertical vent riser and monitoring station installation.
- 3) Installation of exhaust stack, including required offsets, roof exhaust cap, and roof exhaust sample ports.
- 4) Installation of additional measures to allow for possible future conversion to an active sub-slab depressurization or ventilation system with blower fan(s).
- 5) Sealant placed within dry conduits penetrating sub-slab vapor barrier system at exterior vault boxes.

B. Deliverable: Observation Forms

C. Completion Time: The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: October 31, 2021.
- On or before: _____.

Task No. 5: Reporting

A. Services: Daily field reports (DFRs) will be prepared following each day of observation documenting Site activities and will be made available for inspection by authorized oversight personnel for the duration of the project. DFRs will document the where, when, how, and from whom project information

was obtained, a brief description of on-Site activities observed, and photographs of relevant site operations.

Following completion of the VIMS, Consultant will coordinate with the installation subcontractors to produce as-built drawings. The as-built drawings will document the VI mitigation system as installed including alterations to the venting collection piping and or riser pipes made in the field. Consultant will rely on field observations and the drawings of the installation subcontractors to complete the as-built drawings. Once completed the as-built drawings will be submitted to the Architect and included in the complete project set of as-built drawings.

The fee estimate assumes Consultant will prepare a VIMS Completion Report following the installation of the VIMS at both Buildings 1 and 2. This report will summarize Consultant's field observations, installation activities, and a description of installation deviations and/or corrective measures, post-installation system measurements and monitoring data, and the required written statement from the vapor barrier contractor indicating the installation was completed in accordance with the engineering drawings and procedures recommended by the product manufacturers. The VIMS Completion Report will include the as-built drawings. The VIMS completion report will be submitted to the DEH for their review and approval, and the final report will be uploaded to the Water Board's Geotracker Database.

- B. **Deliverable:** Daily Reports, As-Built Drawings and VIMS Completion Report
- C. **Completion Time:** The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: October 31, 2021.
- On or before: _____.

Task No. 6: Meetings, Project Management and Coordination

- A. **Services:** Consultant anticipates ongoing project management and general consultation services will be needed for this project including completing VIMS progress emails/reports, attendance at weekly construction project meetings, and coordination with the construction and design teams.
- B. **Deliverable:** Progress Reports
- C. **Completion Time:** The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: October 31, 2021.
- On or before: _____.

Attachment B: Terms and Conditions

1. **City's Contract Manager:** The City's contract manager for this Approved Service Order is:

Name: Geoff Blair	Phone No.: (408) 975-2576
Department: Environmental Services	E-mail: Geoffrey.Blair@sanjoseca.gov
Address: 200 E. Santa Clara Street, San José, CA 95113	

2. **Consultant's Contract Manager and Other Staffing:** Identified below are the following: (a) the Consultant's contract manager for this Approved Service Order, and (b) the Consultant(s) and/or employee(s) of the Consultant who will be principally responsible for providing the services and deliverables. ***If an individual identified below does not have a current Form 700 on file with the City Clerk for a separate agreement with the City, and is required to file a Form 700, the Consultant must comply with the requirements of Subsection 17.2 of the Master Agreement, entitled "Filing Form 700."***

		Required to File Form 700?		
		Yes Already Filed (Date Filed)	Yes Need to File	No
<u>Consultant's Contract Manager</u>				
Name: Chris Heiny, Principal Geologist	Phone No.: 925-705-5063			X
Address: 1220 Oakland Parkway, Suite 220, Walnut Creek, CA 94085	E-mail: cheiny@cornerstoneearth.com			
<u>Other Staffing</u>				
<u>Name:</u>	<u>Assignment:</u>			
Kurt Soenen	Sr. Principal Engineer			X
Michael Chang	Project Engineer			X

3. Subconsultants: Whichever of the following is marked applies to this Approved Service Order:

- The Consultant can **not** use any subconsultants.
- The Consultant can use the following subconsultants to assist in providing the required services and deliverables:

<u>Subconsultant's Name</u>	<u>Area of Work</u>
Torrent Laboratory	Analytical Laboratory

4. Reimbursable Expenses: If the Compensation Table set forth in **Attachment C** of this Approved Service Order states that the City will reimburse the Consultant for expenses, then only the expenses identified in Subsection 10.5.3 of the Master Agreement are Reimbursable Expenses unless the following box is marked and additional reimbursable expenses are set forth:

- In addition to the expenses identified in Subsection 10.5.3 of the Master Agreement, the following expenses are Reimbursable Expenses:

<u>Additional Reimbursable Expense(s)</u>	<u>Mark-up</u>
1. _____	_____
2. _____	_____
3. _____	_____

Notwithstanding the foregoing, any additional reimbursable expense(s) set forth in the above table will be disregarded if the Compensation Table states that the City will *not* reimburse the Consultant for any expenses.

Attachment C: Compensation Table

The City will compensate the Consultant for providing the services and deliverables set forth in **Attachment A** in accordance this Compensation Table. This Compensation Table is subject to the terms and conditions set forth in the Master Agreement, including without limitation Section 10 of the Master Agreement.

Part 1 – Compensation for Services and Deliverables						
Column 1	Column 2		Column 3			Column 4
Task Nos. from Attachment A	Basis of Compensation		Invoice Period			Compensation
1	<input checked="" type="checkbox"/> Time & Materials	<input type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$ 16,000
2	<input type="checkbox"/> Time & Materials	<input checked="" type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$ 6,500
3	<input checked="" type="checkbox"/> Time & Materials	<input type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$ 6,764
4	<input checked="" type="checkbox"/> Time & Materials	<input type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$ 21,031
5	<input type="checkbox"/> Time & Materials	<input checked="" type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$ 7,500
6	<input checked="" type="checkbox"/> Time & Materials	<input type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$ 8,070
Part 2 – Reimbursable Expenses						
<input checked="" type="checkbox"/> No expenses are separately reimbursable. The amount(s) in Column 4 of Part 1 include(s) payment for all expenses.			<input type="checkbox"/> Expenses are separately reimbursable in the maximum amount of:			\$
Part 3 – Subconsultant Costs						
<input checked="" type="checkbox"/> Subconsultant costs are <i>not</i> separately compensable. The amount(s) in Column 4 of Part 1 include(s) subconsultant costs.			<input type="checkbox"/> Subconsultant costs are separately compensable in the maximum amount of:			\$
Maximum Service Order Compensation (sum of Parts 1 through 3):						\$ 65,865

Attachment D: Sub Consultant Schedule of Rates and Charges

Torrent Laboratories	
Description	Rate
TPH as Gas (5030/8015)	\$30.00/Sample
TPH as Diesel (8015)	\$40.00/Sample
TPH as Motor Oil (8015)	\$45.00/Sample
PAHs (8260)	\$85.00/Sample
VOCs (8270)	\$75.00/Sample
PCBs (8082)	\$60.00/Sample
Pesticides (8081)	\$75.00/Sample
CAM 17 metals (6010)	\$85.00/Sample