

Formal Task Assignment Document

2019 – 2022 SNOHOMISH COUNTY ON-CALL TASK ASSIGNMENT

Name of Project: C-1 Hangar & Building/Former ATS Hangar & Precision Property Remedial Investigation
Project Number: Airport
Discipline: Engineering Services
Task No.: TA #2 Completion Date: 12/31/2023

The COUNTY desires to authorize services pursuant to the AGREEMENT entered into with **GeoEngineers, Inc.**, and executed on December 24, 2018, as amended by Supplement No. 1 on July 9, 2019, as amended by Supplement No. 2 on September 12, 2019, as amended by Supplement No. 3 on November 2, 2020, as amended by Supplement No. 4 on August 16, 2021 and identified as Agreement No. **OCC19/1-7.8(Y)**, On-Call Consultant Services for **Environmental Site Assessment**.

All provisions in the AGREEMENT remain in effect except as expressly modified by this TASK ASSIGNMENT, and are incorporated herein by reference.

ATTACHED TO THIS TASK ASSIGNMENT

- Scope of Work
- Cost Estimate with Total Hours to Perform Work
- Items unique to the project not included in the AGREEMENT and which are to be reimbursed at cost with no markup.

The **Total Amount Authorized** under this TASK ASSIGNMENT, inclusive of all fees and other costs is **\$195,000.00**. **No other payment shall be allowed unless a TASK ASSIGNMENT Supplement for changed Scope of Work has been signed and authorized before work is performed.**

All work under this TASK ASSIGNMENT shall be performed pursuant to the terms, conditions, specifications, and limitations contained in the AGREEMENT.

If you concur with this TASK ASSIGNMENT and agree to the items as stated above, please sign and date in the appropriate spaces below and return to the COUNTY for final action.

Consultant Signature

Approving Authority



2101 4th Avenue, Suite 950
Seattle, Washington 98121
206.728.2674

April 27, 2022

Paine Field/Snohomish County Airport
3220 – 100th Street SW, Suite A
Everett, Washington 98204-1303

Attention: Andrew Rardin

Subject: Proposal for Remedial Investigation Planning and Implementation
Integrated Planning Grant (IPG) Consultant Scope of Work
Paine Field/Snohomish County Airport – C-1 Hangar & Building/
Former ATS Hangar and Precision Property
Everett, Washington
File No. 5530-014-01

GeoEngineers, Inc. (GeoEngineers) is pleased to present this proposal for Remedial Investigation Planning and Implementation for the C-1 Hangar and Building Property (site) at Paine Field/Snohomish County Airport (Paine Field) in Everett, Washington. We understand Paine Field is the recipient of an IPG from the Washington State Department of Ecology (Ecology) and has requested this scope of services for remedial investigation planning and implementation to be completed under the IPG. Our scope of our services is based on discussions with Andrew Rardin of Paine Field, our prior work at the site in 2020 and 2021, prior work completed at the site by others, and our experience with the investigation and cleanup of other airport and industrial facilities under the Ecology Model Toxics Control Act (MTCA) and its implementing regulations.

The results of prior assessments completed at the site indicate the presence of volatile organic compounds (VOCs) and/or metals in soil, soil vapor and groundwater at concentrations greater than the applicable MTCA cleanup levels. We understand that additional subsurface assessment is needed for site characterization/regulatory compliance purposes and the results of the proposed remedial activities will be included as part of a MTCA-compliant Remedial Investigation and Feasibility Study (RI/FS) for site cleanup. Based on this understanding of Paine Field's objectives for the site and the applicable regulatory requirements, our scope of services is presented below.

BUDGET AND SCOPE OF WORK

The tasks associated with the scope of services described below are structured to be consistent with the IPG scope of work template provided to Paine Field by Ecology.



TASK 1. GRANT AND PROJECT ADMINISTRATION

This task is reserved for use by Paine Field and is not included in GeoEngineers' scope of services.

TASK 2. REMEDIAL INVESTIGATION

The goal of this task is to complete a MTCA-compliant Remedial Investigation (RI) for site cleanup.

Task 2.1 Remedial Investigation Work Plan

The goal of this subtask is to prepare a draft RI Work Plan that outlines the goals/objectives of the RI, summarizes the existing information, identifies the data gaps to be addressed, the scope of work to supplement the existing information and meet the MTCA requirements, and presents the field investigation procedures, exploration locations and the analytical testing program for the additional sampling and analysis, and the anticipated schedule for completion of the RI.

1. Prepare a draft and final RI Work Plan and provide to Paine Field for review and comment.
2. Prepare a final RI Work Plan and incorporate comments following review by Paine Field and Ecology.

Task 2.2. Remedial Investigation Implementation

The scope of work for this subtask will be consistent with the scope of work described in the RI Work Plan described in Task 2; however boring locations may be adjusted following Ecology's review of the RI Work Plan.

1. Attend a project kickoff meeting/conference call with Paine Field.
2. Prepare a sampling and analysis plan (SAP) and site safety plan prior to the start of fieldwork and submit to Paine Field for review and comment. Coordinate site access with Paine Field representatives.
3. Mark proposed exploration locations and notify public utilities to mark utilities in the vicinity of the proposed exploration locations. A private geophysics vendor will locate underground utilities at the proposed boring locations using ground-penetrating radar (GPR) technologies.
4. Complete RI explorations inside the C-1 Building as follows:
 - a. A concrete coring vendor will core 4-inch holes in the concrete slab at each exploration location inside the C-1 Building (approximately 2 days of concrete coring activities). Cores will be removed from the slab intact and retained for surface restoration following sampling.
 - b. Observe limited-access direct-push (DP) and hollow-stem auger (HSA) drilling of up to eight borings inside the C-1 Building to depths up to 15 feet below ground surface (bgs) or to refusal (approximately 3 days of DP exploration activities). Obtain continuous core soil samples from each of the DP explorations and soil samples at 2.5- to 5-foot-depth intervals in the HSA borings. It is anticipated that a limited-access HSA drilling rig will be used to complete borings located in the southern portion of the C-1 Building where a monitoring well is anticipated, and a smaller limited-access DP drilling rig will be required for borings completed in the northern portion of the C-1 Building where ceilings heights are lower and monitoring well installation is not anticipated.



- c. Install a permanent 2-inch polyvinyl chloride (PVC) monitoring well in one boring completed inside the southern portion of the C-1 Building, if sufficient groundwater is encountered during drilling. Construct the well with the well screen extending between approximately 10 and 20 feet bgs, or the depth where groundwater is observed during drilling. Develop the monitoring well.
 - d. Following drilling and sampling, observe the restoration of the building concrete slab by the concrete coring vendor. We assume each core will be placed back in the hole and sealed using quick-set concrete grout.
5. Observe drilling outside the C-1 Building and/or the C-1 Hangar as follows:
 - a. Observe HSA drilling of up to four borings to depths of approximately 20 feet bgs (assume 3 days of HSA drilling activities).
 - b. Install permanent 2-inch PVC monitoring wells in the borings with the well screen extending between approximately 10 and 20 feet bgs, or the depth where groundwater is observed during drilling. Develop the monitoring wells.
6. Field screen soil samples from the borings for evidence of petroleum and volatiles using visual, water sheen and headspace vapor screening methods. Visually classify the samples in general accordance with ASTM International (ASTM) D 2488 and maintain a detailed log of each boring.
7. Submit selected soil samples for laboratory chemical analysis. Up to three soil samples per boring will be collected and submitted for laboratory chemical analysis for the following analytes on standard turnaround (typically 5 to 7 business days): gasoline-range total petroleum hydrocarbons (GRPH) by NWTPH-Gx; diesel- and heavy oil-range total petroleum hydrocarbons (DRPH and heavy ORPH, respectively) by NWTPH-Dx Method; VOCs by U.S. Environmental Protection Agency (EPA) 8260; and metals (RCRA 8) by EPA Method 6000/7000 series. Samples to be selected for analysis will be based on field observations and sample depth in relation to depth to groundwater.
8. Collect one groundwater sample each from the new monitoring wells and existing monitoring wells located at the site (assume eight wells total) for four consecutive quarterly monitoring events. This scope of work assumes up to 32 total groundwater samples will be collected and submitted for the following analyses on a standard turnaround (typically 5 to 7 business days): GRPH by NWTPH-Gx (including mineral spirits); DRPH and heavy ORPH by NWTPH-Dx Method; VOCs by EPA 8260; and total metals (RCRA 8) by EPA Method 6000/7000 series. Select groundwater samples may also be submitted for analysis of dissolved RCRA 8 metals.
9. Investigation derived wastes (decontamination rinse water and any soil spoils) will be drummed and temporarily stored on site. For the purpose of estimating costs, we assume the investigation-derived soil spoils will be considered F002-listed waste under the Washington State Dangerous Waste Regulations (DWRs) if detectable concentrations of halogenated volatile organic compounds (HVOCs) are detected, and that a contained-in determination waiver will be required for disposal. The estimated costs for disposal assume the waste will qualify for a contained-in determination for disposal at a Subtitle D landfill.



Task 2.3. Reporting

The goal of this subtask is to complete a MTCA-compliant RI Report documenting the findings of the RI. The draft and final reports will be provided to Ecology for review and comment.

1. Interpret field and chemical analytical data for the RI. Discuss preliminary results with Paine Field.
2. Prepare draft and final RI Report. Provide electronic copy of the draft report for review by Paine Field and its agents. Assume one round of comments and revision. Provide electronic and hard copies of final report.

Task 2.4. Consultant Meetings and Project Coordination

1. Provide supporting environmental consulting or input to Paine Field related to the project. Attend meetings and/or conference calls with the project team, as requested, to facilitate project work.
2. Communications with Ecology; assumes two in-person meetings with Ecology for two GeoEngineers' staff and the project team to discuss Ecology's review of the draft RI Work Plan. For this task we have assumed 40 hours of professional labor.
3. Perform project management, administration, budget tracking and invoicing.

SCHEDULE, TERMS AND BUDGET

We will work with the Paine Field project team to identify a schedule for planning and implementation of the RI and reporting that meets your needs.

Our estimated fee for the scope of services outlined above is \$195,000, as detailed in the attached Table 1.

Our services will be provided, and our charges invoiced, in accordance with the terms described in our 2019-2021 On-Call Consultant Services Agreement [Number OCC19/1-7.8(y)] with Snohomish County that forms a part of this proposal. We understand that the work will be completed under a new Task Assignment.

There are no intended third-party beneficiaries arising from the services described in this proposal and no party other than the party executing this proposal shall have the right to legally rely on the product of our services without prior written permission of GeoEngineers.

This proposal is valid for a period of 60 days commencing from the first date listed above and subject to renegotiation by GeoEngineers, Inc., after the expiration date.



We appreciate the opportunity to assist you with this project. Please call if you have any questions regarding this proposal.

Sincerely,
GeoEngineers, Inc.



Jacob M. Letts, LG, LHG
Project Manager



Tim L. Syverson, LHG
Associate

JML:TLS:tlm

Attachment:

Table 1. Time-and-Expense Detailed Cost Estimate

Proprietary Notice: The contents of this document are proprietary to GeoEngineers, Inc. and are intended solely for use by our client to evaluate GeoEngineers' capabilities and understanding of project requirements as they relate to performing the services proposed for a specific project. Copies of this document or its contents may not be disclosed to any other parties without the written consent of GeoEngineers.

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Table 1
Time-and-Expense Detailed Cost Estimate

Snohomish County Paine Field
C-1 Hangar/Former ATS Hangar Property - Remedial Investigation Planning and Implementation
GeoEngineers, Inc.
2019-2021 Snohomish County On-Call Consultant Services

Description	TS Associate	JL Senior 1	KA/PR Scientist 2	HM CAD Technician	Administrator 1	Total Hours	Total Labor Cost
Task 1 - Grant and Project Administration (Reserved for Paine Field)	--	--	--	--	--	--	--
Task 2.1 - Remedial Investigation Work Plan	12	30	35	30	12	119	\$15,218
Task 2.2 - Remedial Investigation Implementation	20	50	200		12	282	\$37,588
Task 2.3 - Reporting	12	40	45	40	12	149	\$23,910
Task 2.4 - Consultant Meetings and Project Coordination	15	35	26			76	\$11,991
Labor Hours	59 ✓	155 ✓	306 ✓	70 ✓	36 ✓	626	\$88,707
Labor Rate (Max rate from Snohomish Co fee schedule)	\$200.00 ✓	\$166.19 ✓	\$122.10 ✓	\$90.00 ✓	\$71.53 ✓		
Cost	\$11,800 ✓	\$25,759 ✓	\$37,363 ✓	\$6,300 ✓	\$2,575 ✓		\$83,797 ✓
Total Labor Cost							\$83,797

Reimbursables			
Type	Unit Cost	Number	Cost Total
Mileage (approved rate)	\$0.560	362	\$203
GPR/Utility Locate Vendor	\$6,000	1	\$6,000
Concrete Coring and Restoration Vendor	\$7,000	1	\$7,000
Drilling Vendor	\$30,000	1	\$30,000
Sampling Equipment Vendor	\$2,000	1	\$2,000
Chemical Analytical Lab Vendor	\$52,000	1	\$52,000
IDW Disposal Vendor	\$14,000	1	\$14,000
Total Reimbursables			\$111,203
Total (Labor + Expenses)			\$195,000

Contract Compliant
By: Gidget Ames Date: 04/27/2022