Chittenden County Brownfields Program Site Nomination / Assistance Request Form

For information on types of assistance available and CCRPC's protocol for deciding if, and to what degree to assist a request, see: http://www.ccrpcvt.org/our-work/economic-development/brownfields/

Site Name: Keith Avenue				
Site's Street Address/Town/Zip Code: 12 Keith Avenue, Barre City, 05641				
Parcel Tax ID #: Property Size (Acres): <u>0.67 acres</u>				
Zoning District:				
Describe current use(s): Vacant lot. The building which was once on the lot has since been demolished.				
Describe former use(s): <u>Commercial dry cleaner, automobile sales and service, fuel storage. The underground storage tank was removed years ago.</u>				
Are there plans for acquisition and/or redevelopment?X_Yes No				
If yes, attach a separate one to two-page document describing the anticipated benefits of the redevelopment such as housing units, commercial development, jobs, economic impact, recreation, etc. (see Site Evaluation Criteria at link above for the types of information to provide). See attachments to previous email (included parcel map, Stone's proposal, cost estimate, and future redevelopment plans. See attachment to this form: CVRPC 12 Keith Ave Site Selection Criteria documents.				
Have studies been conducted to identify or assess contamination? X Yes No				
If yes, please identify the title, author and date of the report, and if available, send us a PDF:				
Partial Corrective Action Plan, Stone Enviro 10/16/2017; Phase II ESA, Stone Enviro 6/10/2014; Phase I				
ESA, Stone Enviro 4/22/2014				
Potential contaminants include: \underline{X} Petroleum \underline{X} Other contaminants				
What type(s) of site assessment or cleanup planning assistance are you seeking? Circle all that apply				
Phase I Environmental Site Assessment Supplemental Phase II Environmental Site Assessment				
Soil Monitoring during Construction Archeological Site Assessment / Recon				
Historic Preservation issues Cleanup / Corrective Action Planning Other				
Property Owner Information:				
Name: City of Barre (Steve Mackenzie, Manager) Signature:				
Mailing Address: 12 North Main Street, Barre City, VT 05641				
Phone: (802) 476-0240 Email: manager@barrecity.org				
Nomination Submitted By:				
Name or Office: <u>Clare Rock, CVRPC</u> Date Submitted: <u>3/15/2018</u>				
Mailing Address: 29 Main Street, Suite 4, Montpelier, VT 05602				
Phone: (802) 229-0389 Email: rock@cyregion.com				

Please Return Site Nomination Form (via PDF is preferred) to:

Dan Albrecht, Senior Planner

Chittenden County Regional Planning Commission 110 West Canal St., Suite 202 Winooski, VT 05404 Phone: (802) 846-4490 Ext. *29; Email: dalbrecht@ccrpcvt.org

Brownfields Site Evaluation Criteria

Project Name: 12 Keith Avenue

Address/Project Location: 12 Keith Avenue, BARRE VT

Applicant: Central Vermont Regional Planning Commission on behalf of the City of Barre

Reviewer: Emily Nosse-Leirer, CCRPC

Required Characteristics Is the property owner willing to sign a Participation Agreement and Site Access Does the site meet DEC eligibility criteria for petroleum sites and/or EPA eligibility Is the planned use consistent with current zoning?	Possible Points Yes = continue No = Not eligible	Scoring Yes Yes Yes
Project Location (10 pts Total)		
Is the project located in Burlington or Winooski?	(Yes=2, No=0)	0
Is the project located in a Center, Enterprise, Metro, Suburban or Village Regional Planning Area (as identified in the most recently adopted regional plan)?	(Yes=2, No=0)	2
Is the project located within a designated state center? (Including areas with pending applications)	(Yes=2, No=0)	2
Does the project site have existing water, sewer, electric, transportation and/or	(Yes=2, No=0)	2
natural gas infrastructure serving it? Is the project located adjacent to another brownfields site?	(Yes=2, No=0)	2
is the project located adjacent to another provincias site.	(163-2, 140-0)	2
<u>Project Location Economic Conditions (5 pts Total)</u> Is the project located in an area where the poverty rate is higher than the Countywide average?	Up to 5 points	5
Housing Potential (30 points total) Will site cleanup enable housing development in an area planned for high density housing or mixed-use development by the municipality? Will site cleanup contribute to alleviating identified housing need as identified in relevant adopted municipal documents?	Up to 10 points	2
Will site cleanup allow multiple housing units (in excess of what is already on site) to be built?	1/2 point per unit, 20 points maximum.	0
Commercial Potential (20 points total) Will site cleanup enable commercial development in an area planned for high density commercial or mixed-use development by the municipality and region? Is the project a mixed-use project?	Up to 20 points	5
Open Space and Recreation Potential (10 points total)		
Will site cleanup enable improvement or construction of a park in an area where it can be readily accessed by an underserved population? Will site cleanup involve creating or improving open or recreational space as part of a	Up to 10 points	3
Project Economic Impact (25 pts Total)		
Does the project have the potential to create or retain jobs?	1 point per FTE job, up to 10 points	1
If no direct jobs are created or retained, does the project lead to indirect job creation?	Up to 15 points	5
Does the project have other economic development benefits?	- h h	-
	Initial Score	29
	100 points possible	
Ronus Categories		

Bonus Categories

	1/2 point per percentage point	
If the project will enable housing unit construction, will a percentage of them be perm	affordable, up to 20 points.	#
Is the developer/property owner willing to pay for the Phase I or pay for part of the Ph	Up to 15 points	#
Does proposed site cleanup mitigate impacts to surface water?	Up to 10 points	#

Additional Notes:

This project will allow for a reconfigured parking lot in downtown Barre, and a small pocket park will be developed. The parking lot will serve adjacent development, including apartments recently built by Downstreet Housing and Community Development. (See attached Master Plan and CVRPC nomination documents)

Bonus Score	
45 points possible	0
_	
TOTAL SCORE	29



CENTRAL VERMONT BROWNFIELDS PROGRAM Site Selection Criteria Review

Projects nominated to receive Brownfields funding are reviewed by the CVRPC Brownfields Advisory Committee for their potential to achieve the mission of the program and result in successful re-use of the site. The Advisory Committee uses the criteria below to guide its evaluation of the overall strength of the site and redevelopment proposal. Sites will be selected for the program based upon its responsiveness to the criteria, other demonstrated strengths toward achieving reuse, and the amount of grant funds available.

CVRPC staff will provide recommendations on each criteria based upon information provided by the program applicant, as well as independent research. Criteria are evaluated in light of what is appropriate for the proposed redevelopment. Certain criteria are more applicable to some projects than others. Not all criteria are requisite, but all will be looked upon favorably when addressed by a project.

Site Name12 Keith Ave. & 25 Pearl St., Barre City_ Date of ReviewJune 13, 2016_
Review Prepared By_Gail Aloisio, Program Coordinator, CVRPC Assistant Planner
Work Requested: _Corrective Action Feasibility Investigation & Corrective Action Planning
Cost Estimate:\$26, 638 per June 17 th , 2015 Cost Estimate by Stone Environmental

Threshold Criteria

Is the property eligible under U.S EPA regulations? Hazardous Substances Yes NoX TBD	Petroleum Substances Yes NoX TBD
The property is likely to be eligible for both Hazardo does not contain Petroleum Substances, and therefor	ous & Petroleum Substances funding, however, the property re must draw from CVRPC's Hazardous Grant.
Has the property owner provided site access and agreed to o	conditions of participation?

Qualitative Criteria	How does the project demonstrate potential for successful ruse in response to this criteria?	
2) Is there a prospective purchaser, investor, developer, etc.?	The City of Barre has purchased the property in pursuit of implementation of the North Main to Summer Street Master Plan. The City will finish redeveloping the property into a parking lot to serve the city and the new Downstreet Housing & Community Development headquarters & apartments on Summer Street between Keith Ave and Pearl St.	

Qualitative Criteria	How does the project demonstrate potential for successful re- use in response to this criteria?
3) Site redevelopment potential: a) Are conceptual site plans available?	The City of Barre has been steadily completing Brownfields projects in its North Main to Summer Street, and Merchant's Row, Master Plans. This includes the construction of City Place, a makeover for the Enterprise Alley Parking, and the new Downstreet Apartments. Conceptual Plans for the neighborhood excerpted from the N.Main to Summer St. Master Plan are included as an attachment. The City has already demolished a building formerly on the 12 Keith Ave. parcel in preparation for parking lot construction (former Ormsby property).
b) Would redevelopment conform to local zoning regulations?	Phase 1 & 2 Assessments have been completed by the City.
c) Other:?	A parking lot is allowed in Barre City's Central Business District as a conditional use. Following the concepts of the N.Main to Summer Master Plan, the parking will fit the Design Review Overlay District by giving special attention to the arrangement of parking to serve pedestrian and vehicular circulation.
4) Will the site assessment and/or reuse assist in addressing:	The site has been confirmed to have elevated levels of tetrochloroethene (PCE), a dry cleaning chemical, in soil gases. This has been an issue which developments at the neighboring City Place, Downstreet Apartments, and Blanchard Block, have had to remediate for
a) Public health	in order to protect the long term health of building occupants. Further
b) Environmental quality	monitoring of the effect of PCE contamination on groundwater at the
c) Land use issues (Local & Regional land use goals)	site is also recommended. As the PCE contamination is part of a more wide-spread contamination issue in downtown Barre City, further
d) Other:?	characterizing the contamination will help to determine the need for remedial measures both on the site and at neighboring properties.

Qualitative Criteria	How does the project demonstrate potential for successful re- use in response to this criteria?
5) To what degree does the site assessment and redevelopment have community and/or municipal support?	The City of Barre has already invested over \$800,000 to date in the acquisition of these parcels and the demolition of the former Ormsby building on the 12 Keith Avenue parcel. Development of this property to support the increasing demand for surface parking in downtown Barre due to the on-going revitalization and development of the City's business district is in keeping with the No. Main to Summer Master Plan (2012). The Master Plan planning process included broadly noticed public design workshops held to obtain public input regarding the future of the plan area. Each workshop was very well-attended and helped to insure that the interests of city stakeholders would be represented when the plan was implemented.
 6) Will redeveloping the site offer public benefit, such as: a) Housing, b) Parkland/greenspace, c) Economic development job creation/retention or d) Other:? 	The project is complementary to Downstreet Apartments, a \$4 million dollar Low Income Housing Project that has already been permitted and constructed. The apartments are nearly completed and are currently seeking occupants. The City has entered into a long term lease to provide parking for 42 staff and tenants. The Downsteet project would not be viable without the parking to be provided in this lot when completed. The parking lot will also include a small pocket park for use by Downstreet tenants and the general public.

Qualitative Criteria	How does the project demonstrate potential for successful reuse in response to this criteria?	
7) Has the owner or developer provided willingness to carry out clean up, if it is necessary? Can they provide financial support/in-kind help for it?	The principle funding source is intended to be from a portion of the voter approved \$2.2 Tax Increment Financing (TIF) District Bond. Depending on final environmental assessment and protect development costs, additional remediation and construction funding may need to be sought. The City has been successful in obtaining Community Development Block Grants and EPA Targeted Brownfields Assessment funding in the past for other brownfields projects. The Environmental investigation expenses covered by the City to date are \$53,300 (\$28,300 over budget). An additional \$26,638 is required to perform this Corrective Action Feasibility Investigation (CAFI) and prepare a Corrective Action Plan (CAP).	
a) Is the project financially feasible? b) Is the timeline realistic? c) Is there commitment from necessary partners (public &/or private)? d) Other?	This project is another in a series of public infrastructure projects which the City has completed in the last 5 years (Main Street "Big Dig", Campbell Place Parking Lot, Nelson Street Hydro-Turbine Project. Enterprise Alley Brownfield Remediation and Redevelopment Project. The City has voter support through the TIF Bond and a proven track record of successful redevelopment.	

Program Coordinator Recommendation

The Program Coordinator recommends enrolling the property for up to \$26,638 of corrective action feasibility & clean up planning work, to be carried out by Dec. 31st, 2016 (or 90 days after CVRPC procurement of contractors, whichever is later). If this work is not underway by that date, the funding will be returned to the grant funding pool to be considered for other nominated sites. Should the need for funding at this site exceed \$26,638, the Brownfield's Advisory Committee will consider a request for supplementary funding based on an update to the Site Nomination reflecting the current project circumstances.

Enrollment Determination

Determination of the Brownfields Advisory Committee regarding enrollment, and recommendation to the CVRPC Executive Committee regarding the amount of funding to authorize for expenditure to cover assessment or clean up planning activities.





Yellow shaded area indicates 12 Keith Ave. & Barre City, VT 1 Inch $-80~\mathrm{Fect}$ 25 Pearl St. together. January 24, 2014

Parcel Map Figure 2

Phase II ESA
12 Keith Avenue
Barre Vermont
Prepared for City of Barre



www.cai-tech.com



MASTER PLAN



Figure 5: Master Plan Detail: No. Main / Pearl / Keith / Elm Street

February 27, 2018

Clare Rock, Senior Planner Central Vermont Regional Planning Commission 29 Main Street, Suite 4 Montpelier, Vermont 05602

Stone Project No. 14-021

Subject: Cost Estimate for Supplemental Phase II ESA, 12 Keith Ave, Barre City, Vermont

Dear Clare,

Pursuant our meeting on February 22, 2018 at the City of Barre Municipal Building, Stone Environmental Inc. (Stone) is pleased to present Central Vermont Regional Planning Commission (CVRPC) our proposal for performing a supplemental Phase II Environmental Site Assessment (ESA) at the 12 Keith Avenue property in Barre City, Vermont (the Site).

Prior Phase II ESA and Site Investigation efforts have identified petroleum and chlorinated volatile organic compounds (VOCs) in soil, soil gas, and groundwater at concentrations that exceed their relevant regulatory criteria. Soil gas contamination was recently detected immediately adjacent to the 143/145 North Main Street property at concentrations that indicate a risk of vapor intrusion into the building and that requires further assessment to 1) determine whether other structures are at risk of vapor intrusion, and 2) evaluate whether this result is related to the previously defined tetrachloroethene and petroleum source areas(Phase II ESA, Stone, 2015) or represent a separate source/release.

1. Proposed Scope of Services

The Supplemental Phase II ESA will include the following elements:

- Develop Work Plan and Site-Specific Quality Assurance Project Plan (SSQAPP) Amendment for
 United States Environmental Protection Agency (EPA) and Vermont Department of
 Environmental Conservation (VT DEC) approval. To gain a full understanding of Site conditions
 related to the petroleum and chlorinated VOC soil gas hot spot(s) within one mobilization, Stone
 proposes to develop a dynamic work plan relying on near-real-time laboratory analysis of samples
 and field-based decisions. The existing SSQAPP will be updated to include additional sample
 locations and methods. The SSQAPP will also provide an update to the Project Schedule.
- 2. <u>Core Supplemental Phase II ESA Field Work Elements.</u> The following Supplementary Phase II ESA tasks will be completed at the initiation of the dynamic work plan (e.g., not subject to field observations).
 - a. Assess indoor air quality within 143, 151, and 159 North Main Street buildings basements.

- Assumes 3 indoor air samples, one field duplicate, and one background sample for TO-15 analysis.
- ii. Stone will perform pressure differential measurements between the basement and exterior soils within the 143, 151, and 159 North Main Street basements
- iii. Assumes samples will be collected over 24 hours.
- b. Assess whether contamination in groundwater entering the buildings may be adversely impacting indoor air.
 - i. Collect samples from sumps within the 143, 151, and 159 North Main Street buildings.
 - ii. Assumes 4 sump samples with 1 field duplicate and trip blank samples.
- c. Evaluate soil gas concentrations in the previously identified petroleum and chlorinated VOC hot spot and surrounding area to evaluate whether other buildings may be at risk of vapor intrusion.
 - Collect 11 soil gas samples with one field duplicate and one trip blank for EPA Method 8260 analysis.
 - ii. Collect 2 confirmation samples for fixed-based analysis to evaluate mobile laboratory precision.
- 3. <u>Dynamic Supplemental Phase II ESA Field Work Elements</u>: Following the completion of the Core Field Work Elements, above, Stone will utilize real-time laboratory analysis to fully delineate petroleum and chlorinated VOCs in soil gas.
 - a. Soil gas samples will be collected using an AMS Soil Gas probe and analyzed on-Site by gas chromatography with mass spectrometry (GC/MS).
 - b. Soil gas samples will be collected along transects between the building and soil source area.
 - c. Transects will be extended or added, as needed, to fully characterize the soil gas plume(s).
- 4. Contingent Supplemental Phase II ESA Field Work Elements: If results of the Supplemental Phase II ESA indicate that the 123 and/or the 135 North Main Street buildings are at risk of vapor intrusion, Stone will perform indoor air sampling of the relevant building interior(s). Samples will be collected over 24 hours and be submitted for fixed based analysis by method TO-15. Stone will also perform pressure differential measurements within the 123 and 135 North Main Street basements as part of this task.
- 5. <u>Reporting:</u> Stone will prepare a Supplemental Phase II ESA Report in accordance with the Investigation and Remediation of Contaminated Properties Rule (I-Rule).
- 6. <u>Project Management, Coordination, and Meetings:</u> Project management and coordination tasks will include:

- a. Coordinate Site access with Site owners of the four downgradient property owners (123, 135, 143/151, and 159 North Main Street).
- b. Pre-marking of proposed core and dynamic investigation locations for utility clearance.
- c. Invoicing, project tracking, and program management assistance.
- d. Two meetings in Barre City.

2. Estimated Costs

The estimated costs to perform the scope of services described above is summarized in Table 1, below, and detailed in Attachment 1. As areas of concern subject to this Phase II ESA include both petroleum and chlorinated VOCs, the distribution of costs between Brownfield Hazardous and Petroleum Assessment Grants may be split equally, as indicated below.

Table 1: Summary of Estimated Costs, Supplemental Phase II ESA, 12 Keith Ave, Barre City

	Task	Professional Services	Consultant	Expenses	Petro. Portion	Haz. Portion	Total
1	Work Plan / SSQAPP Amendment	\$1,980	\$0	\$0	\$990	\$990	\$1,980
2	Core Field Work Elements	\$2,575	\$4,759	\$1,170	\$4,252	\$4,252	\$8,504
_3	Dynamic Field Work Elements	\$4,310	\$4,953	\$2,149	\$5,706	\$5,706	\$11,412
4	Contingent Field Work Elements	\$1,755	\$1,166	\$364	\$1,643	\$1,643	\$3,285
5	Reporting	\$4,420	\$0	\$0	\$2,210	\$2,210	\$4,420
	Project Management,						
_6	Coordination, and Meetings	\$1,170	\$0	\$24	\$597	\$597	\$1,194
	TOTAL	\$16,120	\$10,878	\$3,706	\$15,397	\$15,397	\$30,794

For this cost estimate, we have made the following assumptions:

- 1) The City of Barre will work with the property owners of 143/151 North Main Street to resume operation of the sumps within their buildings.
- 2) Core field work components will be completed in one day of field work.
- 3) Dynamic field work components will require two days to complete.
- 4) Contingent tasks will be required, based on the results of the Supplemental Phase II ESA.

3. Schedule

The schedule for completion of the field work will be developed as part of the SSQAPP Amendment. The schedule provided below in Table 2 assumes a notice to proceed by CVRPC and the City of Barre by March 9, 2018.

Table 2: Schedule

	Expected	Estimated Completion
Task	Duration	Date
Work Plan / SSQAPP Amendment	1 week	March 16, 2018
Regulatory Review and Approval	2 weeks	March 30, 2018
Core Field Work	1 day	
Dynamic Field Work Elements	2 days	Week of April 2, 2018
Contingent Field Work Elements	1 day	
Laboratory Analysis (confirmation,		
groundwater, and indoor air samples)	2 weeks	April 20, 2018
Report	3 weeks	May 11, 2018

On behalf of Stone, thank you for the opportunity to provide you with this proposal. Please feel free to call or email me with any questions.

Sincerely,

Daniel Voisin

Senior Geologist, Director of Environmental Assessment and Remediation Services

Direct Phone / 802.229.1875

Mobile / 802.279.8174

E-Mail / dvoisin@stone-env.com

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Keith Ave Phase II ESA Supplement 14-021

DETAILED FEE & SCOPE DETAILS

	Rate Per Unit	Unit	Amount	Subtotal		Scope Details
Work Plan / SSQAPP						evelop dynamic work plan/SSQAPP Amendment for supplementa
Professional Services						il gas assessment.
	\$ 115 / hour	2	\$230			ise elements include:
						ndoor air samples in 143 through 159 N Main Street
	\$ 115 / hour	2	\$230			Soil gas samples along exterior of Site buildings.
Project Professional 2 LJR	\$ 100 / hour	12	\$1,200			0 , 0
•	\$ 80 / hour	4	\$320		- \$	Sump sampling within 143/151 and 159 N Main Street.
Professional Service		20	4520	¢1 000		
Professional Service	as Summary	20		\$1,980	Dy	namic elements:
					- /	Additional soil gas samples and analysis to define exceedances
						e VISL for PCE/Petroleum constituents.
						Samples will be collected along evenly spaced, itnervals along up
					two	o transects.
					Co	ontingent elements:
					l - I	f soil gas samples collected from adjacent 123/135 N Main Stree
						ildings exceed the VISL, then, indoor air samples would be colle
						m these spaces.
					-1	Perform pressure differential testing
TASK SUBTOTAL					\$1,980	
Base Field Work Elements					Ba	se elements include:
Professional Services						ndoor air samples in 143 through 159 N Main Street
	\$ 115 / hour	1	\$115			Soil gas samples along exterior of Site buildings.
Project Professional 2	\$ 100 / hour	12	\$1,200		- \$	Sump sampling within 143/151 and 159 N Main Street.
,	\$ 70 / hour	12	\$840		1	
					1)	Collect 3 indoor air samples, with 1 FD and 1 ambient exterior
	\$ 70 / hour	6	\$420			gradient sample over 24 hours for TO-15 analysis.
Professional Service	es Summary	31		\$2,575		Collect 11 soil gas samples with 1 FD and 1 TB for 8260 analysis
					,	,
Consultants*						egin delineation of contingent elements, based on results.
	\$1 636 / al	4	¢1 000			Collect 2 confirmation samples in Tedlar for fixed-based analysis
Cascade Technical Services - VOC Lab	\$1,636 / day	1	\$1,800		4)	Collect up to 4 sump samples with 1 FD and 1 TB for 8260.
CTS Data Management	\$120 / day	1	\$132			
TestAmerica - VOCs in Indoor Air (SUMMA)	\$265 / ea	5	\$1,458		1	
TestAmerica - VOCs in Soil Gas (Tedlar)	\$165 / ea	3	\$545		1	
` ,		6	\$825			
TestAmerica - VOCs in Water	\$125 / ea	О	\$825			
Consulta	nt Summary			\$ <i>4,75</i> 9		
External Expenses						
•	¢125 /		£120			
Rental-Field Equipment	\$125 / ea	1	\$138		1	
Stone Equipment					1	
EAR Tacoma Usage Fees	\$125.00 / day	1	\$125.00		1	
EAR AMS Soil Gas Sampling Kit	\$100.00 / day	1	\$100.00		1	
	•				1	
EAR Bosch Hammer Drill	\$50.00 / day	1	\$50.00		1	
EAR Electrical Generator - Honda Eu 2000	\$50.00 / day	1	\$50.00		1	
EAR PID	\$90.00 / day	1	\$90.00		1	
	•				1	
GDS Trimble GEO 7X GPS	\$125.00 / day	1	\$125.00		1	
Stone Consumables					1	
EAR 1/4" OD FEP Tubing SG	\$2.16 / ea	80	\$172.80		1	
EAR PPE	\$15.00 / day/staff	2	\$30.00		1	
EAR Tedlar Bags (0.5 or 1.0 liter)	\$14.50 / ea	20	\$290.00		1	
3 ()		20	\$25U.UU	¢4 170	1	
Expen	se Summary			\$1,170		
TASK SUBTOTAL					\$8,504	
Dynamic Field Work Elements						namic elements:
Professional Services						Additional soil gas samples and analysis to define exceedances
Senior Professional 1	\$ 115 / hour	2	\$230			e VISL for PCE/Petroleum constituents. Samples will be collected
Project Professional 1	\$ 100 / hour	24	\$2,400		alc	ong evenly spaced. itnervals along up to two transects.
•	\$ 70 / hour	24	\$1,680		1	
	, ,		1,000 پ	¢4340	1)	Collect up to 20 soil gas samples per day over two days using o
Professional Service	es summary	50		\$4,310		e laboratory for real-time analytical support to delineate soil gas
						ot(s) between N Main Street buildings and soil source area.
					Sp	orto, pormoon is main oriest buildings and soll source area.
Consultants*		2	\$3,600		1	
	\$1.636 / dav	_	\$3,600 \$264		1	
Cascade Technical Services - VOC Lab	\$1,636 / day		3/64			
Cascade Technical Services - VOC Lab CTS Data Management	\$120 / day	2			ı	
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air	\$120 / day \$165 / ea		\$1,089			
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air	\$120 / day	2		\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air	\$120 / day \$165 / ea	2		\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultar	\$120 / day \$165 / ea	2		\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultai External Expenses	\$120 / day \$165 / ea nt Summary	2 6	\$1,089	\$ <i>4</i> ,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultat External Expenses Rental-Field Equipment	\$120 / day \$165 / ea	2		\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultai External Expenses	\$120 / day \$165 / ea nt Summary	2 6	\$1,089	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultat External Expenses Rental-Field Equipment Stone Equipment	\$120 / day \$165 / ea nt Summary \$125 / ea	2 6	\$1,089 \$275	\$ <i>4</i> ,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultati External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees	\$120 / day \$165 / ea nt Summary \$125 / ea \$125 / day	2 6 2	\$1,089 \$275 \$250.00	\$ <i>4</i> ,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultat External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day	2 6 2 2 2	\$1,089 \$275 \$250.00 \$200.00	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultati External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees	\$120 / day \$165 / ea nt Summary \$125 / ea \$125 / day	2 6 2	\$1,089 \$275 \$250.00	\$ <i>4</i> ,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultat External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit	\$120 / day \$165 / ea nt Summary \$125 / ea \$125 / day \$100 / day \$50 / day	2 6 2 2 2 2 2	\$1,089 \$275 \$250.00 \$200.00 \$100.00	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultat External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day	2 6 2 2 2 2 2 2	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$100.00	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultati External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$90 / day	2 6 2 2 2 2 2 2 2	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$100.00 \$180.00	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultat External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day	2 6 2 2 2 2 2 2	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$100.00	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultati External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$90 / day	2 6 2 2 2 2 2 2 2	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$100.00 \$180.00	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultate External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID GDS Trimble GEO 7X GPS Stone Consumables	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$90 / day \$125 / day	2 2 2 2 2 2 2 2 0	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$100.00 \$100.00 \$0.00	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultat External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID GDS Trimble GEO 7X GPS Stone Consumables EAR 1/4" OD FEP Tubing SG	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$90 / day \$125 / day \$125 / day \$2.16 / ea	2 6 2 2 2 2 2 2 2 0	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$180.00 \$0.00 \$345.60	\$ <i>4</i> ,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultat External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID GDS Trimble GEO 7X GPS Stone Consumables EAR 1/4* OD FEP Tubing SG EAR PPE	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$90 / day \$125 / day \$2.16 / ea \$15 / day/staff	2 6 2 2 2 2 2 2 2 0 160 4	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$180.00 \$0.00 \$345.60 \$60.00	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultat External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID GDS Trimble GEO 7X GPS Stone Consumables EAR 1/4" OD FEP Tubing SG	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$90 / day \$125 / day \$125 / day \$2.16 / ea	2 6 2 2 2 2 2 2 2 0	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$180.00 \$0.00 \$345.60	\$4,953		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultate External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID GDS Trimble GEO 7X GPS Stone Consumables EAR 1/4" OD FEP Tubing SG EAR PPE EAR Tedlar Bags (0.5 or 1.0 liter)	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$90 / day \$125 / day \$2.16 / ea \$15 / day/staff	2 6 2 2 2 2 2 2 2 0 160 4	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$180.00 \$0.00 \$345.60 \$60.00	\$4,953 \$2,149		
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultate External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID GDS Trimble GEO 7X GPS Stone Consumables EAR 1/4" OD FEP Tubing SG EAR PPE EAR Tedlar Bags (0.5 or 1.0 liter)	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$50 / day \$50 / day \$125 / day \$125 / day	2 6 2 2 2 2 2 2 2 0 160 4	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$180.00 \$0.00 \$345.60 \$60.00			
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultate External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID GDS Trimble GEO 7X GPS Stone Consumables EAR 1/4" OD FEP Tubing SG EAR PPE EAR Tedlar Bags (0.5 or 1.0 liter)	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$50 / day \$50 / day \$125 / day \$125 / day	2 6 2 2 2 2 2 2 2 0 160 4	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$180.00 \$0.00 \$345.60 \$60.00			
Cascade Technical Services - VOC Lab CTS Data Management TestAmerica - VOCs in Air Consultate External Expenses Rental-Field Equipment Stone Equipment EAR Tacoma Usage Fees EAR AMS Soil Gas Sampling Kit EAR Bosch Hammer Drill EAR Electrical Generator - Honda Eu 2000 EAR PID GDS Trimble GEO 7X GPS Stone Consumables EAR 1/4" OD FEP Tubing SG EAR PPE EAR Tedlar Bags (0.5 or 1.0 liter)	\$120 / day \$165 / ea Int Summary \$125 / ea \$125 / day \$100 / day \$50 / day \$50 / day \$50 / day \$50 / day \$125 / day \$125 / day	2 6 2 2 2 2 2 2 2 0 160 4	\$1,089 \$275 \$250.00 \$200.00 \$100.00 \$180.00 \$0.00 \$345.60 \$60.00		\$11,412	

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Keith Ave Phase II ESA Supplement 14-021

DETAILED FEE & SCOPE DETAILS

Staff Type	Name	Rate Per Unit	Unit	Amount	Subtotal	Scope Details	
Contingent Field Work Element	;					Contingent elements:	
Professional Services						- If soil gas samples collected from adjacent 143/151 N Ma	
Senior Professional 1	\$	115 / hour	1	\$115		buildings exceed the VISL, then, indoor air samples would be	e colle
Project Professional 1	\$	100 / hour	8	\$800		from these spaces.	
Staff Professional 1	\$	70 / hour	12	\$840		- Perform pressure differential testing	
Profes	sional Services Su	ummary	21		\$1,755	A) Callest Circles and a consider with A continue of a consider	
						 Collect 3 indoor air samples, with 1 ambient exterior upgr sample over 24 hours for TO-15 analysis. 	adient
Consultants*						Perform pressure differential measurements between bases.	comon
TestAmerica - TO15		\$265 / ea	4	\$1,166		exterior soils (through basement wall) and, if possible, sub-s	
		\$0		\$0		3) Assess interior sources of VOC contamination.	nab oc
		\$0		\$0		-,	
	ummary			\$1,166			
Stone Equipment							
EAR Manometer		\$65.00 / day	1	\$65.00			
EAR Tacoma Usage Fees		\$125.00 / day	1	\$125.00			
EAR PID		\$90.00 / day	1	\$99.00			
EAR DeWalt Hammer Drill		\$35.00 / day	1	\$38.50			
Stone Consumables							
EAR 1/4" OD LDPE Tubing		\$0.42 / ea	15	\$6.30			
EAR PPE		\$15.00 / day/staff	2	\$30.00			
	Expense Su	ummary			\$364		
TASK SUBTO	ΓAL					\$3,285	
Reporting						Prepare Supplemental Phase II ESA Report in accordance	with I-
Professional Services						Produce contour map of soil gas concentrations.	
Senior Professional 1	\$	115 / hour	4	\$460			
Project Professional 2	\$	100 / hour	24	\$2,400			
Staff Professional 3	\$	80 / hour	16	\$1,280			
Staff Professional 1	\$	70 / hour	4	\$280			
Profes	sional Services Su	ummary	48		\$4,420		
TASK SUBTO	ΓAL					\$4,420	
Project Management, Coordina	ion, and Meetir	ngs				Assumes:	
Professional Services						1) PM to coordinate Site access with 4 property owners.	
Senior Professional 1	\$	115 / hour	8	\$920		2) Field Staff to perform dig safe mark out and lay out points	
Staff Professional 1	\$	70 / hour	2	\$140		3) Invoicing, project tracking, and program management ass	
Accountant 2	\$	55 / hour	2	\$110		4) assumes 2 meetings in Barre. 1 to plan (held on February	y 22),
Profes	sional Services Su	ummary	12		\$1,170	discuss results in late March, early April.	
External Expenses							
Mileage - Personal Vehicle		\$0.535 / mile	40	\$24			
	Expense Su	ummary			\$24		
TASK SUBTOTAL							
IASK SUBIO	AL					\$1,194	

Stone Environmental's standard mark-up on all Consultant and reimbursable project expenses is 10%.

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