



Department of
Community Investment

Redevelopment Commission Agenda Item

DATE: April 24, 2017
FROM: Chris Dressel, Staff *cd*
SUBJECT: Contract Amendment for Environmental Services – Hull & Associates

PURPOSE OF REQUEST:

Staff is seeking approval of the attached contract amendment from Hull & Associates, Inc. in the amount of \$13,390 for professional engineering/environmental services to address activities south of Indiana Avenue and adjacent to Area A (the former Studebaker/current Ignition Park site) as a continuation of ongoing activities consistent with enrollment in the IDEM Voluntary Remediation Program (VRP). Following approval, work is expected to start 2-3 weeks after approval. The specific components of the proposal are summarized as follows:

Task 1: Conduct Sub-Slab and Indoor Air Sampling

- Installation of six (6) sub-slab vapor pins at the Site;
- Collection of eleven (11) sub-slab vapor and indoor air samples

Task 2: Install New Monitoring Wells

- Installation of three (3) monitoring wells

Task 3: Conduct Additional Groundwater Sampling

- Collection of ten additional (10) groundwater samples during the next two quarterly sampling events
- Disposal of groundwater or soil cuttings that are assumed to be hazardous.

Task 4: Complete Letter Report

Staff requests your approval of this service contract amendment. Please contact me at 235-5847 or cdressel@southbendin.gov if you have any questions.

INTERNAL USE ONLY: Project Code: J298
Total Amount new/change (inc/dec) in budget: \$13,390; broken down by:
Acct # 32410504 Amt: 13,390; Acct # _____ Amt: _____;
Acct # _____ Amt: _____; Acct # _____ Amt: _____;
Going to BPW for Contracting? Y/N Is this item ready to encumber now? _____
Existing PO# 229464 Inc/Dec \$ 13,390





April 25, 2017

Mr. Chris Dressel
Brownfield Coordinator
City of South Bend Department of Community Investment
227 West Jefferson Blvd., Suite 1400 S
South Bend, Indiana 46601

RE: Addendum to Existing Contract to Conduct Sub-Slab and Indoor Air Sampling, Monitoring Well Installation; and Groundwater Sampling; Southwest of Ignition Park (the Former Studebaker Complex), South Bend, Indiana (the Site); SBI075.300.0003.

Dear Mr. Dressel:

Hull & Associates, Inc. (Hull) is pleased to present the City of South Bend Redevelopment Commission (Client) the following addendum to our original proposal to provide professional engineering services for the above referenced project. The purpose of this document is to establish the Scope of Work as we understand it and to provide a fee schedule for the project.

The Site, known as Ignition Park, and formerly known as the Studebaker Complex, is enrolled in the Indiana Department of Environmental Management (IDEM) Voluntary Remediation Program (VRP). The Scope of Work entails sampling sub-slab vapors beneath and indoor air from within off-Site structures; installing monitoring wells in vacant City-owned property south of Indiana Avenue; additional groundwater monitoring efforts on a quarterly basis for two additional quarters; and preparation of a report summarizing sub-slab vapor and indoor air at adjacent properties.

Task 1 Sub-Slab Vapor and Indoor Air Sampling

Recent temporary groundwater and soil gas sampling completed upgradient of the Site identified that groundwater exhibiting concentrations of chlorinated VOCs at concentrations exceeding groundwater to indoor air screening levels is present in the vicinity of occupied structures south of Indiana Avenue. To evaluate the extent to which a complete exposure pathway exists in this vicinity, IDEM has requested paired sampling of sub-slab vapors and indoor air from beneath privately-owned property adjacent to and immediately west of City-owned property south of Indiana Avenue between Scott Street and Kendall Street.

It is proposed that three sub-slab vapor probes will be installed through the building floor slab in each of two commercial structures to further evaluate the vapor intrusion exposure pathway. A hammer drill will be used to drill through the concrete slab into the underlying sub-base material. Drilling cuttings and dust will be removed from the hole and a Vapor Pin™ installed. The locations of the vapor probes will be determined upon entry into the structure, but will be directed toward the areas where spaces appear to be occupied either at ground surface or within basements at the structures. Hull will coordinate the installation and sampling schedule with the respective owners. Paired indoor air samples will be collected simultaneously with the sub-slab vapor samples. The samples will be collected in a time weighted period of approximately 8 hours.

Samples for VOC analysis will be collected using 6-liter (interior sub-slab vapor samples) capacity Summa™ canisters fitted with a laboratory-calibrated flow regulator sized to allow the collection of a sample over an 8-hour period from the sub-slab probes. Paired indoor air samples will be collected from a minimum of two locations at each structure on the same days as samples are collected from the sub-slab vapor pins. In addition, prior to sample collection, sub-slab vapor purging will be conducted at a maximum flow rate of 0.1 L/min. The sample tubing will be purged with a vacuum pump or syringe until a volume of air approximately twice the tubing volume is evacuated in order to remove potentially stagnant air from the internal volume of the soil gas probe and ensure that representative soil gas is obtained. The sample tubing will then be attached to the Summa™ canister and the canister valve opened. The vacuum in the Summa™ canister will be measured and

recorded immediately prior to canister deployment. The canister vacuum will be monitored and recorded periodically during the sample collection period.

The soil gas samples will be analyzed by ALS Laboratory Group in Holland, Michigan or Cincinnati, Ohio using the U.S. EPA's TO-15 gas chromatograph/mass spectrometer (GC/MS) methodology for VOCs. Quality control/quality assurance (QC/QA) measures implemented during the soil gas sampling event will include maintaining a minimum residual negative pressure in the Summa™ canisters of approximately 1 to 5 inches of mercury following sample collection.

A brief summary report will be prepared with the intent that the results will be shared with IDEM following internal discussions between the City, Hull, and outside counsel.

Task 2 Install New Monitoring Wells

Additional monitoring wells are proposed at City-owned property south of Indiana Avenue to evaluate the concentrations of tetrachloroethylene (PCE) in groundwater upgradient of Ignition Park, and to better delineate an apparent source of PCE in groundwater underlying Ignition Park. This cost estimate assumes three shallow monitoring wells will be installed.

Hull will work with the drilling subcontractor, the property owners, and the appropriate City and St. Joseph County authorities to arrange for access for the work and to clear utilities and to prepare appropriate permits for drilling in the right-of-way, if necessary. Drill cuttings and sample purge and decontamination water will be containerized and placed at a location designated by the City.

Soil borings associated with the proposed monitoring wells will be drilled using 4.25-in., inside-diameter hollow-stem augers and continuously sampled using 24-in. split-spoon samplers to the appropriate depth based on conditions encountered during drilling (currently proposed to be approximately 30 feet below grade). The final locations of the monitoring wells may be modified based on field observations. Soil samples will be screened with a photoionization detector (PID) during soil boring logging to evaluate for the presence of soil contamination, and select soil samples will be submitted for laboratory analyses as part of the monitoring well installation.

Monitoring wells will be constructed of two-inch inside diameter Schedule 40 PVC slotted screens and risers. Once the targeted depth has been reached, the well column will be slowly lowered to the base of the borehole. A clean silica quartz sand filter pack will be placed around the screen and will extend no more than two feet above the top of the screen. Sodium bentonite chips or pellets will then be placed on top of the sand pack to a depth of approximately three feet below ground surface. The remaining three feet will be filled with concrete to anchor a flush-mount manhole completed at the ground surface.

Monitoring wells will be developed following installation to remove fines that may have entered the well screen or filter pack during installation. Well development activities will continue until pH, temperature, and conductivity have stabilized for three consecutive well volumes, or until five well volumes have been removed, whichever is greater. Development waters will be collected and stored in a DOT approved 55-gallon drum. Costs to remove, transport, and dispose of approximately 8 55-gallon drums of containerized groundwater and drill cuttings (which are presumed to be non-hazardous) are included in this task. Containerized groundwater and drill cuttings will be sampled and appropriately characterized for proper disposal following installation and sampling activities.

After the new monitoring wells are installed, passive diffusion bags (PDBs) will be placed in the monitoring wells to allow for future sampling events consistent with the scope of groundwater sampling efforts

currently completed at other monitoring wells at Ignition Park. Groundwater samples will be collected from the newly-installed PDBs as described below.

Following the installation of the new monitoring wells, the top of casing and ground elevations of the new wells will be surveyed so that the groundwater elevations measured in these wells can be compared relative to the other wells in the monitoring network. Costs include a surveying event from Jones Petrie Rafinski to tie the new wells into the monitoring network.

Task 3 Additional Quarterly Groundwater Sampling Costs

Beginning with the subsequent quarterly groundwater sampling event in June 2017, or immediately following sub-slab vapor and indoor air sampling activities, whichever occurs immediately following monitoring well installation activities described in Task 2 above, groundwater samples will be collected from the newly-installed monitoring wells south of Indiana Avenue. Groundwater samples will be collected and submitted to the laboratory for VOC analysis using U.S. EPA Method 8260 consistent with the sampling regime currently employed at Ignition Park pursuant to the current contract. Duplicate samples will be collected at randomly selected monitoring well locations. Field/equipment blanks will also be collected and submitted along with a trip blank for analysis as part of QA/QC of field procedures. Purge and decontamination waters, if generated, will be collected and stored in U.S. DOT-approved 55-gallon drums and appropriately disposed as presented in Task 2 above. Laboratory analytical subcontractor costs for this Task include the cost of replacing PDBs during each quarterly sampling event at each well.

A brief draft letter report documenting the results of each quarterly sampling event will be prepared and submitted to the Client for review. Once the draft letter report is reviewed by the Client and finalized by Hull, a copy will be submitted to the IDEM VRP.

Task 4 Letter Report

Hull will provide a brief letter report detailing the sub-slab vapor and indoor air sampling activities. The letter report will include copies of soil gas probe construction diagrams, field data forms, analytical results and a Site plan. The report will also include recommendations, if necessary, for additional field work to continue or complete the vapor intrusion investigation.

SCHEDULE

Hull will begin sampling and well installation activities as soon as is practicable following approval (currently estimated to be within 2-3 weeks).

COMPENSATION

A breakdown of costs is presented in the Task Order included below. The fees have been developed based on our estimate of hours for each labor category expected to be involved in the project. The fees are reflective of the balance of remaining funds from the "Additional Activities" task from the existing contract that have not been expended. The portion of the "Additional Activities" task that has been spent to date reflects coordination of proposed sub-slab and indoor air sampling events; meeting with off-Site property owners; coordination with IDEM; coordination with the City and outside counsel; and the completion of a geophysical survey at City-owned property south of Indiana Avenue to evaluate for the presence of utilities and/or preferential pathways for the migration of chemicals of concern from potential source areas. Also, as we have discussed, a \$10,000 portion of the General Consulting Services contract between Hull and the City will be used to defray the costs of this Addendum. The project will be billed on a four-week basis with payment due to Hull within thirty days after receipt of an invoice.

ADDITIONAL WORK

Additional work beyond the Scope of Work defined herein shall not be performed until such time as an

Mr. Chris Dressel
April 25, 2017
SBI075.300.0003
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amendment to this proposal, including the scope of the additional work and associated costs, has been prepared in writing to address the additional work and said amendment has been approved by the Client in writing.

Specific items not within the Scope of Work on this project include, but are not limited to the following:

1. Installation of more than six (6) sub-slab vapor pins at the Site;
2. Collection of more than eleven (11) sub-slab vapor and indoor air samples to be analyzed for VOCs in accordance with U.S. EPA Method TO-15;
3. collection of more than 10 groundwater samples (including QA/QC samples), during the next two quarterly sampling events, to be analyzed for VOCs in accordance with U.S. EPA Method 8260; and
4. disposal of groundwater or soil cuttings that are determined to be hazardous.

No amendment to this proposal shall be required in situations where additional work may be necessary, as a result of unanticipated or unidentified conditions including, but not limited to, the presence of unidentified or mislocated buried utilities, structures, or objects and unanticipated hazardous materials and/or hazardous or dangerous circumstances, to complete previously identified tasks. Hull shall be compensated for the actual time spent performing this additional work and other direct expenses and subcontractor fees at the billing rates outlined in Table 2.

STANDARD OF CARE AND LIMITATIONS

Hull shall perform its services using that degree of care and skill ordinarily exercised under similar conditions by reputable members of its profession practicing in the same or similar locality at the time of service. No other warranty, expressed or implied, is made or intended by our proposal or by our oral or written reports. The work will not attempt to evaluate past or present compliance with federal, state, or local environmental or land use laws or regulations. Conclusions presented by Hull regarding the Site to be investigated shall be consistent with the Scope of Work, level of effort specified, and investigative techniques employed. Reports, opinions, letters and other documents will not evaluate the presence or absence of any compound or parameter not specifically analyzed and reported. The presence of radiation, radon, lead, electromagnetic fields, and indoor air pollution will not be investigated, unless specifically stated in the scope of work. Hull makes no guarantees regarding the completeness or accuracy of any information obtained from public or private files or information provided by subcontractors.

Again, thank you for the opportunity to conduct additional Phase II ESA activities at Ignition Park. Please call me at (800) 241-7173 if you have any questions. If you approve of this proposal, please sign the attached Task Order form and return it to my attention.

Sincerely,



Douglas G. Stuart, CHMM
Senior Project Manager

ct: File

TASK ORDER FORM

**TASK ORDER
TO
PROPOSAL FOR PROFESSIONAL SERVICES**

HULL & ASSOCIATES, INC.

TASK ORDER NO: 002
HULL PROJECT CODE: SBI075
PROPOSAL NUMBER: SBI075.300.0003

Subject to the terms and conditions of the above referenced Contract, the Consultant agrees to perform the following Scope of Work as follows:

Install permanent monitoring wells to evaluate the off-Site (i.e., upgradient) plume of chlorinated VOCs at the Ignition Park Property located south of Indiana Avenue; South Bend, Indiana; collect and analyze sub-slab vapor and indoor air samples; and prepare a brief summary report; as further described in Hull document number SBI075.300.0003 dated April 25, 2017.

Task 1: Sub-Slab and Indoor Air Sampling	\$8,134
Task 2: Install New Monitoring Wells	13,618
Task 3: Additional Groundwater Sampling Costs	1,670
Task 4: Letter Report	<u>3,890</u>
Subtotal	\$27,312
Less: Balance from "Additional Activities" Task	(3,922)
Less: Balance from General Consulting Contract	<u>(10,000)</u>
TOTAL ADDENDUM REQUESTED	\$13,390

NUMBER OF COPIES OF DELIVERABLE: as required for IDEM and Client needs

ESTIMATED TOTAL COST: \$13,390

HULL & ASSOCIATES, INC. PROJECT CONTACT: Doug Stuart

CLIENT PROJECT CONTACT: Mr. Chris Dressel

CLIENT AUTHORIZATION: _____ DATE: _____

(Please return one signed original to Hull & Associates, Inc.'s Project Contact and retain one signed original for Client's records).