



Department of

Community Investment

Redevelopment Commission Agenda Item

DATE: June 30, 2016
FROM: David Relos, Economic Resources *DR*
SUBJECT: Environmental Testing / Remediation – former Gates Service Center

This proposal from Jones Petrie Rafinski (JPR) is to provide environmental site assessment and clean up for the former Gates Service Center, located at 410 W. Wayne St. This proposal includes:

- Testing and closure of twelve in ground hydraulic lifts
- Testing and cleaning of two in ground oil / water separators
- Testing and cleaning of trench drains along overhead exterior doors
- Ground penetrating radar (GPR) testing for unground storage tanks

This testing and remediation will ensure this site is ready for redevelopment efforts. Costs are:

- \$11,910 – Remediation / clean up
 - disposal of petroleum products, cleaning of pits, closure of hydraulic lift shafts, documentation / summary
- \$9,388 – Environmental assessment / testing
 - GPR survey, soil sampling and laboratory analysis, reporting
- \$5,671 – geoprobe rental, soil sampling and laboratory analysis, reporting
 - this would be completed only if the GPR survey uncovered anomalies

The City currently has EPA grant money available for environmental testing. If approved, the last two items above could be reimbursed, totaling \$15,059. The cleanup cost of \$11,910 is not eligible.

Staff requests approval of this JPR proposal, in the amount of \$26,969, with the hopes \$15,059 will be approved for EPA grant money.



INTERNAL USE ONLY: Project Code: __10J063__

Total Amount new/change (inc/dec) in budget: __\$26,969__; broken down by:

Acct # 324-1050-460-31.06

Going to BPW for Contracting? No Is this item ready to encumber now? Yes

Existing PO# _____ Inc/Dec \$ _____



Engineering • Planning • GIS • Landscape Architecture •
Surveying • Environmental • Renewable Energy • Architecture

June 27, 2016

City of South Bend
Department of Community Investment
227 W. Jefferson Blvd., Suite 1400 S
South Bend, Indiana 46601

Attention: Mr. David Relos

RE: PROPOSAL FOR PHASE II ENVIRONMENTAL CLEAN-UP AND ENVIRONMENTAL SITE ASSESSMENT, FORMER GATES SERVICE BUILDING, 410 WAYNE STREET, SOUTH BEND, INDIANA (PROPOSAL # JPRE16-051)

Jones Petrie Rafinski (JPR) appreciates the opportunity to present the following proposal for conducting an initial environmental clean-up, followed by an environmental assessment for the former Gates Service Center Facility, which is currently owned by the City of South Bend. JPR understands that the City of South Bend is entertaining offers for the potential purchase of the subject site; however, environmental conditions are cause for concern based upon the findings and recommendation of a 2012 Phase I Environmental Site Assessment conducted by Wightman Petrie Inc. (as performed for the City of South Bend).

Specifically, the Phase I Environmental Site Assessment was undertaken for the entire Former Gates Chevrolet/Toyota complex, located at Western Avenue and Wayne Street, in South Bend (total of ten land parcels totaling approximately 4.79-acres). However, the larger portions of that complex have since been re-developed and are currently used as a Veterans Administration Outpatient Clinic (333 Western Avenue). However, Gates Toyota/Chevrolet continued to use the 410 Wayne Street facility as a downtown South Bend automotive service location through 2013, at which time service operations were transferred to a newly constructed facility in Granger Indiana.

With respect to the Recognized Environmental Conditions identified specifically for the 410 Wayne Street service center location, which remained in operation at the time of the assessment in 2012; the following were noted:

- 1) Two (2) underground storage tanks were reportedly removed from the area of the Downtown Service Center building (406 Wayne Street) in 1990. Wightman Petrie was unable to locate, and GMS Realty, Inc. (Owner) was unable to provide closure documentation that would indicate that environmental sampling was performed at the time of tank removal. Furthermore, the actual location of the former USTs could not be readily identified. We also note the potential for UST systems to have been associated with former residential dwellings prior to the acquisition of the property by Gates/GMS Realty. As such the potential exists for subsurface contamination as a result of the historical presence of such UST systems. We do note that the existing structure was constructed in the early 1970s, and as such it would be unlikely given the date of removal for the identified USTs at 406 Wayne Street as 1990, that the UST systems would be located beneath the existing structure.
- 2) Underground hydraulic lift units were previously utilized within both of the on-site buildings. (We understand that there are a total of twelve in-ground lifts for which the center shafts were removed; however, water and oil sheens were identified within several of the outer casings that were left in

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place). Further investigation was recommended to address the potential for subsurface contamination due to the presence of the underground lift units.

- 3) Existing trench drains (metal plate lined) within both service areas should be cleaned of dirt, debris and oily residues for subsequent categorization as petroleum contaminated wastes. Following cleaning, the trench drains should be assessed through visual inspection for any defects that would suggest a potential for release. If discovered, soil samples should be collected for laboratory analysis, with subsequent determination of the need for additional action (i.e., excavation of impacted soils).

Additionally, it was noted that there are two existing oil/water separators present within the building, both of which contain residual solids, water and indications of the presence of a sheen. As such, it is recommended that the oil/water separators be pumped and cleaned using a rotary jet nozzle (power washer), prior to any environmental assessment as verification that the systems have not resulted in environmental impact to the surrounding soils.

Based upon the aforementioned, the City of South Bend has requested a proposal for performing additional environmental services associated with the subject site. As presented below, please note that for purposes of this proposal, we have divided Estimated Costs into two components, those being costs for 1) environmental remediation/clean-up and 2) environmental assessment/testing.

PROPOSED SCOPE OF SERVICES

ENVIRONMENTAL REMEDIATION/CLEAN-UP

Task 1 – Trench Drain Clean- out

JPR identified the presence of numerous trench drains (approximately 250 ft.) within the former auto service areas of the building, principally along all of the overhead service doors. While we believe that there is observed evidence of oily residuals within the trench drains of the service area, there did not appear to be any residual oils within the service writer area, where problems associated with autos were initially evaluated relative to the service needs. As such, we have not included the cleaning of the two identified trench drains within the service writing area of the building.

Cleaning of the drains will involve the removal of protective grate, followed by the scraping of the trench drain to removal all solid matter (drummed for off-site disposal as petroleum contaminated solids). Once the debris has been removed, the trench drains will be power washed with all liquids either being captured by vacuum unit within the trench, or flowing to the oil/water separators, for removal as part of the oil/water separator cleaning process (see below). Once wash down of the drains is complete, an air supply will be used to effectively dry the units, at which time a visual inspection will be undertaken to look for signs of defects or other damage that may have a potential for subsurface soil impacts (none expected given the steel liner of the trench units).

Task 2 – Hydraulic Lifts and Oil/Water Separators

In terms of Environmental Remediation/Clean-up, JPR is initially proposing the vacuum removal of waters and oily residuals from both the hydraulic lift shafts and the oil water separator systems. Following vacuum removal of residuals, the shafts and separator systems will be jet cleaned using a rotating nozzle to a power washed that allows for running the line to the bottom of the shaft cylinder and the oil water separator containment unit. Once the lifts and separator units have been power washed, all wash waters will be vacuum removed. Upon completion of wash water removal, the hydraulic lift

unit shafts will be filled with concrete as a means of closure. The oil/water separator units will remain intact, as their continued operations will be required for continued use of the existing floor drains present throughout the facility.

ENVIRONMENTAL ASSESSMENT/TESTING

Task 1 – Ground Penetrating Radar Survey (General Property)

Given historical documentation of the prior removal of two UST systems from the 406 Wayne Street address (adjacent), as well as the potential for historical UST systems having been associated with prior residential dwellings (long ago demolished in support of Gates Chevrolet/Toyota operations); JPR would recommend an initial Ground Penetrating Radar Survey of the site.

Completion of a Ground Penetrating Radar Survey would initially serve as verification of the prior removal of the two UST systems identified for the 406 Wayne Street address, as well as provide insight as to any anomalies such as subsurface remnant structures (demolition debris) or other remnant USTs (heating oil) that may not have been removed from the property as a part of historical repurposing or re-development activities. We note that such debris can create significant cost considerations with respect to future construction/use.

If UST systems or other anomalies are identified, the GPR Survey will make determinations as to size, depth and orientation of the systems in support of subsequent boring placement so as to specifically not penetrate the tank system. If tank system(s) or other anomalies are not identified as remaining in the ground, the Ground Penetrating Radar should help in identifying the limits of any prior excavations having occurred at the subject site. By knowing the extent of excavation, we will be able to identify the point at which soil samples from backfill materials should be collected.

In performing the GPR Survey, Jones Petrie Rafinski will utilize a Geophysical Survey Systems, Inc. (GSSI), SIR System-3000 unit, which offers the means to detect buried objects that are not otherwise detectable. In addition to the ability to locate metal objects (i.e., underground storage tanks, drums), GPR is able to detect the accumulation of non-metallic objects (fiberglass/resin tanks, concrete and wooden debris). The system sends radar pulses into the subsurface environment, receives, and processes the reflected energy. Through advanced processing technology, the system calibrates the di-electric constant of the surrounding material. When the signal is reflected from the material having a different di-electric constant, the signal is displayed on the screen as an anomaly. Depth can also be determined by processing the sampling interval and determining the size and comparing relative data to other objects detected.

Characteristics of underlying soils affect the penetration of the radar through the ground. Sands and gravel offer the greatest depth penetration and clearest resolution. Whereas, dense saturated clays offer limited penetration of the radar signal. For purposes of this proposal, Jones Petrie Rafinski has assumed a depth limitation for the GPR of approximately 8 to 10 feet below land surface.

The area of the subject site will be scanned by GPR and delineated using varying interval grid patterns (typically 5-foot or 10-foot intervals). All grid lines will be located on Indiana State Plane Coordinates. Multiple scans in a north-south and east-west direction will be performed utilizing the GPR, looking for anomalies consistent with the presence of underground storage tanks or other large subsurface features (extent or backfill materials). Any identified anomalies (i.e., disturbed subsurface soils) will be marked on the surface using paint, as an aid to any future location for removal closure activity (unless otherwise directed). As such anomalies are identified, a tighter grid pattern may be used to provide for additional definition to the boundaries of concern (typically 3-feet to 5-feet).

Jones Petrie Rafinski will provide an AutoCAD drawing depicting all grid lines established with any anomalies encountered. We will also provide a summary of survey field notes, GPR data files in .pdf format, site photos, and two (2) hard copies of the drawing depicting the above information. Please note that our reporting of Ground Penetrating Radar results does not include any field survey services in the presentation of the location of each and every anomaly identified for purposes of the AutoCAD drawing.

Task 2 – Geoprobe Installation for Soil Sampling (Hydraulic Lifts and Oil Water Separators)

For Geoprobe (small, track mounted, hydraulically driven, sampling probe) boring locations to be placed in the area of the hydraulic lifts and oil water separators, discrete soil samples will be collected at 5-foot intervals throughout the soil profile to a depth of 10-12 feet below ground surface. Each soil sample interval will be screened for the presence of volatile organics by placing a portion of the soil sample into a plastic bag, allowing time for equilibration, and insertion of a photo ionization detector (PID) probe to observe a reading of “total VOCs” in parts per million (ppm). All data associated with the screening of VOCs will be recorded for future reference (Soil Boring Logs).

In addition, a portion of each discrete sampling interval will also be collected for submittal to a laboratory. Jones Petrie Rafinski proposes to submit at least one soil sample from each of the twelve (12) hydraulic lift locations and two (2) oil/water separators for analysis of Polynuclear Aromatic Hydrocarbons (PAHs) via EPA Method 8270 Selective Ion Monitoring. For soil samples collected at the oil/water separators, analysis for the presence of VOCs will also be performed. Samples to be analyzed for Polynuclear Aromatic Hydrocarbons will be collected within 4-ounce glass jars provided by the laboratory (Pace Analytical of Indianapolis, Indiana). Soil samples for VOC analysis will be collected using Terra-Core Sampling kits in a manner consistent with EPA Method 5035A and analysis via EPA Method 8260. All soil samples will be labeled, packed on ice and forwarded to the laboratory under chain-of-custody procedures.

Any additional soil sample submittal will be based on the detection of elevated PID field screening results and/or other indications of the presence of potential contamination (visual or olfactory). If field screening with a PID, visual or olfactory observations do not indicate the presence of contamination, no additional soil sample analyses are anticipated.

TASK 3 – REPORTING

Upon receipt of the lab analyses, data will be reviewed and tabularized. Comparison of the data for each reported chemical constituent will be made to the IDEM, Office of Land Quality, Remediation Closure Guide, Screening Level Summary Table A-6, dated March 2016. Upon completion of the data review, a “Letter Report” will be prepared which presents the sample collection and analytical methodologies used during the field phase of the assessment. Copies of the sample location maps, soil boring logs, tabulated data and comparison to Remediation Screening Levels will also be incorporated. Recommendations for any additional assessment activities will be made for review and comment.

Task 4 – General Property Assessment – Soils Sampling (if necessary)

Assuming that anomalies are identified through the completion of the Ground Penetrating Radar Survey, the potential for historical impact at the subject site will be completed using Geoprobe methodologies. Soil samples would be collected from a total of four locations (north, south, east and west) of the identified anomaly.

For each of the four General Property Geoprobe boring locations (as deemed necessary), discrete soil samples will be collected from the upper 1-foot of soils as an indicator of the potential for direct contact as a pathway for exposure. In addition, soil samples will be collected at 5-foot intervals throughout the soil profile until saturated soil conditions are encountered. Each soil sample interval will be also be screened for the presence of volatile organics (PID readings, visual and odor observations). Such screening efforts will continue throughout the soil boring until saturation is encountered. Soil boring depth will not exceed 30 feet in depth, as 30-feet is a limitation with respect to current guidelines for UST closure.

In addition, a portion of each discrete sampling interval will also be collected for submittal to a laboratory. Jones Petrie Rafinski proposes to submit a minimum of at least two soil samples (one being the surface soil sample) from each of the four (4) proposed boring locations for Volatile Organic Compounds via EPA Method 8260, and Polynuclear Aromatic Hydrocarbons (PAHs) via EPA Method 8270 Selective Ion Monitoring. The second soil sample from each boring submitted for laboratory analysis will either be based on the detection of elevated PID field screening results and/or other indications of the presence of potential contamination (visual or olfactory), or if field screening observations do not indicate the presence of contamination, the depth interval immediately above the soil/groundwater interface will be submitted for laboratory analysis as a means of determining potential for environmental impact.

Jones Petrie Rafinski will utilize IDEM guidance Terra-Core Methods (EPA Method 5035A) to collect soil samples from each sampling interval for the analysis of Volatile Organic Compound (VOC) constituents. Samples to be analyzed for Polynuclear Aromatic Hydrocarbons will be collected within 4-ounce glass jars provided by the laboratory (Pace Analytical of Indianapolis, Indiana). All soil samples will be labeled, packed on ice and forwarded to the laboratory under chain-of-custody procedures.

Task 5 – General Property Assessment - Groundwater Sampling (if necessary)

Jones Petrie Rafinski proposes to convert the four (4) General Property Assessment Geoprobe boring locations (as deemed necessary) to temporary wells with insertion of a Geoprobe groundwater sampling device, allowing for placement of a 10-foot 0.10-inch slotted PVC screen and PVC riser to ground surface for collection of a groundwater sample at a predetermined depth interval within the saturated zone. In the event that the soil boring collapses and does not allow for insertion of the PVC screen and riser, a stainless steel Geoprobe groundwater sampling device will be used in order to collect a groundwater sample.

Once advanced to the desired depth (typically 5' into the saturated zone), the temporary well would be purged using low-flow sampling techniques until such time as the water discharge becomes relatively free of solids or until at least two (2) gallons of water has been removed. Jones Petrie Rafinski proposes that groundwater from each of the temporary wells be analyzed for Volatile Organic Compounds and Polynuclear Aromatic Hydrocarbons. Wastewater from the purging and sampling of the wells will be containerized pending receipt of analytical results.

Each groundwater sample will be appropriately labeled, packed on ice, and forwarded to the laboratory (priority overnight delivery) under chain-of-custody procedures. Jones Petrie Rafinski will plug the boreholes/temporary wells with bentonite once soil and groundwater sampling activities have been completed, as well as inserting either an asphalt or concrete plug, consistent with surrounding cover.

SCHEDULE

Jones Petrie Rafinski proposes to commence with the **ENVIRONMENTAL REMEDIATION/CLEAN-UP** Tasks immediately upon acceptance of this proposal. Such implementation would also include the closure of the hydraulic lift shafts with insertion of concrete. Overall it is anticipated that completion of the **ENVIRONMENTAL REMEDIATION/CLEAN-UP** can occur during an 8-hour period.

We would anticipate completion of the **ENVIRONMENTAL ASSESSMENT/TESTING** following completion of any remediation/clean-up activities. The possible exception to this schedule would be the completion of the Ground Penetrating Radar Survey, which would aid us in the location of soil borings, should any anomalies be identified. Overall, it is anticipated that the GPR services can be completed within 1-day at the subject site, with supplemental completion of the field testing (soil and groundwater sample collection occurring over a three-day period). Upon receipt of the analytical data (one week turnaround); JPR will report the results to the City of South Bend within 48-hours.

Please note that **ENVIRONMENTAL ASSESSMENT/TESTING** activities are also dependent upon weather, utility clearance and Geoprobe availability. Geoprobe services for the twelve borings at hydraulic lifts and two borings at oil/water separators should be completed within 2.0-days of fieldwork or less (only charged for actual day or ½-day rates incurred). However, if because of circumstances beyond our control (i.e. obstructions, collapsing borehole) completion of Geoprobe services requires additional field time, you will be billed accordingly.

If determined appropriate based upon the completion of the Ground Penetrating Radar Survey, a **GENERAL PROPERTY ASSESSMENT** is deemed necessary (i.e., anomalies consistent with UST systems of other debris fields), an additional day of Geoprobe services, as well as additional field time and laboratory analytical costs will be assessed to the project (to be pre-approved).

Samples will be forwarded for arrival to the selected laboratory within 24-hours of collection, with reporting of analytical results available one week following receipt of the samples by the laboratory. Our initial discussion of results will occur within two (2) days of receipt of all laboratory analytical results. Our written "Letter Report" will be submitted within one week of the conference call.

ESTIMATED COSTS

An **ESTIMATED COST** for performing the **ENVIRONMENTAL REMEDIATION/CLEAN-UP** is presented as follows:

Hourly Rate of \$700/hour inclusive of two (2) operators, one (1) technician, vacuum truck, power washer, sewer cleaning head, cleaning chemicals and all required personal protective equipment (estimate 8 hours)	\$5,600
Disposal Costs - \$1.20/gallon of solids (estimate 300 gallons)	\$ 360
\$0.50/gallon of liquids (estimate 2,000 gallons)	\$1,000
Concrete Costs - \$150/yard (estimate 25 cubic yards – in 10 yard increments)	\$3,750
Scheduling/Oversight/Photographic Documentation/Letter Report Summary	<u>\$1,200</u>
ESTIMATED COST	\$11,910

An **ESTIMATED COST** for performing the **ENVIRONMENTAL ASSESSMENT/TESTING** is presented as follows:

Ground Penetrating Radar Survey	\$1,000
Field Engineering Services/Project Management – Sampling	\$2,000
Geoprobe Rental (assumes 2.0-days @ \$1760, including mobilization)	\$3,520
Laboratory Analysis:	
14 soil samples for % Moisture @ \$7/sample	\$ 98
2 soil samples for VOCs @ \$75/sample (oil/water separators)	\$ 150
14 soil samples for Polynuclear Aromatic Hydrocarbons @ \$80/sample	\$1,120
Reporting	<u>\$1,500</u>
ESTIMATED COST	<u>\$9,388</u>

Supplemental General Property Investigation (based upon GPR Results, if necessary)

Geoprobe Rental (assume 1-day @ \$1,760)	\$1,760
Field Engineering Services/Project Management – Sampling	\$1,000
Laboratory Analysis	
8 soil samples for % Moisture @ \$7/sample	\$ 56
8 soil samples for VOCs @ \$75/sample	\$ 600
8 soil samples for Polynuclear Aromatic Hydrocarbons @ \$80/sample	\$ 640
5 groundwater samples for VOCs @ \$75/sample (includes trip blank and MS/MSD)	\$ 375
3 groundwater samples for PAHs @ \$80	\$ 240
Reporting	<u>\$1,000</u>
ESTIMATED COST (if Necessary)	<u>\$5,671</u>

Please note that this **ESTIMATED COST** should be considered a Project Maximum, which Jones Petrie Rafinski will not exceed without prior approval. However, should the scope of services require modification (i.e., additional/less borings) based upon field conditions and/or circumstances that would not have otherwise been anticipated, Jones Petrie Rafinski will notify the client of such “changed conditions” and resultant cost implications to the project. If the project is ongoing, our services will be billed monthly. Payment is due upon receipt of our invoice. Should you have any questions or comments concerning our services or charges during the course of the work, please bring them to our attention immediately for quick resolution.

LIMITATIONS/QUALIFICATIONS

The sampling and testing of soil, groundwater and/or other materials not specifically identified in this proposal is beyond the scope of services for this project. Cost estimates for our proposed services have been prepared based on the following assumptions:

- Jones Petrie Rafinski will have unlimited access to the site during daylight hours;
- Areas for which the GPR will be performed will be cleared of all obstacles prior to mobilization;
- The GPR will be completed in one day, with an additional 2-days for boring installation and field sampling efforts;
- No drilling activities will be performed in the public right-of-way;
- No subsurface obstructions (buried utilities or fill debris) will interfere with our work;
- Groundwater will be encountered within 30-feet of ground surface, with sufficient re-charge to collect appropriate groundwater samples within a time frame of the work schedule;
- Inclement weather will not interfere with the completion of our field work;

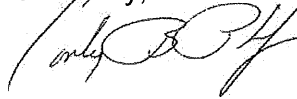
- Soil cuttings will be returned to the boring from which they were generated, with the remainder of the boring filled with bentonite pellets to land surface (with plug consistent with existing surfaces). Purge waters will be containerized pending receipt of laboratory analysis. A cost for disposal of the purge waters has not been included in our cost estimate if determined “hazardous” by laboratory analysis.
- Laboratory analysis will be performed on a one week (7 calendar days) from the date at which the laboratory receives the samples (typically the day following field work).

This **ENVIRONMENTAL ASSESSMENT/TESTING**, as proposed, should be considered as a “tool” in the evaluation of the subject site relative to the potential presence of contaminants, and does not necessarily fulfill IDEM guidelines for delineation of contaminants identified as required for UST Closure or Initial Site Characterization in the event impacts are identified.

AUTHORIZATION

Jones Petrie Rafinski appreciates the opportunity to be of service on this project, and is prepared to commence work immediately upon your acceptance of this Proposal. Should you have any questions or require additional information, please contact me at (574) 232-4388. As noted, costs associated with the implementation of the Phase II Environmental Site Assessment are to be split by both the Purchaser and Seller. Accordingly, there are two Proposal Acceptance Pages. If acceptable, please execute the appropriate Proposal Acceptance Page by signature, where indicated, and return a copy via e-mail (cphifer@jpr1source.com) or facsimile (574) 232-4333). Once both executed copies have been received a fully executed contract will be returned to both parties.

Sincerely,



Conley B. Phifer, CHMM
Environmental Consultant

PROPOSALACCEPTANCE

This PROPOSAL FOR PHASE II ENVIRONMENTAL CLEAN-UP AND ENVIRONMENTAL SITE ASSESSMENT, FORMER GATES SERVICE BUILDING, 410 WAYNE STREET, SOUTH BEND, INDIANA (PROPOSAL # JPRE16-051) is hereby accepted and authorization to proceed hereby granted:

Accepted By: _____ Date: _____

Printed name and title: _____

Point of Contact for Access to facility _____

Telephone Number for Point of Access Contact _____

Business name: _____

Billing address: _____

Billing/account manager: _____

Phone No.: _____ Fax No.: _____ E-mail: _____

Please note: Jones Petrie Rafinski offers electronic invoicing if requested. Please sign below if you would prefer that option.

I prefer to have my invoice transmitted through electronic email:

The party who signs this Proposal is directly responsible for the charges incurred during the completion of our work.