



BRRTS DUPLICATE  
7/21/2020

# GILES

ENGINEERING ASSOCIATES, INC.

**GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS**

- Atlanta, GA
- Baltimore/Wash. DC
- Dallas, TX
- Los Angeles, CA
- Milwaukee, WI
- Orlando, FL

April 22, 2010

BMP Realty  
3319 Nobb Hill Drive  
Racine, Wisconsin 53406

Attention: Mr. Douglas L. Berry

Subject: Proposal for Supplemental Site Investigation Services  
Martinizing Racine  
1730 State Street  
Racine, Wisconsin  
Proposal No. 1EP-1004024

Dear Mr. Berry:

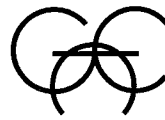
In accordance with your request, Giles Engineering Associates, Inc. (Giles) is pleased to submit this proposal to BMP Realty (the Client) to perform Supplemental Site Investigation services for the Martinizing Racine site at 1730 State Street in the City of Racine, Racine County, Wisconsin (the "Site").

The Site is currently used as a coin-operated laundry and dry cleaner drop-off facility, but was operated as a dry cleaning facility from 1971 until 2000. Historically, dry cleaning operations were conducted in the northern portion of the building. Dry cleaning solvent (tetrachloroethene; PCE) was used at the Site and was stored along the northern wall of the dry cleaning operations room.

Three borings were completed on the site by Northern Environmental in 2007 as part of an initial site-scoping. A temporary well was also constructed in one boring in the approximate former location of the dry cleaning machine (DCM) to facilitate groundwater collection.

Trichloroethene (TCE) and PCE were detected in the shallow soil profile beneath the building at concentrations exceeding regulatory standards in soil samples submitted to an analytical laboratory. TCE, PCE, and intermediate chlorinated volatile organic compounds (VOCs) were detected in the groundwater sample collected from the boring in the approximate former location of the DCM at concentrations exceeding Wisconsin Department of Natural Resources (WDNR) regulatory enforcement standards.

Giles completed five soil borings to a depth of 16 feet below the ground surface (bgs) in January 2010. Four of the borings (MW-1 through MW-4) were completed as NR 141-compliant groundwater monitoring wells; the fifth boring (TW-1) was completed as a temporary groundwater well. MW-1 was completed within the building to evaluate the magnitude and extent of soil and groundwater impact beneath the floor slab, in the vicinity of the former DCM. The additional borings were completed outside the building to evaluate the lateral extent of soil and groundwater impact.



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TCE and PCE were reported in soil samples from boring MW-2 (located immediately north of the building) at a depth of 0 to 2 feet bgs at concentrations exceeding the WDNR Landfill Non-Hazardous Disposal Limit. PCE was reported in MW-2 at a depth of 6 to 8 feet bgs at a concentration exceeding the WDNR Landfill Non-Hazardous Limit. PCE and TCE were also reported in the soil sample from MW-1 (located in the approximate former location of the DCM) at 10 to 12 feet bgs at concentrations exceeding their respective U.S. EPA calculated soil screening levels (SSLs). Additional VOCs were detected at levels below regulatory standards or with no established standard.

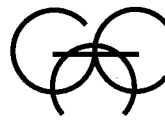
TCE and PCE were detected in groundwater samples collected from MW-1 through MW-4 at concentrations exceeding their respective Ch. NR 140 Enforcement Standards (ES). Vinyl chloride was detected in groundwater samples collected from MW-1 through MW-3 and TW-1 at concentrations exceeding the NR 140 ES. Cis-1,2 dichloroethene (cis-1,2 DCE) was detected in groundwater samples collected from MW-1 and MW-2 at concentrations exceeding the NR 140 ES; cis-1,2 DCE was detected in samples from MW-3, MW-4, and TW-1 at concentrations exceeding the Ch. NR 140 preventive action limit (PAL). Trans-1,2-dichloroethene (trans - 1, 2 DCE) was also detected in the groundwater sample from MW-2 at a concentration exceeding the Ch. NR 140 PAL. Groundwater flow was inferred to be to the south-southeast, toward the Root River.

## **SCOPE OF SERVICES**

Giles proposes to establish direct-push boring grid to include 5 soil borings overlaying the area of MW-2 to define the extent of soil contamination in this area; pre-pack screened wells will also be installed in two direct-push borings completed east of MW-4 and west of TW-1 to define the side-gradient limits of groundwater impact. In addition, Giles proposes to install two additional NR 141-compliant groundwater monitoring wells to further define the lateral extent of impacted groundwater. Two quarterly groundwater sampling events are proposed to establish groundwater contaminant trends and stability.

The following is a detailed listing of the proposed scope of services:

- Obtain permission from the adjoining property owner to the north for access the Turtle Cove property to install the proposed monitoring well north of MW-2 and to sample the proposed monitoring well.
- Coordinate the field activities to be performed on the Site, including Client communication, scheduling, and underground utility locate request.
- Develop and implement a sampling plan for the proposed supplemental investigation.
- Establish grid consisting five direct-push soil borings; four borings will be advanced to 10 feet bgs in the area of monitoring well MW-2 and one boring will be advanced to 20 feet, adjacent to MW-2 to assess the vertical and lateral extent of soil impact (Figure 1).



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- Complete two direct-push borings east of (MW-4 and west of TW-1) to 12 feet bgs and install pre-pack 1-inch well screens to facilitate groundwater collection to define the side-gradient extent of groundwater impact.
- Installation of two Ch. NR-141-compliant monitoring wells, to a common termination depth of approximately 12 to 16 feet bgs, to establish the extent of groundwater impact; one well will be at the Site. The proposed groundwater monitoring well locations include: one boring/well near the State Street right-of-way, south of MW-3, and one boring/well north of MW-2, on the adjoining property currently owned by Turtle Cove of Wisconsin (a former electric motor repair facility). Please see attached Figure 1.
- 
- Observe and document the exploration activities performed at the Site including the location, elevation, and depth of the groundwater monitoring wells.
- Subject the soil samples collected from the soil borings to a visual evaluation and a volatile organic vapor scan utilizing a photoionization detector (PID).
- Submit up to 18 select soil samples collected from the borings (two per boring) to an analytical laboratory for chemical analysis of VOCs by EPA Method 8260.
- Perform two quarterly groundwater sampling events. Collect groundwater samples from the four existing groundwater monitoring wells and three proposed groundwater monitoring wells. Groundwater samples will be submitted to an analytical laboratory for the chemical analysis of VOCs (8260).
- Coordinate the disposal of soil cuttings generated from the newly installed wells.
- Complete data verification and data reduction.
- Prepare a Site Investigation report. The referenced report will summarize the tasks performed, the results of the chemical analyses, and provide Giles' conclusions and recommendations (The cost for Site Investigation Report is included under the initial approved proposal amount).
- Communication with the Client, project management, and peer review.

## **COST**

The estimated cost to complete the referenced environmental services is **\$15,875**. A detailed cost summary is provided on the attached DERF Investigation Bid Sheets (WDNR Form 4400-233). Table 1. The estimated costs are prepared from "good-faith" estimates submitted from select qualified commodity service providers at the time this proposal was prepared. However, due to the potential for WDNR revisions/additions to the scope of services, final compensation will be determined based on the actual lineal footage of borings drilled, number of types of laboratory tests performed, waste disposal and transportation fees, and the actual costs for professional services. It should also be noted that the fees presented in the attached bid sheets do not include costs for expedited turnaround of laboratory analysis.



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**SCHEDULE**

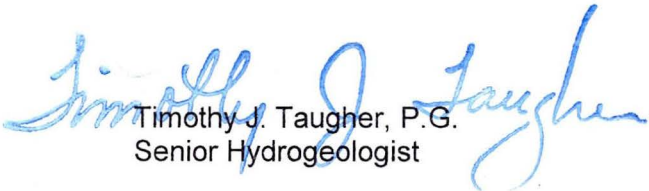
Giles proposes to initiate the utility location, drilling, and soil sampling work within one week of receipt of notification to proceed. The scope of work is expected to take approximately four to six months to complete.

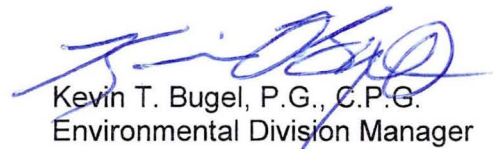
**CLOSURE**

We appreciate this opportunity to offer our consulting services to BMP Realty. Should you have any questions relating to the proposed services or if we can be of additional assistance, please do not hesitate to call.

Respectfully submitted,

GILES ENGINEERING ASSOCIATES, INC.

  
Timothy J. Taugher, P.G.  
Senior Hydrogeologist

  
Kevin T. Bugel, P.G., C.P.G.  
Environmental Division Manager

**ACCEPTED: BMP Realty**

BY:   
\_\_\_\_\_  
(signature)

  
\_\_\_\_\_  
(printed name)

TITLE: Pres.

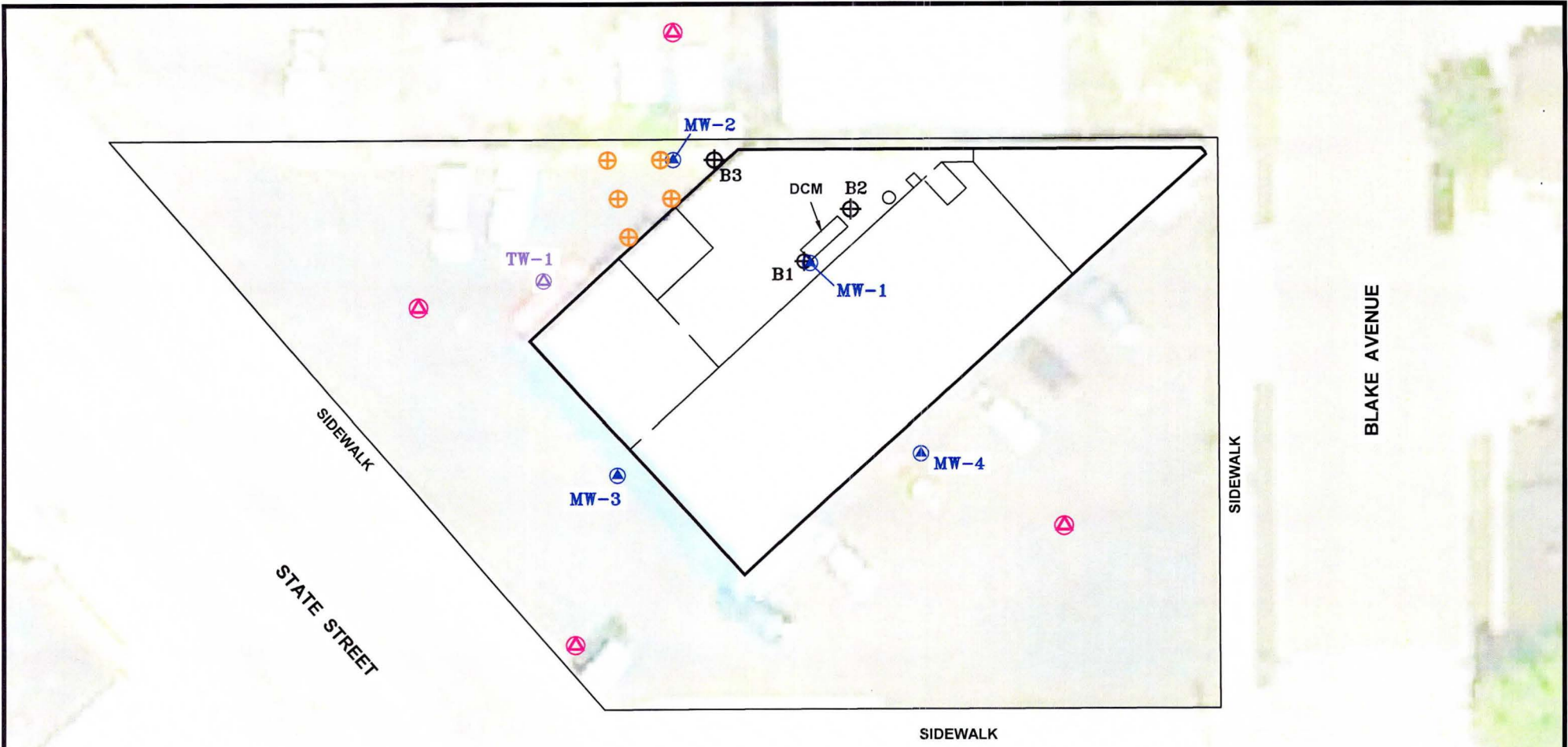
DATE: 4-22-10.

Attachments: Figure 1; Site Plan  
WDNR Form 4400-233 (Site Investigation Bid summary)






Enclosures: Important Information About This Geoenvironmental Services Proposal

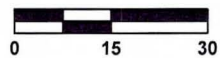
Distribution: BMP Realty  
Attn: Mr. Douglas L. Berry (1 copy)

Wisconsin Department of Natural Resources  
Attn: Ms. Shanna Laube-Anderson (1 copy via Certified mail)



**LEGEND:**

-  PROPOSED DIRECT-PUSH SOIL BORING (QTY: 5)
-  PROPOSED GROUNDWATER MONITORING WELL (QTY: 4)
-  **MW-1** GROUNDWATER MONITORING WELL
-  **TW-1** SOIL BORING / TEMPORARY WELL
-  **B1** SOIL BORING (INSTALLED BY NORTHERN)



APPROXIMATE SCALE

**NOTES:**

1.) BASE MAP DEVELOPED FROM AERIAL PHOTOGRAPHY.

WEST STREET

SPRING STREET



**GILES ENGINEERING ASSOCIATES, INC.**  
 N8 W22350 JOHNSON DRIVE, SUITE A1  
 WAUKESHA, WI 53186 (262)544-0118

**FIGURE 1**  
**PROPOSED BORING LOCATION PLAN**  
 MARTINIZING  
 1730 STATE STREET  
 RACINE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/TJT	JSZ	approx. 1"=30'	04-22-10	--
PROJECT NO.: 1E-0909013			CAD No. 1E0909013A2	

## DERF Site Investigation Bid Summary Consultant Selection Cover Sheet

Notice: Use this form to notify the Department of Natural Resources of the consultant you are selecting to conduct a site investigation and to submit and summarize the bids required in the Dry Cleaner Environmental Response Fund (DERF) Program. This form is authorized under s. 292.65, Wis. Stats. and s. NR 169.23, Wis. Adm. Code. Completion of this form is mandatory for any person applying for DERF reimbursement. Persons who do not submit a completed form will not be eligible for reimbursement under DERF. Personal information will be used to manage the DERF program, and be made available to requesters under Wisconsin's Open Records laws (ss. 19.32-19.39, Wis. Stats.) and requirements.

Complete the following information and submit it to your DNR regional project manager. Copy this form as necessary.

### Site Information

Site name: <b>Martinizing Racine</b>	Facility Name: <b>Martinizing Racine</b>	BRRTS #02-52-549890
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### Consultant Selected

Consultant Name: <b>Giles Engineering Associates</b>	Consultant Address: <b>N8 W22350 Johnson Dr., Waukesha, WI 53186</b>
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### Summary of Costs:

<b>Consultant Name: Giles Engineering Associates</b>	
Consulting costs:	\$8,585.00
Drilling costs:	\$4,013.00
Analytical costs:	\$2,210.00
Miscellaneous costs:	\$1,067.00
<b>Total Costs:</b>	<b>\$15,875.00</b>

<b>Consultant Name:</b>	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
<b>Total Costs:</b>	

<b>Consultant Name:</b>	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
<b>Total Costs:</b>	

<b>Optional 4th bid information:</b>	
<b>Consultant Name:</b>	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
<b>Total Costs:</b>	

Justification for Selection:

### Applicant Information and Certification

I certify that the information contained above is true and correct to the best of my knowledge.

Applicant Name <b>BMP Realty</b>	Date
Street Address <b>3319 Nobb Hill Drive</b>	City <b>Racine</b>
State <b>WI</b>	Zip Code <b>53406</b>

Signature

### Department Use Only

Project Manager Approval Signature	Phone Number	Date
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If not approved, reason for non-approval:

**DERF Site Investigation Bid Sheet**

**Consultant Bid Summary**

Form 4400-233 (R 4/04) Page 2 of 6

**Site Information**

Site Name: Martinizing Racine

Consultant Name: Giles Engineering Associates, Inc

Applicant Name: Kevin T. Bugel

**Bid Summary**

<b>Drilling Costs Total =</b>	<b>\$4,013.00</b>
<b>Analytical Costs Total =</b>	<b>\$2,210.00</b>
<b>Consulting Costs Total =</b>	<b>\$8,585.00</b>
<b>Misc Costs Total =</b>	<b>\$1,067.00</b>
<b>Grand Total =</b>	<b>\$15,875.00</b>

I certify that the costs are an accurate estimate of my total projected costs for the site investigation and I understand and will adhere to s.292.65 Stats. and ch NR 169, Wis. Adm. Code.

Consultant Signature

Date

Please attach to these forms a written narratige specifying how the tasks outlined in these sheets will be performed.

Consultant Name: Giles Engr.  
 Site Name: Martinizing Racine  
 BRRTS #: 02-52-549890  
 Date: 04/22/2010

**DERF Site Investigation Bid Sheet**

**Drilling Costs**

Form 4400-233 (R 4/04) Page 3 of 6

<b>Drilling Costs</b>						
Task	Interval	Number of Borings or Wells	Number of Days	Total Number Feet Drilled	Cost/feet, Day or Well	Total Cost
<b>Well installation and Completion</b>						
Well Installation	_0_ ft to _16_ ft	2	1	32	\$ 14.00	\$448.00
	___ ft to ___ ft					
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs					LS	\$100.00
Mobilization Costs					LS	\$195.00
<b>Auger Borings (continuous sampling)</b>						
	_0_ ft to _16_ ft	2	1	32	\$ 12.00	\$384.00
	___ ft to ___ ft					
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						100
Mobilization Costs						195
<b>Auger Borings (specify split spoon sampling interval)</b>						
	___ ft to ___ ft					
	___ ft to ___ ft					
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						
Mobilization Costs						
<b>Direct Push Borings (per point)</b>						
5SBs@10'; 1 SB @20'	0 ft - 20 ft depth	6	1	70	\$ 8.50	\$595.00
Construction of 2 MWs	0 ft - 20 ft depth	2	1	24	\$ 6.50	\$156.00
SB Abandonment		6	1	46	\$ 2.50	\$115.00
Decontamination Costs					LS	\$150.00
Mobilization Costs					LS	\$100.00
<b>Well Development (if done by subcontractor)</b>						
	Monitoring Wells					
	Piezometers					
	Recovery Wells					
<b>Other</b>						
Drums		3			\$ 55.00	\$165.00
Flush Mount Covers		2			\$ 180.00	\$360.00
Prepack well screens & covers		2		2	425	\$850.00
expendables (direct push)		1			LS	\$100.00
expendables (hollow stem)					LS	
<b>Total Drilling Costs</b>						<b>\$4,013.00</b>



Consultant Name: Giles Engr.  
 Site Name: Martinizing Racine  
 BRRTS #: 02-52-549890  
 Date: 04/22/2010

**DERF Site Investigation Bid Sheet**  
**Drilling Costs**

Form 4400-233 (R 4/04) Page 3 of 6

Parameter	WI Certified Lab			Field Test/Field Kit			Mobile Lab			Total Costs
	\$/sample	# samples	Method Used	\$/sample	# samples	Method Used	\$/Sample \$/Day	# Samples # Days	Method Used	
Solids Analysis										
VOCs	65.00	18	8260							\$1,170.00
Water Analysis (low flow sampling assumed unless otherwise indicated at bottom of this sheet)										
VOCs	65.00	16	8260							\$1,040.00
Air Analysis										
VOCs										\$0.00
TCE										\$0.00
PCE (minimum detection limit is <10 ppbv)										\$0.00
Other: (Specify)										\$0.00
Waste Analyses (soil/water)										
										\$0.00
										\$0.00
Miscellaneous (specify)										
										\$0.00
										\$0.00
Charge for Mobile Lab (indicate # days and daily fee)										
Total Analytical Costs										\$2,210.00

\* Natural Attenuation parameters required for consideration of NA as remedy.



Consultant Name: Giles Engr.  
 Site Name: Martinizing Racine  
 BRRTS #: 02-52-549890  
 Date: 04/22/2010

**DERF Site Investigation Bid Sheet**  
**Drilling Costs**

Form 4400-233 (R 4/04) Page 3 of 6

Major Activity	Specifications	Commodity Unit (specify)	Unit Rate	Number of Units	Total Cost
IDW Disposal					
transport	Non-Hazardous	LS	\$75.00	2	\$150.00
disposal - soil	Non-Hazardous	drum	\$80.00	3	\$240.00
disposal - water	Non-Hazardous	drum	\$145.00	1	\$145.00
Equipment Rental (list and include shipping costs if applicable)					
water level indicator		day	\$20.00	3	\$60.00
Electronic Scale		day	\$25.00	2	\$50.00
PID		day	\$75.00	2	\$150.00
Field Supplies (list)					
Surveying					
Survey Equipment		day	\$40.00	2	\$80.00
Personal Protection Equipment (list)					
Sample Shipping Costs					
Other (specify)					
Mileage	320 mi		\$0.60	320	\$192.00
<b>Total Miscellaneous Costs</b>					<b>\$1,067.00</b>

**Reminders:** DERF does not reimburse for attorney, closure or GIS fees. Mileage and meals are also non-reimbursable. Also, costs to prepare a reimbursement application and discuss the application with the department are not reimbursable. No expedited shipping w/o prior PM approval.

# Important Information About This Geoenvironmental Services Proposal

*This document explains some of the concepts that may be addressed in this geoenvironmental proposal, and conveys information and suggestions to help you manage your risk.*

## **Rely on a Qualified Firm, Not a Standard**

*Even if a standard practice or standard guide applies to a certain geoenvironmental service, the people who perform that service make all the difference.* The scopes of service that comprise standard practices and guides developed by the American Society for Testing and Materials (ASTM) and other standards-developing organizations (SDOs) cannot possibly consider the infinite client-, project-, and site-specific variables that *always* conflict with the theoretical conditions on which SDOs base their standards. For that reason, when something other than a well-established standard test method is involved, knowledgeable geoenvironmental professionals seek to achieve "general compliance." In other words, they use their experienced professional judgment to include applicable elements of a standard in a scope of service they design specifically for the client, project, and site involved.

## **Meet with Your Consultant To Discuss the Scope**

Meet with your consultant to discuss the scope of service best-suited for your project. If you do not, your consultant will be required to base the scope on assumptions about your needs and preferences, among other variables. Assumptions elevate risk. An experienced geoenvironmental professional will ask you questions to gain information that can significantly improve your project's scope of service. During that process, you should ask questions, too, so you can evaluate the people you're dealing with and the cost-effectiveness of their recommendations. If you are reluctant to discuss scope issues because you fear that your consultant's principal concern is increasing the fee, you either are not dealing with the right consultant or you relied on a selection/procurement process that failed to reveal the kind of information needed to create trust.

## **Evaluate Innovation's Risks and Rewards**

Ongoing geoenvironmental research continues to spawn innovation. Do you want to try it? Most innovations are designed to achieve significant

time and/or dollar savings, so the lure can be strong. But understand the risks involved and why "the cutting edge" is sometimes known as "the bleeding edge." Well-qualified geoenvironmental professionals are familiar with "what's new" and can explain its potential benefits and the risks you will have to accept in order to pursue them. Reliance on a well-qualified firm will lower your risk, but it will not eliminate it. Above all, the risks – and the rewards – are yours.

## **If Other Parties Will Rely on the Report, Involve Them Now**

Geoenvironmental studies and reports are designed to meet the specific needs of the clients involved and the statutory, regulatory, or other requirements that apply. Even if the same site were involved, the study designed for a developer might differ substantially from one designed for a lender, insurer, public agency, civil engineer, or even another developer. If you know that others will rely on the report, *involve them now, before you finalize the scope of service*, so your geoenvironmental professional can consider their needs, too. Additional testing, analysis, or study may be required and, in any event, appropriate terms and conditions should be agreed to so both you and your geoenvironmental professional can reduce your risk of third-party claims.

## **Take Steps Now To Avoid Misinterpretation of the Geoenvironmental Report Later**

Some of the geoenvironmental findings, conclusions, and recommendations developed by your consultant may be incorporated into other professionals' deliverables. Even if your geoenvironmental consultant considers their needs when designing your study, they could still misinterpret what the report has to say. Reduce that risk by including a review service in your study's scope. In that way, your geoenvironmental professional will be able to explain pertinent elements of the report to those who will apply them, and to review the deliverables that incorporate them. Such services should not be assigned to others. Your

geoenvironmental professional has the best understanding of the issues involved, including the fundamental assumptions that underpinned the study's scope.

### **Do Not Overrely on a Report's Recommendations**

A report's recommendations are preliminary. Geoenvironmental professionals base them on assumptions about subsurface conditions.

*Geoenvironmental professionals can develop final recommendations only by observing actual conditions as they are exposed in the field.*

For that reason, the scope of service for this project should require the geoenvironmental professional to observe construction and/or remediation as it occurs, to permit rapid response to unanticipated conditions.

*The geoenvironmental professional who prepares a report cannot assume responsibility or liability for the adequacy of a report's recommendations if that professional is not retained to observe relevant site conditions and operations.*

### **Geotechnical Issues Will Not Be Considered**

Unless geotechnical engineering services are *specifically included* in the proposed scope of service, the report you receive will not likely relate any findings, conclusions, or recommendations about subsurface materials' suitability for construction purposes. Geotechnical engineering equipment, techniques, and testing differ markedly from their geoenvironmental counterparts; practitioners' education, training, and experience can be significantly different, too. If you plan to build on the subject site, but have not yet had a geotechnical engineering study conducted, your geoenvironmental professional can probably provide guidance about the next steps you should take.

### **Beware of Change**

The design of a geoenvironmental study considers a variety of factors that are subject to change. Change can undermine the applicability of your consultant's findings, conclusions, and recommendations. Lower such risks by apprising your consultant of impending changes you are aware of, such as:

- modification of the proposed development or ownership group,
- sale or other property transfer,
- replacement of or additions to the financing entity, or
- changes in the use or condition of adjacent property.

Be certain to discuss the property's future, because different uses can have a significant impact on optimal study design and any remediation plan developed. Also discuss the potential for federal, state, or local regulatory changes, some of which could be applied retroactively. While you may be powerless to prevent such changes, your consultant may be aware of what's in development, enabling you to take prudent steps now to address challenges that could emerge later.

### **Expect the Unexpected**

The findings, recommendations, and conclusions of a site assessment or environmental inquiry report typically are based on a review of historical information, interviews, a site "walkover," and other forms of noninvasive research. When site subsurface conditions are not sampled, you're more likely to encounter unanticipated conditions later on.

While borings, installation of monitoring wells, and similar invasive test methods are valuable tools that make unanticipated conditions less likely, *do not overvalue them*. Testing provides information about actual conditions only where and when samples are taken. Geoenvironmental professionals then apply that information to develop opinions about overall conditions. *Actual conditions in areas not sampled may differ (sometimes significantly) from those predicted in a report.* For example, a site may contain an unregistered underground storage tank that shows no surface trace of its existence. *Even conditions in areas that were tested can change*, sometimes suddenly, due to any number of events, such as occurrences at adjacent sites. Recognize, too, that *even some conditions in tested areas may go undiscovered*, because the tests or analytical methods used were designed to detect only those conditions assumed to exist. Manage your risks by retaining your geoenvironmental professional to work with you as the project proceeds, by staying informed of developments, and by staying involved in the decision-making process.

### **Tell Your Consultant How You Want To Deal with the Unexpected**

While you cannot eliminate the potential for unanticipated conditions, you can lessen their impact by structuring the engagement so that your consultant can respond to them quickly and effectively, by immediately authorizing more or deeper borings, different procedures, or additional tests. Few geoenvironmental consultants will proceed unilaterally, because, regrettably, doing so is not good business: Any number of clients have refused to pay for legitimate extras because a consultant proceeded without proper authorization, or failed to submit notice in a timely manner, or failed to provide proper documentation. *Be sure your contract includes a mechanism that gives your geoenvironmental professional a rapid-response capability.* Identify the procedures involved. What types of documentation do you require? To whom should it be sent? When? How? Address the issue *now* so your geoenvironmental professional has the wherewithal to prevent molehills from growing into mountains.

### **Recognize the Risk of Cross-Contamination and Other Unpreventable Problems**

Astute environmental consultants apply a contract provision that directly or indirectly addresses the potential for cross-contamination, as when a drill or probe passes through a contaminated layer and into an aquifer. The provision is likely to make the owner responsible for the consequences, because cross-contamination is