

ISID – Environmental Expanded Triage (Billing Rate)
Indefinite-Scope, Indefinite-Delivery Contract
R 1/9/13



**STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET**

This contract authorizes the professional services contractor to provide professional services. (Authority: 1984 PA 431)

CONTRACT FOR PROFESSIONAL SERVICES: Indefinite Scope-Indefinite Delivery

THIS CONTRACT, authorized this 5th day of April in the year two-thousand and thirteen (2013), by the Director, Department of Technology, Management and Budget, BETWEEN the STATE OF MICHIGAN acting through the FACILITIES AND BUSINESS ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION of the DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET, Second Floor, Stevens T. Mason State Office Building, Lansing, Michigan, hereinafter called the Department, and TriMedia, 1002 Harbor Hills Drive, Marquette, Michigan 49855, the Prime Professional Services Contractor, hereinafter called the Professional.

WHEREAS, the Department proposes securing professional services for:

Indefinite-Scope, Indefinite-Delivery Contract No. 00422

Index No. (To Be Established)

Contract Order No. Y (To Be Assigned)

File No. (To Be Assigned)

Department of Technology, Management and Budget, Facilities and Business Services Administration, Design and Construction Division, Professional Architectural and Engineering Indefinite-Scope, Indefinite-Delivery Contract (ISID) for Minor Projects - **Environmental Expanded Triage**

Various State Departments and Facilities

Various Site Locations, Michigan

NOW THEREFORE, the Department and the Professional in consideration of the covenants of this Contract agree as follows:

- I. The Professional shall provide the professional environmental services for the Project in the study, Phase and Task sequence provided in this Professional Services Contract and to the extent authorized by the Department of Technology, Management and Budget Facilities and Business Services Administration (FBSA), Design and Construction Division (DCD) [The Department], and be solely responsible for such professional services. The Professional's services shall be performed in strict accordance with the Project.
- II. The State of Michigan shall compensate the Professional for providing their professional services for the Project in accordance with the conditions of this Professional Services Contract.

IN WITNESS, WHEREOF, each of the parties has caused this Professional Services Contract to be executed by its duly authorized representatives on the dates shown beside their respective signatures, with the Contract to be effective upon the date on which the Professional received a copy executed by the authorized State of Michigan representative(s) by regular, registered, or certified mail or by delivery in person.

FOR THE PROFESSIONAL:

Firm Name

Federal Identification (I.D.) Number

Signature

Date

Title

FOR THE STATE OF MICHIGAN:

Director, Department of Technology, Management and Budget

Date

WHEREAS, this Professional Services Contract constitutes the entire agreement as to the Project between the parties, any Contract Modification of this Contract and the Department's approved and attached Project/Program Statement scope of work requirements must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered into to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional firm's final design Contract Documents/architectural and engineering design errors, omissions or neglect on the part of the Professional.

ARTICLE I PROFESSIONAL SERVICES SCOPE OF WORK

Provide professional environmental services, technical staff, and support personnel for ISID minor projects on an as-needed basis at various State/Client Agencies within the various site location areas as defined by the State of Michigan. These various ISID minor projects may include projects where the construction costs are between fifteen-thousand dollars (\$15,000) and five-hundred-thousand dollars (\$500,000) for this Contract.

This Contract is for professional design services for an unspecified number of ISID projects. The scope of work for each assigned project will be defined at the time the project is awarded by the State to the Professional firm. The professional environmental services required for each of these assigned projects requested by the Department/Agency may include any or all of the Tasks included in the Phase 100 – Study.

The Professional firm's environmental services shall be performed in strict accordance with this Professional Services Contract and be in compliance with the Department's approved and attached Appendix 1– Project/Program Statement.

This Contract does not warrant or imply to the Professional design firm, entitlement to perform any specific percentage (%) amount of environmental work during the life of this three (3) year Contract.

This Contract will remain in effect for one (1) year from the date of this Contract award, but may be unilaterally terminated by the State of Michigan at any time, for cause or its convenience, by written notification of the State, to the Professional. Furthermore, this Contract may be extended for two (2) option years, at the sole option and discretion of the State upon the Department providing written notice to the Professional prior to the expiration of the original one Contract time period. Any such time extension shall be subject to the terms and conditions of this Contract, including, but not limited to, the existing hourly billing rates included in this Contract for the Professional, their Consultant, and their employees or agents.

Please note that for this Professional Services Contract ISID Contract No. 00422, as noted on page 1, must be provided on all Project correspondence and documents. Also, you are not to provide any services or incur expenses until individual ISID Projects are assigned to this Contract (see the Article II – Compensation and the Appendix 1 – Project/Program Statement).

The Professional shall provide all professional services, technical staff, and support personnel necessary to achieve the Project as described in its Project/Program Statement, in the best interest of the State, and be within the Professional's fee(s) herein authorized by the State. Assigned project services shall comprise, without exception, every professional discipline and expertise necessary to meet all the requirements as described in the Project/Program Statement and be in accordance with the accepted industry standards for professional practice and services. The Professional's services includes attendance at all Project related meetings and conferences. Professional services for the assigned projects under this contract shall be provided in the Phase/Task sequence shown below and shall be rendered in accordance with the Professional's proposed and approved Project Study, Design, and Proposed Construction Schedule. The Professional's study, design and proposed construction schedule shall be detailed, undated, and time sequence related for all Phase/Task services appropriate for the Project. The Professional shall field-check and verify the accuracy of all study/drawing and any data furnished by the Department, the State/Client Agency or any other Project related source. The Professional shall not employ or consult with any firms in completing the Professional's obligations herein who it anticipates will be a construction Bidder for the Project or any part thereof, unless specifically authorized, in writing, by the Department. The Professional acknowledges that the Department is the first interpreter of the Professional's performance under this Contract.

The Professional acknowledges by signing this Professional Services Contract having a clear understanding of the requested professional services required by the Department to provide it, and further agrees that the terms and conditions of this Professional Services Contract provide adequate professional fee(s) for the Professional to provide the requested Project scope of work requirements for each assigned project. No increase in fee to the Professional will be allowed unless there is a material change made to the Project as described in its Project/Program Statement and the change in scope to the Project/Program Statement is accepted and approved in writing, by the Project Director and the Professional. Professional services shall not be

performed and no Project expenses shall be incurred by the Professional prior to the issuance of a written and signed Professional Services Contract and a Contract Order authorizing the Professional to start the Project work. Compensation for Department directed changes to the Project will be provided to the Professional by a Contract Modification and/or Contract Change Order signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from increases in the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Project Director, on an hourly billing rate basis in accordance with this article. This compensation shall not exceed seven and half percent (7.5%) of the Construction Contractor's quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director.

The Professional shall immediately inform the Department whenever it is indicated that the Professional's authorized not-to-exceed Budget for any of the assigned Projects may be exceeded. The Professional shall make recommendations to the Department for revisions to bring the Project Cost back to the Professional's original authorized Budget amount. Any revision to the Project must be accepted and approved by the Department in writing.

The professional services may also include participation in legislative presentations as described in the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" and as the legislature or the Department may prescribe.

No substitution of any "Key Principal Personnel/Employee" essential for the successful completion of the Project and identified in the Professional's Organizational Chart will be allowed by the Professional for this Contract without the prior written consent from the Project Director. Before any "Key Principal Personnel/Employee" substitution takes place, the Professional shall submit a written request to the Project Director, and this substitution request shall include the following information: (1) A request in writing for a No Cost Contract Modification; (2) Detailed written justification for this substitution; (3) The Professional's qualifications of any proposed "Key Principal Personnel/Employee" replacement; and (4) A written statement from the Professional assuring the Department that the Project scope of work will not be adversely affected by this substitution. This request to modify their Professional Services Contract must be accepted and approved in writing by the Project Director and the Director of the Department.

The Department will designate an individual to serve as the Project Director for the Project scope of work who shall be fully acquainted with the Project/Program Statement and have the authority to render Project decisions and furnish information promptly. Except in connection with issues under the Article XII - Contract Claims and Disputes text, the Project Director will exercise general management and administration for the Professional's services in so far as they affect the interest of the State. The Professional shall indemnify, defend, and hold harmless the State against exposure to claims arising from delays, negligence, or delinquencies by the Professional for the professional services of this Contract.

During the construction administration services of the Project, the Professional shall be required to complete and submit, the on-site Inspection record form titled "DMB-452, The Professional's Inspection Record" for all on-site Inspection visits to the Project site. The Professional's Inspection Record shall be completed and signed by the Professional and submitted monthly, with the original document sent to the Project Director and copies sent to the State/Client Agency and Construction Contractor. The Professional's Inspection Record shall accompany the Professional's monthly submitted payment request.

The "DMB-460, Project Procedures" documents package containing Department forms for use during construction administration shall be used by the Professional in the administration of this Contract.

All professional services will be consistent with the Department's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" unless otherwise approved in writing by the Department.

The professional services required for this Contract shall be performed by the Prime Professional and their Consultants in accordance with service descriptions in this article. The following service descriptions outlined in this Contract represents the Department's standard of care method for describing the Professional's responsibilities for providing the professional services of this Contract, but by inclusion, or omission, do not limit or exclude any regular or normal professional services necessary to accomplish the Project and be in accordance with the approved Project Budget and the industries accepted practice and standards for professional services. However, all of the services outlined in this Contract may or may not be applicable to the Project/Program Statement and will require the Professional to identify only the services that are applicable for the Project at hand. The Professional shall determine and coordinate the interface of the services required for the Project at hand and be responsible for identifying any additional services necessary to successfully complete their Project.

PHASE 100 - STUDY PHASE

Provide a complete and comprehensive environmental study consistent with the Project's Program Statement, with itemized construction cost estimates as defined by the Department.

Task 101 **COORDINATION:** Meet with the Project Team and define all areas of investigation. Establish Project Team responsibilities and lines of communications for the assigned Project. Review the status of the study efforts with the Project Team at such frequency and times as may be required to achieve the Project objectives.

Present study documents to the State/Client Agency and the Department for their review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated and/or critical decisions are made, whether in meetings, conversation or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 102.01 **PHASE I - SITE ASSESSMENT:** Conduct a Phase I - Site Characterization Assessment of the Project site, its buildings and/or structures, and the natural environment. The survey shall be performed, and reported, in accordance with the current edition of the American Society for Testing and Materials (ASTM) standard practice for E1527-05 Environmental Site Assessment, the instructions for which are part of this Contract and its specifications. The subjects of investigation within the text of this standard practice guide shall be supplemented with such other topics of investigation as may be necessary, and appropriate, to completely describe the Project site. Upon finding any definitive indication of possible defect, or reaching any conclusion that a Phase II Site Assessment Investigation is necessary, photographs and additional site assessment investigations and sampling shall be performed while on-site, using manual and portable power tools and equipment.

Task 102.02 **PHASE II - SITE ASSESSMENT:** Upon receiving the Department's written authorization, conduct the Phase II - Site Assessment Investigations to evaluate potential defects identified in the related Phase I - Site Characterization Assessment. Submit a summary report of the Phase II - Site Assessment Investigation in accordance with the Task 110 Report format.

Task 102.03 **SITE CLASSIFICATION:** Determine which classification scenarios (Class 1 through Class 4) fit the Project site based on their threat to human health, safety or sensitive environmental receptors in accordance with the Department of Environmental Quality operational memoranda and the American Society for Testing and Materials, Standard Guide for Risk-Based Corrective Action process for sites under Part 213 of the 1994 PA 451, as amended.

Task 102.04 **RESEARCH:** Gather and/or develop all data to evaluate and clarify the Project. Research existing data, analyze and refine the concepts of the assigned Project's Program Statement. Through discussions with the Project Team, by interrogation and necessary counsel, establish, in requisite detail, the information required to complete the Study for functional and operational needs of the State/Client Agency's respective program(s), as well as operational factors, maintenance and other support features. Identify all additional research, studies, and analysis necessary to express such objectives and requirements in terms of a fully operable facility or system which will acceptably serve its intended use.

Task 103.01 **INITIAL RESPONSE INVESTIGATIONS:** Conduct such on-site investigations as may be necessary to assess any potential for, verify the occurrence/circumstance of, and envision the implications of, fugitive contamination. Except as may be otherwise directed by the Department, the following work of this Task shall be commenced within twenty-four (24) hours of the assignment by the Department:

- A. Perform site surveys and site investigations to identify, and initially assess, the extent of uncontrolled toxic/hazardous materials at the Project site. Conduct site Inspections to detect any immediate hazard to

public health, safety, and welfare. Prescribe and oversee implementation of measures to arrest, stabilize, contain, and negate or remedy such hazards. In circumstances posing risk of fire, explosion, or release of toxic materials to the atmosphere, develop contingency response procedure plans for the affected area. Prepare submittals, and provide all information necessary to secure the approval of the State and the local disaster preparedness authority having governing jurisdiction at the Project site.

- B. Recommend procedures for the safe execution of the affected State/Client Agency functions, consistent with the character and impacts of the site contamination. Provide appropriate information for notifications to personnel impacted by the site contamination, and/or for the Department of Environmental Quality's use in its public information program regarding the site contamination. Provide no statements to State/Client Agency staff, wards of the State, inmates, news media, or the public, regarding any circumstance of the site contamination.
- C. Provide, on the Department's behalf, the appropriate notifications to the Department of Environmental Quality's, State Project Manager and the local and State government agencies and identify any reportable quantities of hazardous materials that may have been released, as required by the 1994 PA 451, as amended. Provide reports required by the 1994 PA 451, as amended, and make all other required notifications to the respective enforcing agency(s). Prepare and provide the initial response investigation(s) reports for this Task, in accordance with the Task 110 Report format or the format required by the enforcing agency.

Provide initial response services including emergency response to a new spill or source area at the request of the Department of Environmental Quality.

Task 103.02 ANALYSIS: Analyze data, information and research gathered. Create draft recommendations or results of the study and research. Upon completion of all on-site field investigation activities, prepare a complete study report. If appropriate, provide itemized construction cost estimates. The analysis will correlate, describe, and record research findings and information for the Project Team's understanding and acceptance. Transcribe and consolidate all existing data, studies and the research analysis of Task 102 into a draft study report. Submit five (5) copies of the draft study report to the Project Team at 50 percent and 90 percent completion review intervals and solicit review comments.

Task 104 PRELIMINARY SITE INVESTIGATION: Conduct the following on-site Inspections, and research, as appropriate, to define the Project site and the circumstances of the site contamination:

- A. Identify and analyze the character, use, history, construction, utilities, and all other pertinent built and natural features of the site, and those within any proximate area which may be impacted by, subject to, responsible for, or contributory to, fugitive contamination. Secure, for reference, all site maps utility/building/structural drawings, well/boring records, surveys, any enforcement records, and all other applicable data. Conduct additional on-site surveys and investigations as necessary to adequately define and depict the Project site. Identify all known, and suspected, contaminants and those that may be predictable from previous site usage.
- B. Conduct an evaluation of the existing data based on preliminary site data and the characteristics of the contaminants, and to the extent that reasonable predictions can be made, envision the source(s), routes, and consequences of active contamination and inspect for indications thereof. As applicable, prepare and submit, on the Department's behalf, a site characterization plan in accordance with the 1994 PA 451, as amended. Prepare and provide preliminary site investigation report(s) for this Task in accordance with the Task 110 Report format requirements.
- C. Conduct Tier 1 Assessment for sites under Part 213 of the 1994 PA 451, as amended. Gather site assessment data on source characterization, potential for exposure and degradation of beneficial uses and extent of contamination. Evaluate Tier 1 results for no action, final corrective action, interim corrective action or tier upgrade-further analysis. Prepare and provide the ninety (90) calendar day initial assessment report in accordance with the report format required by the Department of Environmental Quality.

Task 105 PROJECT WORK PLAN: Prepare a complete, cost effective, viable, and efficient, work plan to determine the extent and degree of environmental contamination at the Project site.

- A. The work plan shall be consistent with the Department's approved Project/Program Statement scope of work and the governing enforcing agency's guidelines for preparation of Project work plan(s). Incorporate the Project specific adapted Project Health and Safety Plan and Quality Control/Quality Assurance Plan of Tasks 602 and 603 and the cost and schedule estimate of Task 108 and Task 109. Summarize the preliminary site investigation findings of Task 104. Develop an appropriate program of sampling and other specialized, nondestructive, investigations to adequately characterize the Project site with respect to geologic, hydrogeologic, hydrologic, topographic, surface and ground water, soil, sediment, air quality, biota, demographics, and other parameters influencing, or, influenced by the contaminants, and/or affecting the vertical and horizontal dispersal and intensities of contaminants, and the migration of the same. Support each line of site investigation with the logic and principals underlying and being applied to define test indicators, detection levels, expected background levels, and the prescribed Project work.
- B. Where Project site sample analysis is to be by other than the Professional firm's own staff, or subcontracted laboratory, the work plan shall include, as appendixes, a listing of the type, method, and number, of environmental tests to be performed and an inventory of all sampling supplies required. The work plan shall be objectively composed and shall not identify the Professional, by name, as performing any part of the work plan. This document shall be so comprehensive, definitive, clearly presented, and self-contained, that the intended work may readily be competitively bid from that document. Review the work plan with the Project Team and revise as required. Where the Project requires, submit the work plan in accordance with the 1994 PA 451, as amended. Submit the work plan and report in accordance with the Task 110 Report work plan format requirements.

- Task 106 REMEDIAL INVESTIGATION/SITE ASSESSMENT: Direct, or as appropriate supervise, the Phase 600 and 700 related Tasks of this Contract for site specific surveys, sampling and subsurface investigations as necessary to fully identify and/or monitor the circumstances of contamination.
- Task 106.01 Conduct all site investigation work in accordance with the requirements of the accepted Project work plan (and such extensions and modifications thereof as the governing enforcement authority may require), and with the Project schedule. Notify the Department and the governing enforcing agency of all sampling with adequate advance notification to allow for their participation.
- Task 106.02 Provide a summary report of all findings and determinations. Include and analyze the results of all laboratory testing. Conduct dispersion modeling as appropriate. Identify and define all geological parameters having influence. Depict the results of all data to graphically show the location(s), vertical and horizontal extent, profiles, and intensities of the site contamination, any plume orientation/rate of dispersion, and the characteristics of any impacted soils and surface/ground water. Identify all computer programs used to reduce, analyze, and otherwise use data. Analyze and provide a risk assessment of the site contamination consistent with the United States Environmental Protection Agency (USEPA) and the Department of Environmental Quality evaluation criteria. The finalized report shall be sufficiently objective, comprehensive, and inclusive that no other reference will be required to understand the circumstances of the site contamination, determine the appropriate method of remediation, and submit proposals for its design. Submit the remedial investigations reports in accordance with the Task 110 Report format requirements.
- Task 106.03 Conduct Tier 2 Assessment: Upon receiving the Department's written authorization, to consider site-specific target levels (SSTLs) and appropriate points of compliance in accordance with the Department of Environmental Quality operational memoranda and the American Society for Testing and Materials, Standard Guide for Risk-Based Corrective Action process. Evaluate the results of Tier 2 for no action, final corrective action, interim corrective action or tier upgrade. Provide a summary report of the Tier 2 assessment in accordance with the report format required by the Department of Environmental Quality.
- Task 106.04 Conduct Tier 3 Assessment: Where the Project requires under Part 213 of the 1994 PA 451, as amended. Upon receiving the Department's written authorization, conduct Tier 3 assessment to consider a more refined site-specific target levels to improve the accuracy of the applicable models in accordance with the Department of Environmental Quality operational memoranda and the American Society for Testing and Materials, Standard Guide for Risk-Based Corrective Action process. Evaluate the results of Tier 3 for no action, final corrective action or interim corrective action. Provide a summary report of the Tier 3 assessment in accordance with the report format required by the Department of Environmental Quality.

- Task 106.05 Conduct a Site Characterization: By collecting sufficient data to understand source area(s), define the nature and extent of contamination, understand contaminant transport and exposure pathways and design a remediation system. Conduct a feasibility study to select a viable and most economical remedial alternative for implementation as a corrective action plan at the site. Prepare the final assessment three-hundred and sixty-five (365) calendar day report. Prepare a closure report for the sites qualified for closure under Part 213 of the 1994 PA 451, as amended. Provide the reports in accordance with the report format required by the Department of Environmental Quality.
- Task 106.06 BUILDINGS/AIR QUALITY: Define and conduct the appropriate testing program to confirm and/or establish the existing baseline/ambient air quality for the site/building(s)/facility and to identify any level(s) of contamination therein.
- A. Determine the local air quality as reported by most current air quality report of the Department of Environmental Quality, Air Quality Division. Such program shall consist of one (1) or more sampling stations on-site and upwind of buildings. Within buildings and structures, identify and sample appropriate areas of homogeneous use, common air supply/return/circulation. Provide a minimum of three (3) samples per area known to contain hazardous materials or sources of contamination as well as one (1) or more representing the main ventilation system air return within each mechanical room, boiler room, and utility tunnel, at all open space or above ceiling plenums, and at such other locations as may represent quantifiable areas having common air supply or circulation characteristics.
- B. Present test results in comparison to standard limits of concentrations allowed and/or recommended by the Department of Community Health, the Department of Environmental Quality, the Michigan Occupational Safety and Health Regulations, and the United States Environmental Protection Agency. Present findings in such format as the Department may prescribe. Verbally notify the governing enforcing agency and the Department of any test results exceeding allowable limits and confirm notice in writing. Provide a summary testing report in accordance with the Task 110 Report format requirements.
- Task 106.07 HAZARDOUS MATERIALS: Define and conduct an appropriate bulk sampling program for suspected toxic/hazardous materials and/or for waste characterization.
- A. ASBESTOS: Assess all asbestos containing materials and provide a management plan and operating/maintenance program in the following format:
- (1) Assessment.
 - (2) Management Plan.
 - (3) Operations and Maintenance Program.
- Task 107 RISK ASSESSMENT: Provide support to the Department and the State/Client Agency to determine ecological and human health risks at the site due to the presence of contaminants. Conduct statistical analysis and data evaluations to support risk assessment. The Professional will evaluate site specific data on a reach by reach basis to develop statistically significant relations of contaminants, to the extent that the data allow.
- Task 107.01 ECOLOGICAL RISK ASSESSMENT: Provide support to the Department and the State/Client Agency to determine risks posed by contaminants at the site. Evaluate the studies, analysis, models and comments on the Ecological Risk Assessment provided by the Potential Responsible Parties (PRPs) and/or the United States Environmental Protection Agency (USEPA) and prepare a response to address the issues/comments.
- Task 107.02 HUMAN HEALTH RISK ASSESSMENT: Provide support to the Department and the State/Client Agency to determine risks posed by contaminants at the site to humans. Evaluate the studies, analysis, models and comments on the Human Health Risk provided by PRPs and/or USEPA and prepare a response to address the issues/comments.
- Task 108 PROJECT COST: Provide itemized construction cost(s) estimates for each Project and maintain current, the estimated cost for, and expenditures of each Task of each respective Phase. In addition to remediation costs, such costs shall include, and specifically identify, all professional, testing, construction, and remediation costs, as well as any costs to maintain the State/Client Agency facility operations. Project cost analysis shall consider funding sources availability, and all steps of the Project Budget and appropriation processes and similar allocation processes affecting funding availability. Such availability shall be compared to projected

cash flows. Where any cost is projected to occur over more than one (1) fiscal year, the estimate shall reflect annual costs.

Task 109 **PROJECT SCHEDULE:** Provide and submit for the Department and the State/Client Agency's acceptance, and maintain current for each assigned Project, a schedule for the events of Tasks 104, 105, 106, and 107. The schedule format will be prescribed by the Department. This schedule shall include the procedural steps of Project Budget submittal, legislative appropriation, and the allocation and release of funds. Project schedules shall be in total compliance with the requirements of any court order(s), consent agreement(s) or other governing directive(s). Prescribed, agreed upon, or historically reasonable schedule times shall be included for reviews and approvals by the governing enforcing agency and for budgetary processes. Such schedules shall be provided in undated unit time durations (day(s), week(s), month(s), etc.) Project schedule dates will be incorporated when approvals or other written orders to proceed become known. Adherence by the Professional, to the Project's accepted schedule time/duration is a condition for satisfactory performance of this Contract.

Task 110 **PROJECT STUDY REPORTS:** Submit weekly written reports for the work of Tasks 103, 104, 106, and 107 (or as the Department may require) which briefly summarize the on-site field investigation activities, findings, significant decisions, and accomplishment of the preceding period. These reports shall transmit and summarize the findings of the on-site field investigation reports of the Phase 700 Project Tasks. Give notice of identified, or anticipated, problems which require response by the Project Team. Project study reports shall identify any significant deviations from the accepted Project work plan, itemized construction cost estimate, or schedule, and provide explanations of the same.

A. Submit the Task 102, draft, preliminary, and final versions, of the Project written report in accordance with the current edition of the American Society for Testing and Materials (ASTM) standard practice for E1527-05, Environmental Site Assessment and as outlined in the Department's approved Project/Program Statement, and the summary reports of Tasks 102, 103, 104, 106, and 107 as the Department may require. Prepare all revisions thereto as the Project Team may deem necessary to produce complete and acceptable report documents. The draft, preliminary, and final reports of Tasks 102.01, 103, 104, 105, 106, and 107 shall be as required by the governing enforcing agency or the Department, as appropriate, and shall include as a minimum the following items:

1. Problem
2. Conclusion
3. Recommendations
4. Discussion, details, and documentation

B. Provide copies of the finalized work plan of Task 105 and summary reports of Tasks 102, 103, 104, 106, and 107 as necessary for submittal to the governing enforcing agency and the Department, along with one (1) camera-ready original, suitable for legible reproduction. In addition, copies of the work plan, and all study reports of this Phase shall be provided to the Project Team members along with up to five (5) additional copies to be distributed as the Department may direct. Provide the Department copies of all electronic/computer data records generated for the Project scope of work, suitable for reapplication to the Project by others.

C. When directed by the Department, submit the Project work plan and reports to the governing enforcing agency on the State/Client Agency's behalf. Monitor the progress of the approval process. Attend all Project related meetings, make presentations, explain all submitted technical data and proposals, provide and submit such amending information, and make such revisions, as may be necessary for the governing enforcing agency's evaluation and approval of the Project work plan and report. Provide environmental investigation/study presentations as indicated in the Project scope of work plan for Department acceptance and incorporate all study review comments required for Department written acceptance of the Project program analysis report. Provide one (1) acceptable environmental investigation/study presentation to the Project Team for this Task. Any additional environmental investigation/study presentations requested by the Department will be considered extra professional services and the additional environmental investigation/study costs will be paid to the Professional firm by the Department with a Contract Change Order.

- Task 111 DATA MANAGEMENT: Review data submitted by Potential Responsible Party (PRP) to determine completeness, integrity, and comparability to other data sets. Develop and manage a comprehensive database to allow the Department and the State/Client Agency access to all electronically submitted data. Run queries on the data at the direction of the Project Director to support the agency's analysis and decision making processes. Review and validate data submitted by Potential Responsible Party (PRP) on quarterly basis. Provide data queries, maps, and associated summaries as requested by the Department and the State/Client Agency.
- Task 112 DOCUMENT MANAGEMENT: Provide services to the Department and the State/Client Agency Project to organize, log, maintain document database, and manage the documents associated with the administrative records for the site. Assist the Department and the State/Client Agency in locating, copying, and distributing documents as requested through the Freedom of Information Act or as otherwise requested by the Department and the State/Client Agency. Project

ARTICLE II COMPENSATION

In consideration of the performance of this Contract, the Department agrees to pay the Professional, as compensation for professional services, an hourly billing rate for each employee providing a direct service to this Project, on a not-to-exceed basis as specified herein, subject to subsequent modification mutually agreeable to the parties hereto; provided, however, the Professional may not incur costs, or bill the Department, for professional services in excess of the estimates established for this Project without the prior written agreement of the Department. The attached proposal prepared by the Professional in response to the Request for Proposal, by the Owner, may describe methodology, services, schedule, and other aspects of the work to be performed under the Contract but does not supersede the Contract.

Compensation to the Professional shall be on an hourly billing rate basis for professional services rendered by salaried and non-salaried professional, technical, and technical support employees, except for any authorized reimbursable expenses provided for in this Contract. Total compensation for any Phase shall not exceed the amount authorized for that Phase, unless authorized in writing by the Department's approved Contract Change Order. Professional services shall not be performed and no Project expense shall be incurred by the Professional firm prior to the issuance of a written and signed Professional Services Contract and a DMB Form 402 - Contract Order by the Department to the Professional, authorizing the Professional to start the Project.

Compensation to the Professional for services and authorized technical and technical support employees performing a direct service for this Project shall be determined using the Professional firm's billing rates. The Professional firm's hourly billing rate cost shall be the actual amount paid for the employee services on the Project exclusive of fringe benefits, vacations, sick leave, other indirect costs, and profit. Such costs and the Professional firm's hourly billing rates shall not change during the life of this Contract without written approval by the Department. The Professional firm's hourly billing rates may also include: (1) All consumables used by the Professional or the Professional firm's Consultants for collection of samples to be tested and analyzed by others; and (2) The costs of owning, operating, maintaining, insuring, and replacing all direct reading/measuring and testing instruments designed for on-site field Inspection and testing work, along with their computer or data recorders, as the Professional may use for on-site field Inspections, investigations, measuring, sampling, or testing services See attached Appendix for the guide to overhead items allowed for the professional services contractor firm's hourly billing rate calculation. Reimbursement for the Project/Program Statement scope of work requirements will be provided only for Department approved items authorized for reimbursement compensation in this Contract. Compensation is approved and authorized by the Department on a per test basis for laboratory services by Professional firm(s) identified and listed in this Contract to: (1) Test and analyze samples collected by their technical employees; and (2) The Professional firm's per test costs shall be recognized by the Department to include all consumables necessary to prepare and secure the respective sample(s) and to conduct the required analytical testing procedures thereon. NO mark-up of these items shall be allowed.

The Professional shall provide, but no additional monetary compensation shall be allowed, for the professional services necessary to respond to and resolve all claims arising wholly or in part from the Professional firm's Design and Contract Documents/study/design/drawing errors or omissions or other aspects of the Project's design or the Professional firm's performance which is inconsistent with the Professional or Construction Contract.

- 2.1 PREMIUM TIME/OVERTIME: This Contract anticipates that no premium or overtime is required to achieve the Project's scope of work. No compensation will be allowed to the Professional for any premium or overtime cost incurred to achieve the Project schedule of this Contract, unless directing in writing by the Project Director.

2.2 **EMPLOYEE HOURLY BILLING RATES:** Hourly billing rates will include all direct and indirect monetary costs to the State for the Professional's services under this Contract other than the authorized and approved reimbursements. Hourly billing rates shall be based on the Professional's documented historical operating expenses and adjusted for Project specific costs. In no case shall this documentation period include more than eighteen (18) months prior to the date of award of this Contract. The Professional may not provide different hourly billing rates for the same individual for different Phases.

No lump-sum amounts of any of the Firm's employees may be billed against this Contract. Any employee associated with this Project who performs the professional services of a subordinate or of a position classification having a lower classification/pay range shall be accounted and paid for at the lower hourly billing pay rate. The hourly billing rate charge of any employee may be changed by the Professional with a written and Department approved Contract Modification during the life of this Contract to account for normal personnel pay increases.

Hourly billing rates include, but are not limited to: Overhead items such as employee fringe benefits, vacations, sick leave, insurance, taxes, pension funds, retirement plans, meals, lodging, and all Project related travel expenses for Projects **less than** one-hundred (100) miles in each direction from the closest Professional's Michigan office, computer costs/operating costs and time, telephone, telephone-related services, and all reproduction services (except Contract Bidding Documents).

The hourly billing rate also includes all reproduction costs for design interpretations, study/design clarifications and Bulletins related to design errors or omissions, construction code compliance (precipitating either from design code compliance and plan review, design interpretations, or construction on-site/field Inspections), and all similar, or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rate. All incidental postage, mail, or other shipping or delivery services, acquisition, bad debts, previous business losses, employment fees, depreciation, and operating costs for equipment, including computer design and/or computer drafting systems, and any specialized testing equipment are to be included. The hourly billing rate shall include, without exception, secretarial, computer/typing/word processing, editing, and clerical services utilized in any way for the Project as well as other non-technical and/or overhead employees. The hourly billing rate also includes all profit without regard to its form or distribution.

Items not allowable as part of the Professional's calculated hourly billing rate include, but are not limited to: Any costs associated with litigation and settlements for the Professional, or other liability suits, out-of-state offices, and associated travel, bonuses, profit sharing, premium/overtime costs, public relations, entertainment, business promotion, contributions, and various speculative allowances.

The hourly billing rate for the Professional may not be applied to the work of the Professional's Consultant's staff. Each Consultant firm must submit a separate hourly billing rate with proper documentation for the Consultant services they will provide as part of the Proposal. The hourly billing rate of the respective Consultant firm shall be used for that Consultant firm's personnel only. No mark-up to Consultant firm's charges will be allowed.

2.3 **RANGE OF EMPLOYEE HOURLY BILLING RATES:** The Professional shall identify the service being provided and include the Professional's or Consultant's employee(s) full names and position classifications for the Project and their current hourly billing rates at the beginning and at the anticipated end of the Project. This hourly billing rate range shall reflect any anticipated pay increases over the life of the Contract. The range of hourly billing rates for any employee position or classification may not be changed without an approved Contract Modification.

2.4 **DIRECT COST REIMBURSEMENT ITEMS:** The Professional's Consultant services and authorized reimbursable expenses shall be treated as an authorized reimbursable expense item at a direct cost. The Professional shall be responsible for the selection of the supplier of their professional services or materials, the coordination, adequacy and application of their professional services, whether provided by the Professional's staff or provided by their Consultant, any Project costs that exceed the Contract per Phase reimbursement Budget. Unless pre-authorized by the Department, direct cost reimbursement items shall be limited to the actual cost.

Project related travel expenses (mileage, meals, lodging) for Projects **more than** one-hundred (100) miles in one-way from the Professional's Michigan office shall be treated as an authorized reimbursable expense at the State of Michigan's current travel rates.

Compensation for this Contract shall not exceed the amounts per Project Phase shown in the attached Contract Order unless authorized by a Department approved Contract Modification. It shall be the Professional's responsibility to carefully monitor

their and their Consultant firms Project costs, activities, and progress and to give the Project Director timely notification of any justifiable need to increase the authorized fee. The Professional may not proceed with professional services that have not been authorized by the Project Director and shall immediately notify the Project Director if such services have been requested or have become necessary.

Identification of Professional and Consultant staff, hourly billable rates, and an itemized list per Project Phase of authorized direct cost reimbursement items are identified in the attached Professional's proposal.

ARTICLE III PAYMENTS

Payment of the professional services fee shall be based on the Professional's performance of authorized professional service(s) performed prior to the date of each submitted payment request. Payment requests shall be submitted monthly to the Project Director on a payment request form (DMB-440). Payment for each monthly submitted payment request shall be made within thirty (30) consecutive calendar days following the Department's approval of the payment request. Payment requests shall include signed certification by the Professional of the actual percentage of work completed as of the date of invoicing for each Phase and summarize the amounts authorized, earned, previously paid, and currently due for each Project Phase. Payment requests shall be supported by itemized records or documentation in such form and detail as the Department may require. Each of the Professional's Consultant's submitted payment request applications shall include similar information. This includes, but is not limited to:

- a) Phase Numbers for the professional services provided.
- b) Professional's personnel and position/classification providing service and hours worked
- d) Current hourly billing rate charges for each individual position/classification.
- e) Copy of certified on-site visitation log or site visit report showing time on-site.
- f) Itemized invoices from each of the Professional's Consultant's documenting that firm's professional services charge and the Project work related services provided.
- g) Authorized reimbursable expense items provided with receipts and invoices.

ARTICLE IV ACCOUNTING

The Professional shall keep current and accurate records of Project costs and expenses, of hourly billing rates, authorized reimbursable expense items, and all other Project related accounting document to support the Professional's monthly application for payment. Project records shall be kept on a generally recognized accounting basis. Such records shall be available to the Department for a period of three (3) years after the Department's final payment to the Professional. The State of Michigan reserves the right to conduct, or have conducted, an audit and inspection of these Project records at any time during the Project or following its completion.

ARTICLE V INSURANCE

The Professional shall purchase, maintain and require such insurance that will provide protection from claims set forth below which may arise out of or result from the Professional firm's services under this Contract, whether such service is performed by the Professional or performed by any of the Professional firm's Consultant's or by anyone directly or indirectly employed by them, or by anyone for whose acts they may be liable. The following insurance policy limits described below are intended to be the minimum coverage acceptable by the State:

For the purpose of this Section, "State" includes its departments, divisions, agencies, offices, commissions, officers, employees, and agents.

- (a) The Contractor must provide proof that it has obtained the minimum levels of insurance coverage indicated or required by law, whichever is greater. The insurance must protect the State from claims that may arise out of or result from or are alleged to arise out of or result from the Contractor's or a Subcontractor's performance, including any person directly or indirectly employed by the Contractor or a Subcontractor, or any person for whose acts the Contractor or a Subcontractor may be liable.
- (b) The Contractor waives all rights against the State for the recovery of damages that are covered by the insurance policies the Contractor is required to maintain under this Section. The Contractor's failure to obtain and maintain the required insurance will not limit this waiver.

- (c) All insurance coverage provided relative to this Contract is primary and non-contributing to any comparable liability insurance (including self-insurance) carried by the State.
- (d) The State, in its sole discretion, may approve the use of a fully-funded self-insurance program in place of any specified insurance identified in this Section.
- (e) Unless the State approves, any insurer must have an A.M. Best rating of "A" or better and a financial size of VII or better, or if those ratings are not available, a comparable rating from an insurance rating agency approved by the State. All policies of insurance must be issued by companies that have been approved to do business in the State. To view the latest A.M. Best's Key Ratings Guide and the A.M. Best's Company Reports (which include the A.M. Best's Ratings) visit the A.M. Best Company internet web site at <http://www.ambest.com>.
- (f) Where specific coverage limits are listed in this Section, they represent the minimum acceptable limits. If the Contractor's policy contains higher limits, the State is entitled to coverage to the extent of the higher limits.
- (g) The Contractor must maintain all required insurance coverage throughout the term of this Contract and any extensions. However, in the case of claims-made Commercial General Liability policies, the Contractor must secure tail coverage for at least three (3) years following the termination of this Contract.
- (h) The minimum limits of coverage specified are not intended, and may not be construed; to limit any liability or indemnity of the Contractor to any indemnified party or other persons.
- (i) The Contractor is responsible for the payment of all deductibles.
- (j) If the Contractor fails to pay any premium for a required insurance policy, or if any insurer cancels or significantly reduces any required insurance without the State's approval, the State may, after giving the Contractor at least 30 days notice, pay the premium or procure similar insurance coverage from another company or companies. The State may deduct any part of the cost from any payment due the Contractor, or require the Contractor to pay that cost upon demand.
- (k) In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Michigan Attorney General.

5.1 Workers' Compensation Insurance

The Contractor must provide Workers' Compensation coverage according to applicable laws governing work activities in the state of the Contractor's domicile. If the applicable coverage is provided by a self-insurer, the Contractor must provide proof of an approved self-insured authority by the jurisdiction of domicile.

For employees working outside of the state of the Contractor's domicile, the Contractor must provide certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

5.2 Employers Liability Insurance

Minimal Limits:

\$1,000,000 Each Accident;
 \$1,000,000 Each Employee by Disease
 \$1,000,000 Aggregate Disease

5.3 Motor Vehicle Insurance

If a motor vehicle is used in relation to the Contractor's performance, the Contractor must have vehicle liability insurance on the motor vehicle for bodily injury and property damage as required by law.

5.4 Commercial General Liability Insurance

For claims for damages because of bodily injury or death of any person, other than the Professional's employees, or damage to tangible property of others, including loss of use resulting therefrom, to the extent that such kinds of liability are not insured by other specific liability insurance and are ordinarily insurable under general liability insurance. The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the Commercial General Liability certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company.

Minimal Limits:

\$1,000,000 Personal & Advertising Injury Limit;
 \$1,000,000 Each Occurrence Limit;
 \$2,000,000 General Aggregate Limit other than Products/Completed Operations; and
 \$2,000,000 Products/Completed Operations Aggregate Limit.

5.5 Pollution Liability Insurance

Minimal Limits:

\$1,000,000 Each Occurrence
 \$2,000,000 Annual Aggregate

5.6 Umbrella Insurance

Minimal Limits:

\$1,000,000 Each Occurrence

\$2,000,000 Annual Aggregate

5.7 Professional Liability Insurance (Errors and Omissions)

For claims for damages arising out of an error, omission or negligent act in the performance of professional services.

Minimal Limits:

\$1,000,000 Each Occurrence

\$2,000,000 Annual Aggregate

The Professional firm's Errors and Omissions coverage shall include coverage for claims resulting from acts of forbearance that cause or exacerbate pollution and claims of bodily injury and property damage in the amount of \$1,000,000 minimum coverage per occurrence, \$2,000,000 annual aggregate. This insurance is required of all Professional firms who conduct professional environmental services including, but not limited to, any of the Phase 100 – Study services:

Contractual Liability Insurance for claims for damages that may arise from the Professional's assumption of liability on behalf of the State under Article VI concerning indemnification for errors, omissions, or negligent acts in the course of the professional service or other provision within this Contract to the extent that such kinds of contractual liability are insurable in connection with and subject to limits of liability not less than for the general liability insurance and the professional liability insurance and set forth in subsections (c) and (d) above.

Except where the State has approved a subcontract with other insurance provisions, the Professional must require any Consultant/Subcontractor to purchase and maintain the insurance coverage required in this Article. Alternatively, the Contractor may include a Consultant/Subcontractor under the Professional's insurance on the coverage required in that Section. The failure of a Consultant/Subcontractor to comply with insurance requirements does not limit the Professional's liability or responsibility.

Certificate of Insurance documents, acceptable to the State, shall be provided and filed with the Department prior to commencement of the Professional's Project services, unless otherwise approved in writing, and not less than 20 days before the insurance expiration date every year thereafter. Facsimile copies of the Certificate of Insurance will not be accepted. Certificate of Insurance documents must be either submitted hard copy or portable document file (.pdf). The Certificate of Insurance documents must specify on the certificate in the oblong rectangle space labeled "Description of Operations/Locations/Vehicles/Exclusions Added By Endorsement/Special Provisions/Special Items" the following items: **(1) The Project File No.; (2) The Project Title; (3) Description of the Project; and (4) The State of Michigan must be named as an "Additional Insured on the General Liability Insurance Policy."** The Certificate of Insurance documents shall contain a provision that the Project insurance coverage afforded under the insurance policies for this Contract will not be modified or canceled without at least thirty (30) consecutive calendar days prior written notice, except for 10 days for non-payment of premium, to the State of Michigan, Department.

The attached, Certificates of Insurance documents required for this Project shall be in force for this Project until the final payment by the State to the Professional is made and shall be written for not less than any limits of liability specified above. The Professional has the responsibility for having their Consultant firm's comply with these insurance requirements.

**ARTICLE VI
INDEMNIFICATION**

- (a) To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Professional in the performance of this Contract and that are attributable to the negligence or tortious acts of the Professional or any of its Subcontractors/Consultants, or by anyone else for whose acts any of them may be liable.
- (b) Employee Indemnification: In any and all claims against the State of Michigan, its departments, divisions, agencies, boards, sections, commissions, officers, employees and agents, by any employee of the Professional or any of its Subcontractors/Consultants, the indemnification obligation under this Contract shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Professional or any of its

Subcontractors/Consultants under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.

- (c) Patent/Copyright Infringement Indemnification: To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Professional or its Subcontractors/Consultants, or the operation of such equipment, software, commodity or service, or the use of reproduction of any documentation provided with such equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

In addition, should the equipment, software, commodity, or services, or its operation, become or in the State's or Professional's opinion be likely to become the subject of a claim of infringement, the Professional shall at the Professional's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if such option is not reasonably available to the Professional, (ii) replace or modify to the State's satisfaction the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if such option is not reasonably available to Professional, (iii) accept its return by the State with appropriate credits to the State against the Professional's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

Notwithstanding the foregoing, the Professional shall have no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) equipment developed based on written specifications of the State; or (ii) use of the equipment in a configuration other than implemented or approved in writing by the Professional, including, but not limited to, any modification of the equipment by the State; or (iii) the combination, operation, or use of the equipment with equipment or software not supplied by the Professional under this Contract.

ARTICLE VII OWNERSHIP OF DOCUMENTS

All Project deliverables, including but not limited to: reports, Bidding Documents, Contract Documents, electronic documents and data, and other Project related documents, including the copyrights, prepared and furnished by the Professional shall become the property of the State of Michigan upon completion of the Project, completion and acceptance of the professional's work, or upon termination of the Contract. Project deliverables shall be delivered to the Department upon their request. The Professional shall have no claim for further employment or additional compensation as a result of this Contract requirement. The Professional may retain a copy of all Project documents for their files.

If the Professional is in default or breach of its obligations under this Contract, the State shall have full ownership rights of the Project deliverables, including Bidding Documents and Contract Documents, including all electronic data. If the Professional is in default or this Contract Agreement is terminated, the State shall not use the Contract Documents and deliverables of this Contract for completion of the Project by others without the involvement of other qualified Professionals who shall assume the professional obligations and liability for the Project work not completed by the Professional. To the fullest extent allowed by law, the State releases the Professional, the Professionals Consultant(s) and the agents and employees of any of them from and against legal claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of the State's use of the Contract Documents other than in accordance with this Contract Agreement.

All Contract deliverables listed may be published or issued for informational purposes without additional compensation to the Professional. The Professional may not use any of the Contract Documents and Contract deliverables for any purpose that may misrepresent the professional services they provided.

The Professional shall retain full rights to the Contract Documents and deliverables and the right to reuse component information contained in them in the normal course of the Professional's professional activities.

The Contract deliverables, Contract Documents, or other documents produced under this Contract may be used by the Department, or others employed by the Department or State of Michigan, for reference in any completion, correction,

remodeling, renovation, reconstruction, alteration, modification of or addition to the Project, without monetary compensation to the Professional.

The State of Michigan will not construct additional Projects or buildings based on the work of this Contract without notice to the Professional.

Whenever renderings, photographs of renderings, photographs or models, or photographs of the Project are released by the State of Michigan for publicity, proper credit for design shall be given to the Professional, provided the giving of such credit is without cost to the State of Michigan.

ARTICLE VIII TERMINATION

The State may, by written notice to the Professional, terminate this Contract in whole or in part at any time, either for the State's convenience or because of the failure of the Professional to fulfill their Contract obligations. Upon receipt of such notice, the Professional shall:

- a) Immediately discontinue all professional services affected (unless the notice directs otherwise), and
- b) Deliver to the State all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Professional in performing this Contract, whether completed or in process.

8.1 If the termination is for the convenience of the State, an equitable adjustment in the Contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed professional services.

8.2 If the termination is due to the failure of the Professional to fulfill their Contract obligations, the State may take over the work and prosecute the same to completion by Contract or otherwise. In such case, the Professional shall be liable to the State for any additional cost occasioned to the State thereby.

8.3 If, after notice of termination for failure to fulfill Contract obligations, it is determined that the Professional had not so failed, the termination shall be deemed to have been effected for the convenience of the State. In such event, adjustment in the Contract price shall be made as provided in Section 8.1 of this article.

8.4 The rights and remedies of the State provided in this article are in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE IX SUCCESSORS AND ASSIGNS

This Contract shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns; provided, however, that neither of the parties hereto shall assign this Contract without the prior written consent of the other.

ARTICLE X GOVERNING LAW

This Contract shall be construed in accordance with the laws of the State of Michigan.

ARTICLE XI NONDISCRIMINATION

In connection with the performance of the Project under this, the Professional agrees as follows:

- a) The Professional will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position. The Professional will provide equal employment opportunities to ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job

or position. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

- b) The Professional will, in all solicitations or advertisements for employees placed by or on behalf of the Professional, state that all qualified applicants will receive equal employment opportunity consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position.
- c) The Professional or their collective bargaining representative will send to each labor union or representative of workers with which is held a collective bargaining agreement or other Contract or understanding, a notice advising the said labor union or workers' representative of the Professional's nondiscrimination commitments under this article.
- d) The Professional will comply with the Elliot-Larsen Civil Rights Act, 1976 PA 453, as amended, MCL 37.2201 et seq; the Michigan Persons with Disabilities Civil Rights Act, 1976 PA 220, as amended, MCL 37.1101 et seq; and all published rules, regulations, directives and orders of the Michigan Civil Rights Commission which may be in effect on or before the date of award of this Contract.
- e) The Professional will furnish and file nondiscrimination compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission; said forms may also elicit information as to the practices, policies, program, and employment statistics of the Professional and of each of their Consultant firms. The Professional will permit access to all books, records, and accounts by the Michigan Civil Rights Commission, and/or its agent, for purposes of investigation to ascertain nondiscrimination compliance with this Contract and with rules, regulations, and orders of the Michigan Civil Rights Commission relevant to Article 6, 1976 PA 453, as amended.
- f) In the event that the Michigan Civil Rights Commission finds, after a hearing held pursuant to its rules, that the Professional has not complied with the contractual nondiscrimination obligations under this Contract, the Michigan Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which the State Administrative Board may order the cancellation of the Contract found to have been violated, and/or declare the Professional ineligible for future Contracts with the State and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until the Professional complies with said order of the Michigan Civil Rights Commission. Notice of said declaration of future ineligibility may be given to any or all of the persons with whom the Professional is declared ineligible to Contract as a contracting party in future Contracts. In any case before the Michigan Civil Rights Commission in which cancellation of an existing Contract is a possibility, the State shall be notified of such possible remedy and shall be given the option by the Michigan Civil Rights Commission to participate in such proceedings.
- g) The Professional shall also comply with the nondiscrimination provisions of 1976 PA 220, as amended, concerning the civil rights of persons with physical or mental disabilities.
- h) The Professional will include, or incorporate by reference, the nondiscrimination provisions of the foregoing paragraphs a) through g) in every subcontract or Contract Order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or Contract Order that said nondiscrimination provisions will be binding upon each of the Professional's Consultant's or seller.

ARTICLE XII CONTRACT CLAIMS AND DISPUTES

In any claim or dispute by the Professional which cannot be resolved by negotiation, the Professional shall submit the claim or dispute for an administrative decision by the Department of Technology, Management and Budget, Director of Facilities and Business Services Administration within thirty (30) consecutive calendar days of the end of the disputed negotiations, and any decision of the Director of Facilities and Business Services Administration may be appealed to the Michigan Court of Claims within one (1) year of the issuance of the Director's decision. The Professional agrees that the Department's appeal procedure to the Director of Facilities and Business Services Administration is a prerequisite to filing a suit in the Michigan Court of Claims.

ARTICLE XIII DEFINITION OF TERMS

The definition of terms and conditions of this Contract are described and outlined in the following Articles I through XIV and attached appendices. The capitalized defined terms used in this Professional Services Contract shall have the following definitions:

ADDENDA: Written or graphic numbered documents issued by the Department and/or the Professional prior to the execution of the Construction Contract which modify or interpret the Project Bidding Documents, including drawings, and specifications, by additions, deletions, clarifications or corrections. The Addenda shall: (1) Be identified specifically with a standardized format; (2) Be sequentially numbered; (3) Include the name of the Project; (4) Specify the Project Index No., Project File No., the Contract Order No. Y, and a description of the proposed Addenda; and (5) Specify the date of Addenda issuance. As such, the Addenda are intended to become part of the Project Contract Documents when the Construction Contract is executed by the Professional's recommended lowest responsive, responsible qualified Construction Contractor. An Addendum issued after the competitive construction Bid opening to those construction Bidders who actually submitted a Bid, for the purpose of rebidding the Project work without re-advertising, is referred to as a post-Bid Addendum.

BID: A written offer by a construction Bidder for the Department. Project construction work, as specified, which designates the construction Bidder's base Bid and Bid price for all alternates.

BIDDER: The person acting directly, or through an authorized representative, who submits a competitive construction Bid directly to the Department.

BIDDING DOCUMENTS: The Professional's Project Contract Documents as advertised, and all Addenda issued before the construction Bid opening, and after the construction Bid opening, if the Project construction work is rebid without re-advertising. Bidding Documents shall consist of: the Phase 500 - Final Design drawings and specifications, any Addenda issued, special, general, and supplemental conditions of the Construction Contract, and modifications, if any, to standard forms provided by the Department. Such forms consist of: the Project advertisement, the instructions to Bidders, the proposal forms, general, supplemental, and any special conditions of the Construction Contract, and the form of agreement between the Department and the Construction Contractor for the Project work requirements.

BID SECURITY: The monetary security serving as guarantee that the Bidder will execute the offered Construction Contract or as liquidated damages in the event of failure or refusal to execute the Construction Contract.

BUDGET: The maximum legislatively authorized Budget amount to be provided by the State of Michigan and available for a specific purpose or combination of purposes to accomplish the Project for this Contract.

BULLETIN: A standard document form (DMB-485, Bulletin Authorization No. and the DMB-489, Instructions to Construction Contractors for Preparation of Bulletin Cost Quotations for Contract Change Orders) used by the Department to describe a sequentially numbered change in the Project under consideration by the Department and the Professional and to request the Construction Contractor to submit a proposal for the corresponding adjustment in the Contract price and/or Contract time, if any. These standard document forms are a part of the "DMB-460, Project Procedures" documents package.

CONSTRUCTION CONTRACT: A separate written Contract agreement between the Construction Contractor and the Department for the construction, alteration, demolition, repair, or rebuilding of a State/Client Agency building or other State property.

CONSTRUCTION CONTRACTOR: Any construction firm under a separate Contract to the Department for construction services.

CONSTRUCTION INSPECTION SERVICES: The Professional's field Inspections of the Project during the construction Phase of this Contract which includes but is not limited to: (1) Documenting the quantity and quality of all Project construction work and verifying that the Project construction work is properly completed; (2) Resolve Project problems that are affecting the Project construction work, certify payment requests, process Bulletins, Contract Change Order recommendations, and requests for information (RFI's) in a timely manner as prescribed in the Department's, "MICHSPEC 2001 Edition of The Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" or the current Department, DMB Short Form 401 - Proposal and Contract/Front-End Package for Small Projects for Professional Services Contractors (PSC) with General Conditions for Construction and Instructions to Bidders" as adopted and modified by the State

of Michigan and incorporated into the Construction Contract; and the (3) Inspection of Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's Project Director and their Department Field Representative that the Project construction work is in compliance with the Professional's design intent and that the Project has been completed by the Construction Contractor in accordance with the Professional's Phase 500 - Contract Documents/drawings and specifications requirements.

The Professional shall provide sufficient Inspections of the Project during the construction Phase to administer the construction Phase field and office services as directly related to the degree of Project complexity, up to and including full-time field Inspections. Construction field Inspections shall occur as the construction field conditions and the Project may require and during the regularly scheduled monthly progress and payment meetings. The Professional shall use for their construction field Inspection services, only personnel having professional expertise, experience, authority, and compatibility with departmental procedures as the Department may approve. The Professional agrees that such characteristics are essential for the successful completion of the Project. Such individuals shall be replaced for cause where the Department determines and notifies the Professional, in writing, of their unacceptable performance.

CONSULTANT: Any individual, firm, or employee thereof, not a part of the Professional's staff, but employed by the Professional and whose professional service cost is ultimately paid by the State of Michigan, either as a direct cost or authorized reimbursement. This includes the recipient(s) of Contract Orders for material, support, and/or technical services. Also, included are persons and firms whose management and/or direction of services are assigned to the Prime Professional as may be provided elsewhere in this Contract.

CONTRACT CHANGE ORDER: A standard document form (DMB-403) issued and signed by the State of Michigan and signed by the Professional which amends the Project Design Professional's Contract Documents for changes in the Project/Program Statement or an adjustment in Contract price and/or Contract time, or both.

CONTRACT DOCUMENTS: The Professional's Phase 100 – Study, Final Report and Phase 500 - Final Design plans/drawings, specifications, Construction Contract, instructions to construction Bidders, proposal, Bidding Documents, agreement, conditions of the Contract, payment bond, performance/labor and material bond, prevailing wages, all Addenda, and attachments as may be necessary to comprise a Construction Contract for the Project. Specifications for this Contract will be prepared for Division 00 through 49, in the 2004 MasterFormat Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the Project.

CONTRACT MODIFICATION: A form (DMB-410) amending the Contract signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Project/Program Statement or previously unknown on-site field conditions as approved by the Department will be compensated to the Professional by way of the Contract Modification in accordance with the Article II, Compensation text of this Contract. Any Contract Modification of this Professional Services Contract must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the Department may require. No Contract Modification will be approved to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional's Phase 100 – Study, Final Report and Phase 500 - Contract Documents study/design errors, omissions or neglect on the part of the Professional.

CONTRACT ORDER: A form (DMB-402) issued and signed by the State of Michigan authorizing a Professional to: (1) Begin to incur Project expenses and proceed with the Project on-site; and (2) Provide professional services for the fee amount designated in the Phases of the Contract Order. Issuance of the DMB-402 certifies that: (1) The State will enter into a Professional Services Contract for the professional services described in the various Phases of this Contract; and that (2) The proper three (3) sets of Certificate of Insurance documents have been received and accepted by the State along with the approval and signing of the Professional's Professional Services Contract by the FBSA, DCD Director.

DEPARTMENT: The Department of Technology, Management and Budget, Facilities and Business Administration, Design and Construction Division. The Department will represent the State of Michigan in all matters pertaining to this Project. This Professional Services Contract will be administered through the Department on behalf of the State of Michigan and The State/Client Agency.

DESIGN MANUAL: Provides the Professional with information regarding the Department's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" review process requirements regarding the uniformity in Contract materials presented to it by the Professional and the State/Client Agency(ies). This manual contains the following noted standards, instructions, and procedures information for: (1) General instructions for planning documents from Phase 100-Study through Phase 500-Final Design; (2) Net and gross area/volume; (3) Project cost format; (4) Outline architectural

and engineering specifications; (5) Specifications in documentation Phase; (6) Instructions for proposal; (7) Bidders questionnaire; and the (8) Project job sign.

DIRECTOR: The Director of the Department of Technology, Management and Budget or their authorized State of Michigan representative.

DIRECTOR-FBSA: The Director of the Department of Technology, Management and Budget, Facilities and Business Services Administration or their authorized State of Michigan representative.

DEPARTMENT FIELD REPRESENTATIVE: An employee of the State under the direction of the Project Director who provides the Inspection of construction Projects for compliance with the design intent of the Professional's Phase 500 - Contract Documents/drawings and specification requirements and the building construction codes. The Department Field Representative is the liaison between the Construction Contractor, the Professional, and the Project Director. The Project Director, or their Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project meetings. Unless delegated by specific written notice from the Department, the Department Field Representative has no authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time.

INSPECTION: The Professional and their Consultant firm's on-site and/or off-site examination of the Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's, Project Director and their Department Field Representative that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional's Phase 500 - Contract Documents/ drawings and specifications requirements.

KEY PRINCIPAL PERSONNEL/EMPLOYEE: An individual employee of a Professional who is essential for the successful completion of the Project.

NOTICE OF INTENT TO AWARD: A written notice to the Construction Contractor, by the Department accepting the Professional's written recommendation to award the construction Bid to the lowest responsive, responsible qualified construction Bidder. The Notice of Intent to Award letter will also designate the Contract price and itemize the alternates that the Department, at its sole discretion has accepted.

PHASE: A discretely distinguishable step necessary to produce the Project in the course of the Professional providing study, design and construction administration services.

PRIME PROFESSIONAL SERVICES CONTRACTOR/PROFESSIONAL: An individual, firm, partnership, corporation, association, or other legal entity who is legally permitted by law to sign and seal final design construction Contract Documents and licensed under the State of Michigan's professional licensing and regulation provisions of the Occupational Code (State Licensing Law), Act 299 of the Public Acts of 1980, Article 20, as amended, to practice architecture, engineering, environmental engineering, geology, civil, land surveying, or landscape architecture services in the State of Michigan.

The Prime Professional Services Contractor/Professional is also legally permitted by the State of Michigan's regulation provisions of the State Construction Code, Act 230 of the Public Acts of 1972, as amended, and designated in a Construction Contract by the Department to recommend construction progress payments to the Construction Contractor.

PROJECT: Any new construction, existing site, new utilities, existing building renovation, roof repairs and/or removal and replacement, additions, alteration, repair, installation, construction quality control and material testing services, painting, decorating, demolition, conditioning, reconditioning or improvement of public buildings, works, bridges, highways or roads authorized by the Department that requires professional study/design services as part of this Contract.

PROJECT COST: The total Project cost including, but not limited to, site purchase, site survey and investigation, hazardous material abatement, construction, site development, new utilities, telecommunications (voice and data), professional fees, construction quality control and material testing services, testing and balancing services, furnishings, equipment, plan(s)/drawing(s) design code compliance and plan review approval fees and all other costs associated with the Project.

PROJECT DIRECTOR: The professional licensed employee of the Department who is responsible for directing and supervising the Professional's services during the life of this Contract. The Project Director, or their Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project related meetings.

PROJECT/PROGRAM STATEMENT: The Project/Program Statement is provided by the Department and defines the scope of the problem, describes why this Project is desirable, and provides a preferred resolution of the problem.

PROJECT TEAM: The Professional, the Project Director, Department Field Representative, a representative of the State/Client Agency, and others as considered appropriate by the Department.

PUNCH LIST: A list of minor construction Project items to be completed or corrected by the Construction Contractor, any one of which do not materially impair the use of the Project work, or the portion of the Project work inspected, for its intended purpose. A Punch List shall be prepared by the Professional upon having made a determination that the Project work, or a portion of the Project construction work inspected, in concert with the Professional, the Construction Contractor, the Department, the Project Director and their Department Field Representative, the State/Client Agency and any construction manager, is substantially complete and shall be attached to the respective DMB-455, Certificate of Substantial Completion form. This standard document form is a part of the “DMB-460, Project Procedures” documents package.

SOIL EROSION AND SEDIMENTATION CONTROL: The planning, design and installation of appropriate Best Management Practices (as defined by the most current version of the Department’s Soil Erosion and Sedimentation Control Guidebook) designed and engineered specifically to reduce or eliminate the off-site migration of soils via water runoff, wind, vehicle tracking, etc. and comply with the Soil Erosion and Sedimentation Control in the State of Michigan as regulated under the 1994 Public Act 451, as amended – The Natural Resources Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Soil Erosion and Sedimentation Control associated with this Contract will be monitored and enforced by the Department of Technology, Management and Budget, Facilities and Business Services Administration, Soil Erosion and Sedimentation Control Program.

STATE: The State of Michigan in its governmental capacity, including its departments, agencies, boards, commissions, officers, employees, and agents. Non-capitalized references to a state refer to a state other than the State of Michigan.

STATE/CLIENT AGENCY: A Department of the State of Michigan, for whose use the Project will ultimately serve, which requires professional design services.

STATE FIELD INSPECTOR: An employee of the State of Michigan under the direction of the State/client Agency who provides the on-site, Inspection of construction Projects for compliance with the study/design intent of the Professional firm’s Contract Documents/drawings and specification requirements and the building construction codes. The State Field Inspector is the liaison between the Construction Contractor, the Professional, and the State Project Manager. The State Project Manager, or their State Field Inspector, has the authority to require the Professional to respond to and resolve study/design related problems, construction on-site field problems and to attend Project related meetings.

STATE PROJECT MANAGER: The assigned staff of the Department or the State/client Agency authorized by the State to represent and act on behalf of the Project Director on a given Project and to thereby provide direction and assistance to the Construction Contractor. The State Project Manager may designate in writing a person to act on behalf of the State Project Manager when they are unable to perform their required duties or is away from the office. In such cases, the State Project Manager must notify the Construction Contractor and the Project Director.

SUBSTANTIAL COMPLETION: The form (DMB-445) stating that the Project work, or a portion of the Project work eligible for separate Substantial Completion, has been completed in accordance with the design intent of the Professional’s Contract Documents to the extent that the Department and the State/Client Agency can use or occupy the entire Project work, or the designated portion of the Project work, for the use intended without any outstanding, concurrent work at the Project work site, except as may be required to complete or correct the Project work Punch List items.

SUSTAINABLE DESIGN: The Professional’s use of a balance of appropriate materials, products and design methods that reduce the impact to the natural ecosystems and be within the Budget constraints of the Project. Sustainable Design shall be used wherever possible by the Professional in their Project design and an itemized list shall be provided with the Professional’s Contract Documents that identifies the processes and products.

TASK: Shall mean the following: (1) A quantifiable component of design related professional study/design Task services required to achieve a Phase of the Project; (2) The most manageable sub-element within a study/design Phase; (3) A unique item of work within a study/design Phase for which primary responsibility can be assigned; and (4) Has a time related duration and a cost that can be estimated within a study, design, and construction Phase.

ARTICLE XIV
COMPLETE AGREEMENT/MODIFICATION

This Professional Services Contract constitutes the entire agreement as to the Project between the parties. Any Contract Modification of this Contract and the Project/Program Statement scope of work requirements must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered into to compensate the Professional for correcting, or for responding to claims or litigation for the Professional firm's final design Contract Documents/study/design errors, omissions or neglect on the part of the Professional.

APPENDIX 1

PROJECT/PROGRAM STATEMENT

APPENDIX 2

PROFESSIONAL'S PROPOSAL

(See CD attached to back cover)

APPENDIX 3

CERTIFICATE OF AWARDABILITY

APPENDIX 4

**PROFESSIONAL/CONTRACTOR DEMOGRAPHICS, STATISTICS AND
CERTIFICATION**

CERTIFICATION OF A MICHIGAN BASED BUSINESS

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER
RESPONSIBILITY MATTERS**

(See Forms in attached Proposal)

APPENDIX 5

**OVERHEAD ITEMS ALLOWED FOR THE
PROFESSIONAL SERVICES CONTRACTOR FIRM'S
HOURLY BILLING RATE CALCULATION**

The following instructions are to be used by the Professional Services Contractor firm's to determine the hourly billing rate to use on State of Michigan Projects.

The Professional's Consultant must submit a separate hourly billing rate for the professional Consultant services they will provide for State of Michigan Projects. No mark-up of the Professional's Consultant services hourly billing rates will be allowed.

The Department will reimburse the Professional for the actual cost of printing and reproduction of the Contract Bidding Documents, soil borings, surveys and any required laboratory testing services and use of field equipment. No mark-up of these Project costs will be allowed.

2013 HOURLY BILLING RATE

Based on 2012 Expenses

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

SALARIES:

Principals (Not Project Related)
Clerical/Secretarial
Technical (Not Project Related)
Temporary Help
Technical Training
Recruiting Expenses

EQUIPMENT RENTALS:

Computers
Typewriter
Bookkeeping
Dictating
Printing
Furniture and Fixtures
Instruments

EMPLOYEE BENEFITS:

Hospitalization
Employer's F.I.C.A. Tax
Unemployment Insurance
Federal Unemployment Tax
Disability
Worker's Compensation
Vacation
Holidays
Sick Pay
Medical Payments
Pension Funds
Insurance - Life
Retirement Plans

OFFICE FACILITIES:

Rents and Related Expenses
Utilities
Cleaning and Repair

TRAVEL:

All Project-Related Travel*

SUPPLIES:

Postage
Drafting Room Supplies
General Office Supplies
Library
Maps and Charts
Magazine Subscriptions

MISCELLANEOUS:

Professional Organization Dues
for Principals and Employees
Licensing Fees

PRINTING AND DUPLICATION:

Specifications (other than Contract Bidding Documents)
Drawings (other than Contract Bidding Documents)
Xerox/Reproduction
Photographs

SERVICES (PROFESSIONAL):

Accounting
Legal
Employment Fees
Computer Services
Research

SERVICES (NONPROFESSIONAL):

Telephone and Telegram
Messenger Services

LOSSES:

Bad Debts (net)
Uncollectible Fee
Thefts (not covered by Project/Contract bond)
Forgeries (not covered by Project/Contract bond)

TAXES:

Franchise Taxes
Occupancy Tax
Unincorporated Business Tax
Property Tax
Single Business Tax
Income Tax

FINANCIAL:

Depreciation

INSURANCE:

Professional Liability Insurance
Flight and Commercial Vehicle
Valuable Papers
Office Liability
Office Theft
Premises Insurance
Key-Personnel Insurance

HOURLY BILLING RATE DOES NOT INCLUDE AND THE DEPARTMENT WILL PAY THE PROFESSIONAL FOR (UNDER REIMBURSABLE COSTS):

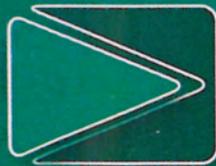
1. Printing and reproduction of Phase 100 Survey and/or Study Final Reports.
2. Printing and reproduction of Phase 500 Final Design Contract Bidding Documents/Drawings, and Specifications.
3. Design Code Compliance and Plan Review Approval Fees of the Phase 500 - Final Design Documents by the Department of State Police, Fire Marshal Division and the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Plan Review Division.
- 4.* Travel mileage costs for State of Michigan Projects **more than** one-hundred (100) miles in each direction from the Professional's Michigan office if the Professional can demonstrate a cost savings to the State, if reimbursed for travel mileage in accordance with the current travel rates provided in the State of Michigan's, "Schedule of Travel and Meal Reimbursement Rates" versus an adjustment to the Professional's hourly billing rates.

APPENDIX 6

ORIGINAL CERTIFICATES OF INSURANCE

Technical Proposal

STATE OF MICHIGAN
2013 ENVIRONMENTAL EXPANDED TRIAGE ISID
PROFESSIONAL SERVICES



TriMedia
Environmental & Engineering

TECHNICAL PROPOSAL

**State of Michigan
2013 Environmental Expanded Triage ISID
Professional Services**

FEBRUARY 25, 2013

PREPARED FOR:

**DEPARTMENT OF TECHNOLOGY, MANAGEMENT
& BUDGET FACILITIES AND BUSINESS SERVICES
ADMINISTRATION
530 WEST ALLEGAN STREET
LANSING, MICHIGAN 48933**

PREPARED BY:

**TRIMEDIA ENVIRONMENTAL & ENGINEERING
SERVICES, LLC
1002 HARBOR HILLS DRIVE
MARQUETTE, MICHIGAN 49855**

TRIMEDIA PROPOSAL NUMBER 2013-3547

TECHNICAL PROPOSAL

TABLE OF CONTENTS

1. GENERAL INFORMATION AND PROJECT TEAM	1
2. UNDERSTANDING OF PROJECT AND TASKS	2
3. PERSONNEL	5
4. MANAGEMENT SUMMARY, WORK PLAN, AND SCHEDULE	6
5. REFERENCES	16

Appendix I Organization Chart and Resumes

1. GENERAL INFORMATION AND PROJECT TEAM

Headquarters	Points of Contact	Branch Offices	Operations
1002 Harbor Hills Drive Marquette, Michigan 49855 (906) 228-5125	Tom Anthos, President tanthos@trimediaee.com Mylan Koski, Project Manager mkoski@trimediaee.com	Ann Arbor, Michigan Fort Atkinson, Wisconsin Minot, North Dakota Livingston, Montana Phoenix, Arizona	[REDACTED] (tax id) Partnership / LLC State of MI Licensed

TriMedia Environmental & Engineering Services, LLC (TriMedia) is in receipt of the *Request for Proposals* (RFP) issued by the State of Michigan and appreciates having the opportunity to present this *Technical Proposal* to provide professional environmental services for the 2013 Environmental Expanded Triage Indefinite-Service, Indefinite-Delivery (ISID) Contract. Our physical locations, resources, and knowledge of leaking underground storage tank (LUST) site project requirements makes our technical team uniquely qualified to complete this work.

TriMedia's staff of scientists, engineers, and surveyors will work closely with the State of Michigan to understand project objectives and implement schedules that meet essential time constraints; we will collect necessary data and information in a professional manner that meets or exceeds acceptable industry standards to support the project; we will prepare final documents in accordance with State of Michigan and federal (if applicable) guidelines; and, we will communicate our progress every step of the way.

Established in 1995, TriMedia provides environmental, industrial hygiene, health and safety, land surveying, materials testing, and geographic information systems (GIS) services. We take the time to understand the objective of each project and then we design a technical approach that works. Effective project management, useful project documentation, modern technical capabilities, and efficient communication with regulatory officials are of critical importance in the successful completion of every project. From our offices in both the Upper and Lower Peninsula's, TriMedia will provide timely and cost-effective service to aid the State of Michigan with this ISID Contract.

In consideration of protecting the interests of our clients, TriMedia maintains professional liability insurance coverage for all projects. A summary of this coverage includes: Professional Liability Errors/Omissions, inclusive of Pollution Liability in the amount of \$1,000,000 per

occurrence/\$2,000,000 aggregate, Comprehensive General Liability in the amount of \$1,000,000 per occurrence/\$2,000,000 aggregate, Automobile Liability in the amount of \$1,000,000 per occurrence, and Workers Compensation. In addition, a \$4,000,000 umbrella applies to all aspects of TriMedia's insurance coverage.

2. UNDERSTANDING OF PROJECT AND TASKS

TriMedia understands the objective of the work is to gather sufficient information to ascertain the threat or risk of impacts at each leaking underground storage tank (LUST) site such that decisions can be made regarding the need for additional site work. TriMedia staff provides an experienced resource to: investigate and assess the current risks at various LUST sites; determine the status of the releases; and potentially close sites that do not pose unacceptable risk under the relevant local, state, and federal regulations.

TriMedia has successfully completed dozens of projects for governmental and institutional clients in the last ten years, including more than \$5 million in environmental design and remediation projects for the State of Michigan. TriMedia was also awarded the *2011 Environmental ISID Contract Number 00331*. In addition to our numerous State of Michigan contracts, TriMedia has recently performed work for the following State and Federal clients; including the State of Wisconsin Departments of Administration, Commerce, Corrections, Natural Resources, State Facilities, and Transportation; the U.S. Fish & Wildlife Service; U.S. Department of Agriculture; U.S. Corps of Engineers; U.S. Geological Survey; U.S. Department of Interior; and U.S. Coast Guard.

TriMedia's staff includes a former U.S. government contracting officer with over 20 years of experience with federal, state, and municipal contracts. Her experience includes a full range of construction management services for a variety of procurement methods, including traditional design-bid-build, design-build, general contractor-construction manager, and indefinite quantity contracts. Our contract manager's experience and training includes a full range of contracting issues, including contract law, contract procurement methods, contract negotiation, dispute resolution, change order procedures, constructability reviews, and project scheduling.

TriMedia understands managing environmental issues, such as those performed under this ISID contract takes experience and resourcefulness. Our staff of Professional Engineers, Engineers-In-Training, Earth Scientists, and Regulatory Compliance Managers has expertise working on a wide range of gasoline and chlorinated hydrocarbon LUST sites, solid waste, landfill, and environmental projects. TriMedia provides the results you need, on-time and within budget.

TriMedia provides expertise in environmental monitoring of groundwater, soil, air, sediment and surface water; water quality and air quality compliance and permitting; landfill inspections; regulatory reporting and negotiation; hazardous and solid waste management; permit development and compliance monitoring; sensitive habitat assessments and mitigation; assessment and re-use of contaminated property; emergency and contingency planning; spill response; and environmental training. Additional services TriMedia can provide to the State of Michigan for LUST sites include the following:

- ▶ Historical Site Research/ Due Diligence/ Phase I ESA
- ▶ Pilot Testing
- ▶ Waste Characterization
- ▶ Remedial Investigations & Feasibility Studies
- ▶ Corrective Action Plans & Implementation Work Plans
- ▶ Hydrology & Subsurface Evaluations
- ▶ Remedial System Design/ Installation/ Operation
- ▶ Public Notification & Community Involvement

Remediation Technologies

TriMedia is experienced at implementing remediation technologies to address both petroleum and chlorinated hydrocarbon releases including the following:

- ▶ Soil Vapor Extraction (SVE) – Pilot Testing and Full-time Operations
- ▶ Air Sparging (AS) – Pilot Testing and Full-time Operations
- ▶ Catalytic Oxidizer Operations (CATOX) & Thermal Oxidizer Operations (THERMOX)
- ▶ Granulated Activated Carbon (GAC) Treatment
- ▶ Multi-Phase Extraction (MPE) including Dual-Phase Extraction (DPE) and Enhanced Free Product Recovery (EFR)
- ▶ Air Stripper/ Pump & Treat (P&T) System Operations
- ▶ Enhanced Bioremediation including chemical injections

Innovative Techniques and Cost Effective Solutions

Having completed hundreds of environmental investigation and remediation projects since 1995, TriMedia understands how to take advantage of opportunities to implement cost effective solutions from the initial site assessment to site restoration and release closure. Applicable cost effective solutions for this contract include the following:

- ▶ Using free resources including aerial photos, building records, historical phone directories, and Sanborn fire insurance maps available online and at local libraries to complete Phase I and Phase II ESAs;
- ▶ Utilizing electronic data transfer, and CD ROMs for large appendices, as a means of reducing printing costs and paper usage;
- ▶ Site characterization planning and data collection to minimize field time and the number of mobilizations of equipment and personnel needed by only installing the soil borings and monitor wells necessary to define the extents of soil and groundwater contamination;
- ▶ Completing feasibility studies, pilot tests, and remedial technology screenings prior to full-scale operations to determine the most cost effective approach to achieve compliance and /or closure for contaminated sites;
- ▶ Evaluating design factors including radius of influence and vadose zone flow rate data to appropriately size remediation equipment and to maximize remediation system coverage of contaminated areas with the minimum number of remedial wells and/or injection points;
- ▶ Taking surface restoration and trenching factors into consideration to minimize costs associated with system installations and site restoration where underground lateral piping runs are needed;
- ▶ Evaluating field instrument readings along with analytical results for soil vapor and groundwater samples on a regular basis to determine remedial system adjustments that will continue to optimize system performance and contaminant mass removal ;
- ▶ Installing catalyst modules and GAC vessels at the appropriate times to optimize propane and natural gas consumption for oxidizer operations; and
- ▶ Utilizing variable frequency drives to optimize system flow rates while minimizing electricity consumption.

Our project management, budgeting, scheduling, experience include coordination with a variety of governmental agencies, public and private entities, and developers. A detailed description of our understanding of the tasks associated with this ISID contract is provided in Section 4.

3. PERSONNEL

TriMedia's technical staff and consultants include Professional Engineers, Engineers-in-Training, Regulatory Compliance Specialists, Biologists, GIS Specialists, Safety Professionals, CAD Specialists, Professional Surveyors, Certified Industrial Hygienists, Licensed Asbestos personnel, and other technical support staff. We will provide an experienced and technically proficient project team to support the State of Michigan with this ISID Contract. Mr. Mylan Koski, P.E., CP, will supervise all aspects of the contract. TriMedia intends to use the work effort from the following project team members. An organizational chart and resumes for the proposed project team are provided in Appendix I: *Organization Chart and Resumes*.

LEVEL	EMPLOYEE(S) NAME	POSITION/CLASSIFICATION
P4	Thomas L. Anthos, CIH	Principal Industrial Hygienist
P4	Mylan A. Koski, P.E., CP	Environmental Department Manager
P3	Derek T. Senn, P.E., CP	Senior Environmental Engineer
P4	Kathy T. Vermaat, P.E.	Senior Engineer
P2	Ryan J. Whaley, REHS	Project Scientist
P2	Robert Greene, P.E.	Project Engineer
P2	Eric J. Sajtar, P.E.	Staff Engineer
P3	Kelly D. Levely	GIS Specialist
P3	Maura A. Pliska	Staff Engineer
P1	James A. DeLiefde	Staff Engineer
T3	Tom J. Myers	Senior Field Technician
T2	Danny D. McLaughlin	Project Field Technician
CL	Cynthia M. Finch	Technical Advisor
T2	Joe W. Melchiori	CADD Operator

Sub-Contractors

TriMedia will utilize qualified and appropriate sub-contractors to complete project work. If sub-contractors are necessary for project-specific tasks, TriMedia will seek State of Michigan approval prior to utilizing sub-contractors.

4. MANAGEMENT SUMMARY, WORK PLAN, AND SCHEDULE

Management Summary

TriMedia will provide project management necessary under this contract including: scheduling and oversight of field activities; coordination with sub-contractors; and participation in progress meetings with State of Michigan staff or designated representatives. TriMedia will provide necessary written reports, verbal presentations, and documentation required for the successful completion of projects completed under this contract. The following summary provides an overview of the services typically provided by TriMedia under this task:

- ▶ Conduct a project kick-off meeting to discuss project requirements, establish lines of communication, review relevant documentation, and potential issues related to completion of the project;
- ▶ Maintain project records that include field documentation, laboratory results, maps, diagrams, and project documents and revisions; and
- ▶ Provide detailed monthly invoices and summary work statements in any format deemed necessary by the State of Michigan.

Work Plan

TriMedia understands that the services requested under an ISID contract may include, but may not be limited to, the investigation and assessment of current risks at approximately 200 LUST sites; determining the status of releases; and potentially closing the sites that do not pose unacceptable risk. Site work will be conducted under Parts 201 and 213 of the Michigan Natural Resources and Environmental Protection Act (NREPA) 1994 P.A. 451, as amended; and other relevant federal statutes and requirements. Assigned activities may also include site reconnaissance with Ground Penetrating Radar/Electromagnetic (GPR/EM), boring/drilling, sample collection, site restoration and reporting. We understand there are nine required elements and services at each site.

An outline of TriMedia's understanding of the tasks included with this ISID contract is as follows:

1. Job Site Administration and Work Plan

TriMedia will provide project management services to aid in ensuring the project tasks and budget are consistent with the Work Plan. This effort will include project planning and scheduling activities, development of monthly project invoices that include a detailed accounting of project expenditures in accordance with the line item rates; contract administration involving necessary sub-contractors and vendors; and, development of documentation and communication necessary to support the project.

▶ Utility Clearance

TriMedia will utilize the MISS DIG Systems, Inc. network to aid in identifying the location of subsurface utilities. A site-specific ticket will be submitted using the MISS DIG Remote Ticket Entry System. Please note such utility clearances require three full working days prior to clearance for on-site activities.

▶ Safe Storage and Handling of All Equipment and Supplies

All equipment will be stored and handled in a safe manner, in accordance with manufacturer's instructions and TriMedia Standard Operating Procedures. Supplies will be stored and handled, when applicable, in accordance with available Material Safety Data Sheets.

▶ Signage

When necessary, TriMedia will provide appropriate traffic control while conducting the work. Traffic control will be consistent with specifications outlined in the "Manual on Uniform Traffic Control Devices" (MUTCD) - Temporary Traffic Control. The following summary provides an overview of the services to ensure a safe traffic control plan for the duration of the project:

- TriMedia will utilize a two person crew. One crew member will perform the borings, while the other member will be responsible for maintaining two way traffic and flagging as needed;
- All members of the TriMedia field crew will don appropriate safety gear; and
- Traffic cones and/or signage may be utilized for drilling work.

Field Work

a. Boring/Drilling Methods

Up to ten soil borings at each site will be advanced using a direct-push Geoprobe® Model 7822DT probing rig. For purposes of assessing potential soil and groundwater impacts at each site, TriMedia will advance the soil borings to a maximum depth of approximately 40 feet below grade (bg) or refusal at locations selected by Michigan Department of Environmental Quality (MDEQ) staff to collect soil samples. Soil samples will be collected continuously to a maximum depth of approximately 40 feet bg using a 1.375-inch Dual Tube sampler in five-foot lengths to document soil type, stratigraphy, color, and relative moisture content. Each five-foot sampling interval may be subdivided into the smaller intervals for field screening or laboratory analysis purposes. Subdivided intervals will be based on changes in soil type, evidence of impairment, at the discretion of TriMedia field staff, and/or discussions with MDEQ project manager.

TriMedia may equip our Geoprobe® Model 7822DT with 4.25-inch inside diameter (ID) by 8.5-inch outside diameter (OD) hollow stem augers (HSAs) to complete the soil borings. Borings advanced using HSAs will also utilize a 1.375-inch Dual Tube sampler to continuously collect soil samples to a maximum depth of approximately 40 feet bg or refusal.

b. Field Screening Methods

An aliquot of each soil sample interval will be placed into a resealable plastic bag for field screening purposes. Each plastic bag will be labeled with the boring location number, sampling interval, and sampling date and time. The samples will be allowed to warm prior to field screening. The soil samples will be field screened using visual and olfactory sensory methods and a photoionization detector (PID) equipped with a 10.6 eV lamp to detect the presence of volatile organic compounds (VOCs). The PID will be calibrated to a 100 part per million (ppm) isobutylene calibration gas prior to conducting each site assessment. The date and time of calibration as well as the model and serial number of the specific PID instrument used for each site will be recorded in the field notes.

c. Sampling Procedures and Protocols for Soil and Groundwater Sampling

Up to 10 soil samples may be selected from each site for laboratory analysis. The selection of samples for laboratory analysis will be in accordance with the following MDEQ-specified sampling matrices:

Soil Sampling Matrix		
Priority	Ranking	Condition
Highest to Lowest	1	Visible Staining or Sheen Observed
	2	PID Reading > 1,000 ppm
	3	PID Reading 500 ppm to 999 ppm
	4	PID Reading 100 ppm to 499 ppm
	5	PID Reading 1 ppm to 99 ppm
	6	Soil Immediately Above Water Table
	7	Soil at Terminus of Boring, if No Water Table

Up to five groundwater samples may be selected from each site for laboratory analysis. The selection of samples for laboratory analysis will be in accordance with the following MDEQ-specified sampling matrices:

Groundwater Sampling Matrix		
Priority	Ranking	Condition
Highest to Lowest	1	Visible Sheen, Petroleum Droplets Observed
	2	Olfactory Evidence of Petroleum Odors
	3	Soil Screening Revealed Staining or Sheen
	4	Soil Screening PID >1,000 ppm
	5	Soil Screening PID Reading 500 ppm to 999 ppm
	6	Soil Screening PID Reading 100 ppm to 499 ppm
	7	Soil Screening PID Reading 1 ppm to 99 ppm
	8	Boring Nearest Source Area (UST, basin, pump, etc.)

As prescribed by MDEQ staff, select borings will be converted to a temporary groundwater sampling point at the terminal depth of the boring (up to approximately 40 feet bg) to collect groundwater samples. The temporary groundwater sampling points will be installed using a 0.75-inch inside diameter by five-foot long section of polyvinyl chloride (PVC) well screen thread-coupled to 5-foot sections of PVC riser pipe. If groundwater is encountered, subsequent to

installation, the temporary groundwater sampling points will be developed by removing groundwater until groundwater appears relatively clear and free of sediment. A groundwater sample will be collected from each temporary groundwater sampling point using new disposable high-density polyethylene (HDPE) tubing inserted within the temporary well and a peristaltic pump.

One duplicate soil and groundwater sample and one field blank sample (for each media) will be collected from each site for quality assurance/quality control (QA/QC) purposes. The duplicate sample will be collected from an interval or temporary wells suspected to exhibit a moderate level of contamination relative to other samples collected from the site.

TriMedia will coordinate with the MDEQ Environmental Laboratory at least 14 days prior to submitting samples to the lab. All sample containers, including methanol soil preservation kits will be obtained from the MDEQ laboratory.

Following selection, the soil and groundwater samples will be collected in laboratory-supplied containers and placed in an ice chest to cool to approximately four degrees Celsius. The samples will be transported to the MDEQ Environmental Laboratory located in Lansing, Michigan along with a completed chain-of custody form for analysis of the selected parameters.

Laboratory Analytical Program

The soil and groundwater samples collected from the soil borings and temporary wells will be analyzed for VOCs by United States Environmental Protection Agency (US EPA) Method 8260.

d. Decontamination Procedures

Drilling equipment will be cleaned prior to beginning the project and before beginning each boring. Non-disposable sampling equipment will be cleaned using a Liquinox® detergent wash and potable water rinse prior to commencement of the project and between collecting each sample. Used

decontamination liquids will be containerized with groundwater investigative derived waste (IDW).

e. IDW handling and disposal

Soil IDW from each push-probe or HSA boring will be placed into DOT-specification steel 55-gallon drums, labeled with a non-hazardous label, and staged in a location acceptable to the site owner and/or MDEQ project manager pending disposal.

Groundwater IDW resulting from temporary monitoring well development and purging will be placed into DOT-specification steel 55-gallon drums, labeled with a non-hazardous label, and staged in a location acceptable to the site owner and/or MDEQ project manager pending disposal.

TriMedia will coordinate with an appropriately licensed subcontractor to perform transportation, treatment, and disposal of IDW from each site. Soil IDW will be transported disposed of at a RCRA Subtitle D landfill. Groundwater and decontamination IDW will be transported to a treatment facility. All IDW will be transported under waste manifest protocol. Upon treatment and disposal, completed manifests will be provided to the MDEQ project manager.

f. Site restoration activities

Upon completion of sampling activities, each boring location will be filled bentonite chips to within one foot of the ground surface. The remaining one foot of boring annulus will be filled with clean soil. Surface material will be installed to match that of adjacent material and finished flush to grade. All site restoration work will be guaranteed for one year.

2. Mobilization / Demobilization

TriMedia will mobilize necessary equipment, personnel, and ancillary items to each site as directed by MDEQ project manager.

3. Site Reconnaissance with GPR/EM

TriMedia understands that prior to completing the site reconnaissance visit with geophysical survey, the MDEQ project manager will mark or communicate to TriMedia the area to be surveyed. Subsequently, TriMedia will mobilize staff to each site to complete a site reconnaissance visit to observe site features and to oversee the completion of geophysical surveying completed by our selected geophysical surveying subcontractor. Geophysical surveying using ground penetrating radar (GPR) and/or electromagnetic (EM) techniques will be completed at each site prior to conducting any on-site drilling. Additionally, to supplement the EM and GPR surveys, TriMedia's geophysical surveyor will utilize a magnetometer to conduct a magnetic survey. The location of the geophysical survey areas will be recorded and the results of the survey(s) will be presented to the MDEQ project manager for consideration of boring locations relative to site features and utilities. Any concerns noted by TriMedia field staff regarding site features or results of the geophysical surveys will be presented to the MDEQ project manager in a site reconnaissance/geophysical survey summary correspondence letter. TriMedia staff will also conduct photographic documentation of site features and/or concerns observed during the site reconnaissance visit.

4. Geoprobe Borings

TriMedia will utilize a direct-push Geoprobe® Model 7822DT probing rig. For purposes of assessing potential soil and groundwater impacts at each site, TriMedia will advance soil borings to a maximum depth of approximately 40 feet bg or refusal at locations selected by MDEQ staff to collect soil samples. Each boring location will be recorded using photographs and survey grade GPS equipment.

4a. Geoprobe Soil Sampling

Soil samples will be collected continuously to a maximum depth of approximately 40 feet bg using a 1.375-inch Dual Tube sampler in five-foot lengths to document soil type, stratigraphy, color, and relative moisture content. The collected soil

data, including PID readings, will be recorded on the Boring Log included in the RFP. Each five-foot sampling interval may be subdivided into smaller intervals for field screening or laboratory analysis purposes. Subdivided intervals will be based on changes in soil type, evidence of impairment, at the discretion of TriMedia field staff, and/or discussions with MDEQ project manager. Soil samples will be collected in accordance with the priorities described in Section 1c of this proposal.

4b. Geoprobe Water Sampling

As prescribed by the MDEQ project manager, select borings will be converted to temporary groundwater sampling points at the terminal depth of the borings (up to approximately 40 feet) to collect groundwater samples. The temporary groundwater sampling points will be installed using a 0.75-inch inside diameter by five-foot long section of PVC well screen thread-coupled to five-foot sections of PVC riser pipe. If groundwater is encountered, subsequent to installation, the temporary groundwater sampling points will be developed by removing groundwater until groundwater appears relatively clear and free of sediment; a minimum of three well volumes will be purged from each well prior to collecting samples. Purge volumes will be calculated based on measurements using an electronic water level indicator. A groundwater sample will be collected from each temporary groundwater sampling point using new disposable HDPE tubing inserted within the temporary well and a peristaltic pump. Groundwater located at a depth beyond the capabilities of the peristaltic pump may be collected with bladder pump using new disposable bladders for each temporary well. Groundwater samples will be collected in accordance with the priorities described in Section 1c of this proposal.

5. Drill Rig with 4.25-inch ID Hollow Stem Augers

If necessary, TriMedia will equip the Geoprobe® Model 7822DT with 4.25-inch ID by 8.5-inch OD hollow stem augers (HSAs) to complete the soil borings.

5a. Drill Rig Soil Sampling

Borings advanced using HSAs will also utilize a 1.375-inch Dual Tube sampler to continuously collect soil samples to a maximum depth of approximately 40 feet or refusal to collect the previously described data and samples. Soil sample and data collection will be performed as detailed in Section 4a of this proposal.

5b. Drill Rig Water Sampling

Groundwater sample and data collection will be performed as detailed in Section 4b of this proposal.

6. Saturated Soil Sampling (Drill Rig or Geoprobe)

If so advised by the MDEQ project manager, TriMedia will advance Geoprobe or HSA tooling into saturated soil for the purpose of collecting data and samples. Acetate liners equipped with core catchers may be employed if the saturated sample retention is a concern. TriMedia understands that no more than one saturated soils sample per site is to be submitted for laboratory analysis. The collected data will include the information described Section 4a of this proposal and samples will be collected according to the previously described priority matrix.

7. Site Restoration

Upon completion of sample collection, TriMedia will restore each boring location to the original or improved condition. Boring locations in asphalt or concrete will be restored using the same material thickness as the adjacent area. In lawn areas, the boring locations will be restored with a minimum of four inches of topsoil followed by seed and mulch. Gravel restoration will include placement of the same material and proper grading. Site restoration activities will be guaranteed for one year from the completion date.

8. Investigative Derived Wastes (IDW) Disposal

Soil IDW from each push-probe or HSA boring will be placed into DOT-specification steel 55-gallon drums, labeled with a non-hazardous label, and staged in a location acceptable to the site owner and/or MDEQ project manager pending disposal.

Groundwater IDW resulting from temporary monitoring well development and purging will be placed into DOT-specification steel 55-gallon drums, labeled with a non-hazardous label, and staged in a location acceptable to the site owner and/or MDEQ project manager pending disposal.

TriMedia will coordinate with an appropriately licensed subcontractor to perform transportation, treatment, and disposal of IDW from each site. Soil IDW will be transported and disposed of at a RCRA Subtitle D. Groundwater and decontamination IDW will be transported to a treatment facility. All IDW will be transported under waste manifest protocol. Upon treatment and disposal, completed manifests will be provided to MDEQ staff.

9. Reporting

Upon completion of site investigation work and within 30 days of receiving final laboratory data, TriMedia will prepare and submit to the MDEQ project manager, two hard copies of the final reporting documentation. TriMedia will prepare a brief Executive Summary report of field activities and notable observations for each site. The final report for each site will include, at a minimum, the following information:

- Daily Field Notes and Logs;
- Site Photographs (digital color photographs of the site both before work is initiated and after site restoration);
- Site Maps of Boring Locations;
- All Waste Manifests;
- All Boring Logs; and
- Geophysical Survey Results

Schedule

TriMedia will meet project assignment requirements by adhering to a schedule and clearly communicating with State of Michigan project representatives throughout the project. At the onset of the project, TriMedia's assigned project manager will meet with State of Michigan project representatives to discuss specific project goals and expectations. These goals may be translated to a published schedule with subtasks relevant to the project for review by the State of Michigan project representatives. Using a Gantt chart type schedule with identified tasks and project milestones, TriMedia may track project progress and provide project stakeholders

with relevant updates to the progress schedule. We conduct formal project progress meetings with managers and specific staff members to ensure labor allocation, equipment availability, timelines, expectations, and goals are being met.

Internal QA/QC Practices

TriMedia maintains a strict QA/QC Program to ensure all project data meets the most stringent standards. We own and use the most current technical instrumentation and data processing software. We place significant priority in the QA/QC of all projects, including internal procedures, employee training, documentation generation, and data evaluation. TriMedia utilizes effective project management, peer review, standard operating procedures, work orders, and equipment maintenance to execute the QA/QC program. TriMedia reviews past work products, regulatory changes, and client feedback. In doing so, TriMedia enforces existing standards, revises the program as needed, and continues the process of improving the accuracy of the final product to the client.

TriMedia is intent on proving that engineering solutions can be practical and cost-effective and will only charge for services required and expended during the course of a project. Our proven track record reflects a majority of projects that have been completed on-time and within budget. Using BillQuick Software, TriMedia employees input their time and assign their hours to each project number. Other project related costs, such as sub-contractor invoices, are also input under the same project number. At any time a Project Manager can have an accurate accounting of all expenses being charged to a project. Invoices are generated and reviewed by Project Management personnel before being submitted to the State of Michigan for payment.

5. REFERENCES

TriMedia continues to serve public and private clients on environmental projects involving LUST sites. For more information regarding our corporate qualifications, experience, and capabilities please also visit us on the web at www.trimediaee.com. We are providing the following references for your consideration. Please contact any one of them for a better understanding of the quality of our professional services.

Randy Rothe, Env. Quality Specialist
State of Michigan
2100 West M-32
Gaylord, Michigan 49735
(989) 705-3416
rother@michigan.gov

Scott Schafer, Sr. Env. Quality Analyst
State of Michigan
5100 State Highway M-123
Newberry, Michigan 49868
(906) 293-5131
schaefes@michigan.gov

Sarat B. Bobba, P.E.
DLZ Michigan, Inc.
535 S. Burdick Street, Suite 160
Kalamazoo, Michigan 49007
(517) 393-6800
sbobba@dlz.com

Paul Bartz, Project Manager
Weston Solutions of Michigan
2501 Jolly Road, Suite 100
Okemos, Michigan 48864-3515
(517) 381-5920
Paul.Bartz@WestonSolutions.com

Richard Baron
Foley, Baron, Metzger & Juip, PLLC
38777 West Six Mile Road, Suite 300
Livonia, Michigan 48152
(734) 742-1855
rbaron@fbmjlaw.com

A representative summary of TriMedia's experience working with tasks similar to those anticipated for this contract, are presented below.

Client: State of Michigan

Site: Wyson's General Store, Lowell Street, Joey's Service, and Former Cook

Timeline: 2006 to Present

Description:

In order to remain in compliance with MDEQ regulations and to protect the environmental integrity of specific State of Michigan properties, TriMedia was retained to assist with the operation and maintenance (O&M) of the remedial treatment systems at multiple properties. The multi-site project includes: an air sparge/soil vapor extraction (AS/SVE) system and free product recovery system; and, a AS/SVE system and multi-phase extraction (MPE) system to remediate petroleum contaminated soil and groundwater related to release(s) from a former leaking underground storage tank (UST) system at the sites. TriMedia completes and submits Daily Monitoring Reports (DMRs) documenting analytical sampling results and visual inspections of the discharge are also submitted, for two of the sites, to the MDEQ on a monthly basis for both these systems. Other site systems include: a dual phase extraction (DPE) system incorporating soil vapor extraction (SVE), and assisted air-lift and air sparging (AS) technologies to remediate

petroleum contaminated soil; and, an AS/SVE bio-sparge system to remediate petroleum and tetrachloroethylene (PCE) contaminated soil and groundwater; related to release(s) from aboveground tanks, spills, and improper disposal of waste material from a service station. In addition to O&M activities, TriMedia provided oversight of Trade Contractor construction activities, as well as oversight of operation, maintenance, and monitoring activities.

Client: State of Michigan
Site: Park Shell Service in Paradise, Michigan
TimeLine: 2006 – Present

Description:

In order to protect the environmental integrity of Lake Superior, the State of Michigan retained TriMedia to assist with the remedial investigation of a gasoline station in Paradise, Michigan. In 1990 a gasoline service station removed five LUSTs and approximately 250 cubic yards of contaminated soil. Located just 500 feet from Lake Superior, a remedial investigation conducted by TriMedia utilized 15 geoprobe samples to construct 11 water table wells and 4 deep aquifer wells to define the lateral and vertical extent of groundwater contamination. COCs at the site include Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), and other gasoline additives and constituents. The results indicated free-phase product had migrate in excess of 200 feet from the source, and dissolved-phase groundwater contamination was venting to Lake Superior. In support of remedial treatment system design and interim corrective action to remove the free-phase product and treat the dissolved-phase petroleum contamination, TriMedia conducted a 72-hour pilot pump test, performed free product bailing, and monitored EFR. A Contaminant Assessment, Delineation Report, and Feasibility Study were developed and approved by the MDEQ. TriMedia also designed and installed a DPE system to contain the dissolved-phase plume and assist with recovering free-phase product. TriMedia provided oversight of Trade Contractor construction activities, as well as oversight of operation, maintenance, and monitoring activities. TriMedia currently conducts periodic groundwater monitoring and continuous operation and maintenance of the AS/SVE system operating at the site. Recent groundwater results have shown sharp decrease in COCs.

Client: State of Michigan
Site: Dave & Herb's in Dowagiac, Michigan
Timeline: 2010 to Present

Description:

TriMedia was retained by the State of Michigan to install a Soil Vapor Extraction/Air Sparging remedial treatment system in Dowagiac, Michigan. The stated goal is eliminating the presence of free product and groundwater exposure hazards. The project area contains two sites in close proximity that have comingled contamination plumes. They were both formerly occupied by gasoline fueling stations with leaking underground storage tanks. In all (2) 10,000 gallon gasoline tanks, (3) 4,000 gallon gasoline tanks, 1(1,000) gallon heating oil tank, (2) 550 gallon waste oil tanks, and (1) 250 gallon waste oil tank had been removed from the site in the early 1990's. TriMedia managed all installation efforts including associated trenching, piping and wells. In all, twenty-six wells were installed including soil vapor extraction wells, air sparge wells, and vapor monitoring wells on site. The treatment system was carefully constructed in a manner that minimized interference with current property use and future property development. Other tasks provided on the project included:

- Mobilization, demobilization and site services
- Installation of soil vapor treatment system components
- Design and installation of electrical and system controls
- Start-up and demonstration
- 12 months of treatment system operation and maintenance

Client: State of Michigan
Site: Emma Milner in Waterford, Michigan
Timeline: 2006

Description:

The State of Michigan – Department of Environmental Quality retained TriMedia to conduct operation and maintenance activities for the air sparge (AS) and soil vapor extraction (SVE) system at the Emma Milner Site in Waterford, Michigan. The Site historically operated as an automotive service and gasoline fueling station. A confirmed release was reported, based on evidence suggesting the release of petroleum constituents from an underground storage tank (UST). The SVE/AS system was installed in the summer of 2004 and became operational in September 2004. To ensure proper operation of the system, the following scheduled maintenance activities were performed:

- The air filter elements upstream of the compressors and blowers were replaced as necessary. The built-in inlet and outlet filters in the compressors were routinely checked and replaced as necessary.
- The vapor phase carbon was changed as necessary to meet air permit requirements. TriMedia made every effort to regenerate the spent carbon.
- Water from the condensation and storage containers were disposed of as necessary.
- Preventative maintenance of the system components were performed in accordance with the manufacture's recommendations.
- All equipment and system apparatus were lubricated, adjusted, maintained, and replaced as necessary to ensure proper operation of the system.
- All structural, electrical, and mechanical components, equipment and apparatus of the remediation system was replaced as necessary to ensure the remediation system met design requirements.

The following operation and monitoring activities were conducted in order to comply with relevant permitting and regulatory requirements:

- A notice of on-site activities was submitted to DLZ seven days prior to on-site activity.
- TriMedia performed one routine site visit per week for the first four weeks. Site visits were performed every other week from the fifth week until the end of the contract.
- During routine site visits, TriMedia performed the following:
 - Collected and recorded measurements specified in the Operation and Maintenance Log.
 - Obtained volatile organic carbon concentrations at the influent, intermediate, and effluent stages of the carbon units, and the air stream from each SVE well utilizing a PID.
 - Adjusted flow rates as directed by DLZ.

TriMedia performed the following activities related to remote monitoring of the system:

- Reprogrammed the PLC to send a fax to TriMedia every morning.
- Reviewed the daily fax status report to determine whether the system is operating properly.
- Compiled data from the daily PLC faxes into a monthly report.

- TriMedia responded to all system alarms, emergencies, and permit violations.
- Air samples, spent carbon, and knockout tank water characterization samples were analyzed by Trace Analytical Laboratories of Muskegon, Michigan.

A monthly report was submitted to DLZ by TriMedia before the 10th day of the following month and included the following information:

- Information specified in the Operation and Maintenance Log.
- Total and percent run times for the SVE blower and AS compressor.
- System sampling and analytical results.
- System shutdown time, including: dates and times of shutdown, total shutdown time, reason for shutdown.

Client: State of Michigan

Site: Arbor Wash in Ann Arbor, Michigan

Timeline: 2009 to Present

Description:

The State of Michigan – Department of Environmental Quality retained TriMedia to conduct operation and maintenance activities of a two-stage liquid phase GAC system at the Arbor Wash Site in Ann Arbor, Michigan. The Site historically operated as a gasoline fueling station. A confirmed release was reported, based on evidence suggesting the release of petroleum constituents from underground storage tank (UST), and the system was installed. The system captures groundwater via an interceptor trench and directs it to two sumps. Groundwater is then pumped into the treatment building via a Goulds submersible pump located in each sump. Sediment is then removed from the water via a 100 um bag filter. VOCs are then removed via a two-stage GAC system (two 1200 lb canisters). Treated water is then discharged via a NPDES permit. To ensure proper operation of the systems, the following scheduled maintenance activities are performed:

- The bag filter element is routinely checked and replaced as necessary.
- The liquid phase carbon is changed as necessary to meet NPDES permit requirements. TriMedia makes every effort to regenerate the spent carbon.
- Preventative maintenance of the system components is performed in accordance with the manufacture's recommendations.

- All equipment and system apparatus are adjusted, maintained, and replaced as necessary to ensure proper operation of the system.
- All structural, electrical, and mechanical components, equipment and apparatus of the remediation system are replaced as necessary to ensure the remediation system meet design requirements.

The following operation and monitoring activities are conducted in order to comply with relevant permitting and regulatory requirements:

- TriMedia performs two routine site visits per week.
- During routine site visits, TriMedia performs the following:
 - Collects and records measurements specified in the Operation and Maintenance Log.
 - Inspects the NPDES outfall.
 - Collects influent, intermediate and effluent water samples from the two-stage GAC system.
 - Water samples are analyzed by the MDEQ Environmental Laboratory in Lansing, Michigan.

A monthly report is submitted to the State of Michigan by TriMedia before the 10th day of the following month and includes the following information:

- Information specified in the Operation and Maintenance Log.
- Total and percent run times for the system.
- System sampling and analytical results.
- System shutdown time, including: dates and times of shutdown, total shutdown time, reason for shutdown.
- Mass removal table.

In addition to these activities, TriMedia performs all NPDES reporting and responds to violations as required to maintain compliance.

Client: State of Michigan
Site: Holly Road in Brighton, Michigan
Timeline: 2009 to Present

Description:

TriMedia was retained by the State of Michigan to conduct two years of O&M and monitoring of a remediation system at Residential Wells - Holly Road Site, located at 7878 Brighton Road, Brighton, Livingston County, Michigan. The system consists of two GAC vessels which remediate chlorinated solvent impacted groundwater related to release(s) from a former refrigeration research facility located north of the site.

Client: State of Michigan
Site: Indian Lake & Riggs Mini Super in Dowagiac, Michigan
Timeline: 2010 to Present

Description:

The State of Michigan – Department of Environmental Quality retained TriMedia to conduct operation and maintenance activities for the air sparge (AS) and soil vapor extraction (SVE) systems at the Indian Lake Super Mini and Riggs Corner Store in Dowagiac, Michigan. The Sites historically operated as gasoline fueling stations. Confirmed releases were reported, based on evidence suggesting the release of petroleum constituents from underground storage tanks (UST). The AS/SVE systems were then installed. To ensure proper operation of the systems, the following scheduled maintenance activities are performed:

- The inlet and outlet filters on the compressors are routinely checked and replaced as necessary.
- The vapor phase carbon is changed as necessary to meet air permit requirements. TriMedia makes every effort to regenerate the spent carbon.
- Water from the condensation and storage containers are disposed of as necessary.
- Preventative maintenance of the system components are performed in accordance with the manufacture's recommendations.
- All equipment and system apparatus are lubricated, adjusted, maintained, and replaced as necessary to ensure proper operation of the system.

- All structural, electrical, and mechanical components, equipment and apparatus of the remediation system are replaced as necessary to ensure the remediation system meet design requirements.

The following operation and monitoring activities are conducted in order to comply with relevant permitting and regulatory requirements:

- TriMedia performs one routine site visit per month to each site.
- During routine site visits, TriMedia performs the following:
 - Collects and records measurements specified in the Operation and Maintenance Log.
 - Obtains volatile organic carbon concentrations at the influent, intermediate, and effluent stages of the carbon units, and the air stream from each SVE well utilizing a PID.
 - Adjusts flow rates as directed by AMEC.
 - Collects influent, intermediate and effluent air samples from the two-stage GAC system via Bottlevac in compliance with a Rule 290 Permit Exemption, and submits them to the MDEQ Environmental Laboratory in Lansing, Michigan.

TriMedia performs the following activities related to remote monitoring of the systems:

- TriMedia monitors the systems via SCADA on a daily basis.
- TriMedia responds to system alarms both remotely and via non-routine site visits.
- TriMedia downloads system data via SCADA on a weekly basis.

A monthly report is submitted to AMEC by TriMedia before the 10th day of the following month and includes the following information:

- Information specified in the Operation and Maintenance Log.
- Total and percent run times for the SVE blower and AS compressor.
- System sampling and analytical results.
- System shutdown time, including: dates and times of shutdown, total shutdown time, reason for shutdown.
- Rule 290 Permit Exemption Form.
- Mass removal table.

Client: State of Michigan

Site: Logan's Gas & Deli in Battle Creek, Michigan

Timeline: 2011

Description:

The State of Michigan – Department of Environmental Quality retained TriMedia to conduct operation and maintenance activities for the air sparge (AS) and soil vapor extraction (SVE) system at the Logan's Gas and Deli Site in Battle Creek, Michigan. The Site historically operated as gasoline fueling station. A confirmed release was reported, based on evidence suggesting the release of petroleum constituents from an underground storage tank (UST). The AS/SVE system was then installed. To ensure proper operation of the system, the following scheduled maintenance activities are performed:

- The inlet and outlet filters on the compressors are routinely checked and replaced as necessary.
- The vapor phase carbon is changed as necessary to meet air permit requirements. TriMedia makes every effort to regenerate the spent carbon.
- Water from the condensation and storage containers are disposed of as necessary.
- Preventative maintenance of the system components are performed in accordance with the manufacture's recommendations.
- All equipment and system apparatus are lubricated, adjusted, maintained, and replaced as necessary to ensure proper operation of the system.
- All structural, electrical, and mechanical components, equipment and apparatus of the remediation system are replaced as necessary to ensure the remediation system meet design requirements.

The following operation and monitoring activities are conducted in order to comply with relevant permitting and regulatory requirements:

- TriMedia performs one routine site visit month
- During routine site visits, TriMedia performs the following:
 - Collects and records measurements specified in the Operation and Maintenance Log.
 - Obtains volatile organic carbon concentrations at the influent, intermediate, and effluent stages of the carbon units, and the air stream from each SVE well utilizing a PID.

- Adjusts flow rates as directed by AMEC.
- Collects influent, intermediate and effluent air samples from the two-stage GAC system via bottlevac in compliance with a Rule 290 Permit Exemption, and submits them to the MDEQ Environmental Laboratory in Lansing, Michigan.

TriMedia performs the following activities related to remote monitoring of the system:

- TriMedia responds to all system alarms.

A monthly report is submitted to AMEC by TriMedia before the 10th day of the following month and includes the following information:

- Information specified in the Operation and Maintenance Log.
- Total and percent run times for the SVE blower and AS compressor.
- System sampling and analytical results.
- System shutdown time, including: dates and times of shutdown, total shutdown time, reason for shutdown.
- Rule 290 Permit Exemption Form.
- Mass removal table.

Client: Elaine Racine, Owner
Steve Harrington, MDEQ

Site: Elaine's Place in Ishpeming, Michigan

Timeline: 2009 to Present

Description:

TriMedia was retained by the owner of Elaine's Place, located at 208 Vine Street in Ishpeming, Michigan, to investigate a suspected gasoline release arising from a discrepancy in product inventory records. TriMedia conducted a remedial investigation at the site including the installation of soil borings and monitor wells. Analytical soil and groundwater results from the remedial investigation indicated that a gasoline release had occurred. Measurable free product was observed in several wells at the site at thicknesses up to 1.10 feet during monitoring activities conducted at the starting in January 2010. TriMedia continues to coordinate EFR and manual free product recovery at the site utilizing pumping equipment to remove free product from site wells on a regular basis. TriMedia prepared a Final Assessment Report in accordance with MDEQ guidelines. TriMedia recently completed a Feasibility Study including a screening of

remedial technologies and cost assessment. Preparations for completion of AS/SVE pilot study are underway. Full-scale system design and construction is planned for summer and fall 2011.

Client: Foley, Baron, Metzger & Juip, PLLC

Site: Stalcorp in Thorntown, Indiana

Timeline: 2009 to Present

Description:

TriMedia Environmental & Engineering, LLC (TriMedia) was retained by Foley, Baron, Metzger & Juip, PLLC (FBMJ) to provide environmental consulting services on behalf of Stalcorp, LP (Stalcorp). Since it was first developed in the 1960s, the site has been used for light industrial manufacturing purposes. In cooperation with Weston Solutions, Inc. (Weston), TriMedia prepared a Feasibility Study/Remediation Work Plan (FS/RWP) for the remediation of chlorinated volatile organic compound (CVOC) -impacted soil and groundwater at the Site. The FS/RWP proposed excavation of vadose zone soil impacts, in-situ treatment of source area groundwater impacts with Enhanced Emulsified Zero Valent Iron (E-EZVI) and Emulsified Oil Substrate (EOS®), and in-situ treatment of downgradient groundwater impacts with 3-D Microemulsion (3-DMe™). Subsequently, TriMedia coordinated with Weston to conduct E-EZVI, EOS, and 3-DMe injections at the site in early 2011. TriMedia also coordinated the installation of a sub-slab depressurization system and prepared a methane monitoring plan for methane that may potentially result from enhanced bioremediation. TriMedia is currently conducting quarterly sampling to assess and monitor the effectiveness of the completed remediation activities. Chemicals of concern (COC) in soil and groundwater have been identified at the site above Indiana Department of Environmental Management (IDEM) 2006 Risk Integrated System of Closure (RISC) Residential Default Cleanup Levels (RDCLs) include tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (DCE), and vinyl chloride (VC).

So, why should the State of Michigan select TriMedia over other ordinary consultants?

- ▶ TriMedia has demonstrated project experience to meet the project objectives;
- ▶ TriMedia is conveniently located in the Upper and Lower Peninsulas to serve the needs of the State of Michigan;
- ▶ TriMedia can propose a cost-effect approach to complete each project;

- ▶ TriMedia employs a diverse, certified staff possessing the expertise necessary to successfully complete each project; and,
- ▶ TriMedia continually earns its reputation for exceptional service as evidenced by our repeat clients.

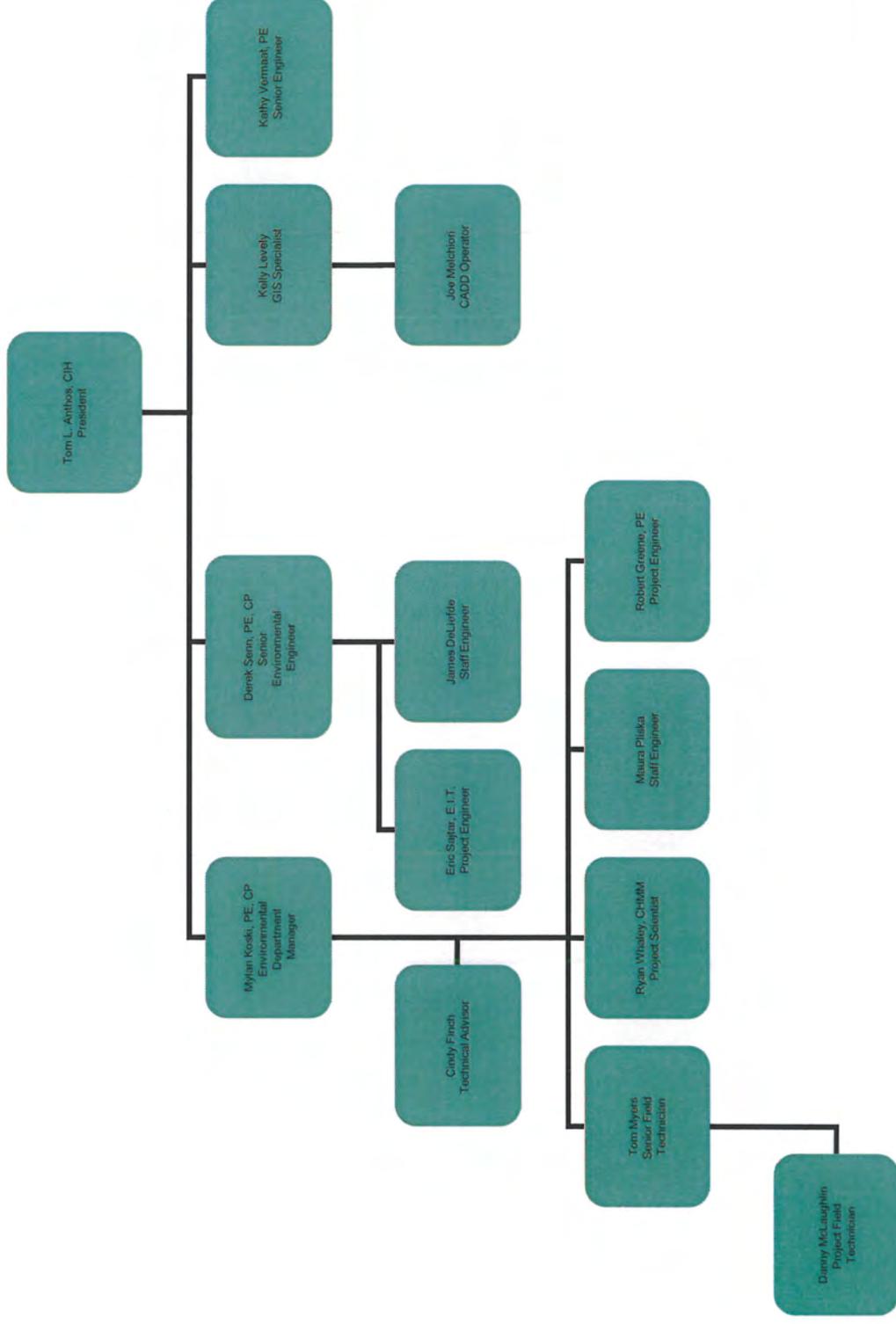
We trust the content and format of this submittal is consistent with the requirements of the referenced RFP. On behalf of the professional staff at TriMedia, we look forward to your review and the opportunity to be of service to the State of Michigan. If additional information is required, please contact (906) 228-5125.

**APPENDIX I
RESUMES**

Appendix I
Organization Chart and Resumes

State of Michigan – Key Project Team Members

TriMedia Proposal Number 2013-3547



Thomas L. Anthos, CIH
Principal Industrial Hygienist
tanthos@trimediaee.com

Summary of Professional Experience

Mr. Anthos has over twenty years of diverse expertise with industrial hygiene and environmental compliance projects. Over the course of his career, Mr. Anthos has managed all aspects of industrial hygiene projects including initial and baseline surveys of work areas and operations to identify and evaluate potential worker health risks. He is also well versed in regulatory compliance activities including, environmental/facility compliance audits, environmental assessments and due diligence evaluations.

Mr. Anthos designs and oversees industrial hygiene projects ranging from large-scale multiple building industrial complexes to small-scale, budget sensitive project concerns. He has completed occupational exposure monitoring studies involving silica in the construction and surface mining industries, hexavalent chromium exposure during power plant maintenance activities, and particulate exposure within the indoor environment.

Past clients have included explosive manufactures, surface mining operations, national railroad concerns, hospitals, schools, power plants, foundries, water treatment plants, and paper mills. Mr. Anthos has also been a technical expert for several industrial hygiene related lawsuits.

Certifications

- Board Certified in the comprehensive practice of industrial hygiene by the American Board of Industrial Hygiene, Certificate Number 9000
- Certified Hazardous Materials Manager
- OSHA 40-Hour Hazardous Waste Site Operations (supervisor)
- Licensed Asbestos Inspector (MI, WI, MT)
- NIOSH Accredited Phase Contrast Microscopist

Education

- B.S. - Biological Sciences, Michigan Technological University, Houghton, Michigan

Professional Affiliations

- American Industrial Hygiene Association
- American Board of Industrial Hygiene
- Peer Review Board – IICRC S520 Mold Remediation Guidelines

Areas of Specialty

- **Industrial Hygiene:**
 - Employee Exposure Monitoring
 - Hazard Risk Assessment
 - Process Safety Management
 - Complaint Review and Forensic Investigation
- **Expert Witness:**
 - Exposure Potential
 - Indoor Air Quality
- **Regulatory Compliance:**
 - Program Development and Review
 - Training
 - Facility Audits
 - ISO 14001 Program Development

Mylan A. Koski, P.E., CP
Environmental Project Manager
mkoski@trimediaee.com

Summary of Professional Experience

Mr. Koski serves as Environmental Project Manager focusing on environmental compliance, risk assessment, contaminant clean-up, and comprehensive management of environmental projects.

He has over 16 years experience with environmental engineering and project implementation. Most recently he was the Environmental Department Manager at Terracon Consultants, Inc. in their Appleton, Wisconsin office.

Mr. Koski has considerable expertise with regulatory compliance, design and operation of environmental treatment systems, brownfield redevelopment, underground storage tank management, environmental permitting, waste management, and the investigation and cleanup of accidental spills.

As Project Manager, Mr. Koski is actively involved in managing TriMedia's environmental personnel in concert with the project objectives and deadlines of our clientele. Estimating project costs, active client communication, and coordination with other staff members and managers are key components of his position and expertise.

Certifications

- Registered Professional Engineer, Wisconsin
- OSHA 40-Hour Hazardous Waste Operation and Emergency Response
- State of Michigan Certified Underground Storage Tank Professional (#1155)
- State of Michigan Storm Water Management Operator-Industrial Site A-1i
- MSHA 24-Hour New Miner Training

Education

- B.S. – Geological Engineering, Michigan Technological University, Houghton, Michigan

Affiliations

- National Groundwater Association

Areas of Specialty

- Regulatory Compliance
- Due Diligence/Due Care
- Brownfield Redevelopment
- Site Investigation
- Soil & Groundwater Remediation Design
- Hazardous Waste Management/Waste Minimization
- Environmental Assessments
- Emergency Response/ Accidental Spills



Derek T. Senn, P.E.

Environmental Project Manager

*dsenn@trimediaee.com***Summary of Professional Experience**

Mr. Senn is a Professional Engineer with experience in environmental compliance and remedial action activities. His expertise includes hydrogeology, groundwater monitoring and remediation, groundwater modeling, engineering geology, and geophysics. He has a working knowledge of state and federal regulations/guidelines providing compliance auditing and assessment services.

Mr. Senn has experience in environmental field activities and technical procedures used to gather project data. Prior to joining TriMedia, Mr. Senn worked with the University of North Dakota Energy and Environmental Research Center where he developed expertise with the bioremediation of ethanol containing fuels, as well as monitoring the environmental impact of coal-bed methane production.

As a Project Manager, Mr. Senn is involved with subsurface soil and water characterization, hydrogeology, groundwater modeling activities, and treatment system design, management, operation, and maintenance. He provides hydrogeological project support and has experience conducting numerous environmental site assessments, baseline environmental assessments and remedial investigations for TriMedia clientele throughout North America.

Certifications

- OSHA 40-Hour Hazardous Waste Operations and Emergency Response
- North Dakota (PE-8039), Michigan (#6201055035) & Indiana (#PE10910577) Professional Engineer (P.E.)
- North Dakota Certified Monitoring Well Contractor (#414)
- MI Underground Storage Tank Professional (#1116)
- American Red Cross Adult CPR and Basic First Aid
- State of Michigan Industrial and Commercial Waste Water Treatment Plant Operator Certification A-2d, B-2c and B-3b.

Education

- B.S. – Geological Engineering, University of North Dakota, Grand Forks, North Dakota

Affiliations

- National Society of Professional Engineers
- National Groundwater Association
- Michigan Association of Environmental Professionals
- ASTM Subcommittee - Environmental Risk Management

Areas of Specialty

- Geology and Hydrogeology
- Environmental Assessments
- Facility Audits
- Site Investigation
- Contaminant Fate and Transport Modeling
- Remedial Treatment System Design, Management, Installation, and Operation
- Environmental Sampling and Monitoring
- Engineering Controls/Contingency Planning
- Monitored Natural Attenuation



Kathleen Vermaat, P.E.

Contract Administrator/Senior Engineer
kvermaat@trimediaee.com

Summary of Professional Experience

Ms. Vermaat, P.E., has over 19 years experience as a project manager and contracting officer. Her professional experience includes all aspects of design and construction project planning via design-bid-build, design-build, general contracting/construction management (GM/CM), term contracts, and other purchase methods.

Prior to joining TriMedia, Ms. Vermaat served as Project Manager, Facilities Manager and Construction Project Manager within the Federal Government and private sector. As Project Manager with the Anchorage (Alaska) School District, she managed multiple school district capital construction projects and numerous smaller renovation projects totaling over \$120 million.

While working with the White House Military Office, Ms. Vermaat was specially selected as team leader for all Washington DC area facilities projects and was responsible for project tasks including project identification, planning, budgeting, environmental analysis, design, and construction management. Working as Facilities Manager with the Marine Corps Air Station at Camp Pendleton, she was responsible for all facilities planning, budgeting, design, construction, and maintenance, including a staff of 17 people, an annual budget of \$13 million, and a capital construction budget in excess of \$150 million.

As Contract Administrator, Ms. Vermaat enhances TriMedia's administrative efficiency and cost accountability. Her responsibilities include preparation of work scope documents; proposal solicitation and evaluation; subcontractor selection, negotiation, and contract administration; and contract close-out.

Certifications

- Registered Professional Engineer, Virginia
- United States Department of Navy Contracting Officer (1992-1999)

Education

- B.S. – Mechanical Engineering, University of Virginia, Charlottesville, Virginia

Areas of Specialty

- Project Management
- Facilities Management
- Contract Administration
- Purchasing Coordination
- Facilities Planning and Budgeting
- Construction Management



Robert L. Greene, P.E.
Project Environmental Engineer
rgreene@trimediaee.com

Summary of Professional Experience

Mr. Greene serves as Environmental Project Manager for TriMedia. Since his career began in 2003, Mr. Greene has provided project management and technical support services specializing in subsurface investigation and remediation projects within the consulting industry.

A well rounded environmental professional, Mr. Greene is proficient in the development of comprehensive scopes of work, health and safety plans (HASPs), technical proposals, and cost estimates. He also coordinates field and office operations including remedial system installations, remedial system operations and maintenance, drilling, excavation, underground lateral piping installation, site/surface restoration, analytical sampling, data tabulation, CAD plan preparation, and reporting.

Mr. Greene is also knowledgeable in helping clients achieve regulatory compliance objectives. He is experienced with ASTM standards, subcontractor coordination, equipment procurement, waste profiling/disposal, government agency permitting, public hearings/notification, budget management, and complete project execution.

Having managed many Leaking Underground Storage Tank (LUST) sites, Mr. Greene has extensive experience with remedial technologies such as Air Sparge, Soil Vapor Extraction, Multi-Phase/High Vacuum Extraction, Catalytic/Thermal Oxidizer, and Granulated Activated Carbon system data evaluation and analysis including contaminant mass removal, Air Quality, and emissions calculations. He is highly experienced in remedial system design; subsurface contaminant plume modeling; groundwater gradient/flow calculations; and the development of SOPs for a wide range of field operations and equipment.

Professional Affiliations

- Environmental Professionals of Arizona

Certifications

- Arizona (#50734) Professional Engineer (P.E.)
- Michigan (ID#6201059345) P.E.
- OSHA 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER)
- OSHA HAZWOPER 8-Hour Manager/Supervisor
- MSHA 24-Hour New Miner
- AHERA Certified Asbestos Building Inspector (F3974)
- ICC Certified for Underground Storage Tank Decommissioning (#8102015)

Education

- B.S. – Chemical Engineering, Arizona State University, Tempe, Arizona

Areas of Specialty

- Project Management of Active Remediation Sites
- Subsurface investigation, modeling, and remediation
- Site characterization
- *In situ* and *ex situ* remedial engineering
- Evaluation and optimization of remedial system operations
- Soil classification
- Evaluation of vapor intrusion hazards/soil gas surveys
- Underground storage tank system closure
- Hazardous/toxic/solid waste impact minimization

Ryan J. Whaley, CHMM, REHS

Senior Project Scientist

rwhaley@trimediaee.com

Summary of Professional Experience

Mr. Ryan Whaley serves as Senior Project Scientist focusing on site assessment, contaminant clean-up, regulatory compliance assessment, and natural resource and environmental management projects. He provides support to senior staff on a wide range of environmental and natural resource projects.

Mr. Whaley has considerable experience in the environmental and regulatory compliance industry. Areas of expertise include: underground storage tank management, site characterization and investigation, remediation, environmental monitoring and permitting, waste management, brownfield redevelopment, and the investigation and cleanup of accidental spills.

Prior to joining TriMedia, he was the Noncommunity Public and Private Water Supply Coordinator for the Luce-Mackinac-Alger-Schoolcraft District Health Department.

Certifications

- Certified Hazardous Material Manager – Institute of Hazardous Material Management
- Registered Environmental Health Specialist/Registered Sanitarian – National Environmental Health Association
- OSHA 40-Hour Hazardous Waste Operation and Emergency Response
- MSHA 24-Hour New Miner Training

Affiliations

- National Ground Water Association
- Michigan Association of Hazardous Materials Professionals
- Alliance of Hazardous Materials Professionals
- Michigan Environmental Health Association, Executive Board (2003-2006)

Education

- B.S. – Natural Resources & Environmental Management, Ball State University, Muncie, Indiana.

Areas of Specialty

- Environmental Due Diligence
- Regulatory Compliance
- Facility Audits
- Soil & Groundwater Remediation
- Brownfield Redevelopment
- Hazardous Waste Management/Waste Minimization
- Risk Assessment
- Natural Resources Management
- Compliance Assessments
- Emergency Response/Accidental Spills



Eric T. Sajtar, P.E.
Environmental Engineer
esajtar@trimediaee.com

Summary of Professional Experience

Mr. Sajtar is an environmental engineer with a strong background in environmental regulations and compliance, mathematical modeling, laboratory analysis, environmental remediation, and the use of the latest environmental computer resources and programs. Prior to joining TriMedia, he was a research and teaching assistant at the University of Wyoming.

As an Environmental Engineer with TriMedia, he has assisted in the completion of environmental projects, including due diligence assessments, contaminant investigations, environmental risk assessments, regulatory compliance, and remedial treatment system selection, design, installation, and operations and maintenance. He has planned, managed, coordinated, overseen and performed all activities associated with retrofitting existing remediation systems and installing new remediation systems.

Mr. Sajtar has also published papers in peer reviewed journals, co-authored a book on water treatment, and developed mathematical models for the United States Department of Energy

Certifications

- Registered Professional Engineer (P.E.), State of Michigan (License No. 6201058957)
- OSHA 40-Hour Hazardous Waste Operations and Emergency Response
- Licensed Asbestos Inspector, State of Michigan
- Army Corps of Engineers Wetland Delineation
- State of Michigan Storm Water Management Operator-Industrial Site A-1i
- State of Michigan Storm Water Management Operator-Construction Site A-1j
- State of Michigan Industrial and Commercial Waste Water Treatment Plant Operator Certification A-2b (filtration), A-2d (air stripping) and B-3b (carbon adsorption).

Education

- B.S. – Environmental Engineering, Michigan Technological University, Houghton, Michigan
- M.S. – Environmental Engineering, University of Wyoming, Laramie, Wyoming.

Areas of Specialty

- Regulatory Compliance
- Environmental Lab Analysis
- Environmental Software & Programs
- Soil & Groundwater Remediation Design
- Hazardous Waste Management/Waste Minimization
- Environmental Assessments
- Environmental Audits
- Environmental Sampling and Monitoring
- Asbestos Management
- Wetlands Delineation



Kelly D. Levely

GIS Specialist

klevely@trimediaee.com

Summary of Professional Experience

Mr. Levely is Geographic Information Systems (GIS) Specialist supporting TriMedia clients on civil engineering, natural resource, and environmental investigation projects. His primary responsibility is to integrate technical information into a user-friendly GIS database and mapping system in support of TriMedia clientele.

Mr. Levely has over 11 years of experience with natural resources management and GIS. Prior to joining TriMedia, he was Forestry Technician with the Delta County Conservation District where he utilized GIS to assist private landowners in properly managing forest resources and wildlife habitat. He has considerable expertise with ARC/GIS mapping and databases, natural resource planning, forest management, watershed inventory and assessment, and various other environmental field activities.

Mr. Levely provides TriMedia clients with GIS services necessary to optimize resource and asset management; conduct market analysis; complete demographic studies; and, support municipal planning efforts. Additionally, GIS is used to increase efficiency of environmental data management; emergency planning; infrastructure and roadway management; natural resource administration; and, industrial facility management.

His GIS expertise is supported through extensive experience with software systems that include: ArcView, ArcGIS, and ArcCatalog. Additionally, he utilizes ArcIMS software to create web-viewable GIS files.

Education

- B.S. – Natural Resources Management, Grand Valley State University, Saginaw, Michigan

Certifications

- Conservation Planner
- NRCS Toolkit Planning Program & ArcGIS
- Forest Stewardship Plan Writer
- Storm Water Operator
- Army Corps of Engineers Wetland Delineation



Areas of Specialty

- GIS Mapping
 - Infrastructure
 - Roadways
 - Asset Management
 - Municipal and Emergency Planning
 - Natural Resource Management
 - Environmental Data Reporting
- GIS Databases
- Wetland Delineation
- Computer Resources

Maura A. Pliska, E.I.T.
Staff Environmental Engineer
mpliska@trimediaee.com

Summary of Professional Experience

Ms. Pliska brings years of varied environmental consulting and engineering expertise to TriMedia having worked within both industry and private consulting over the course of her career. She has proven ability to manage/execute multiple, complex projects on schedule and within budget and lends engineering design expertise on both environmental and civil engineering projects. She also provides strong project management, design, regulatory compliance, and field and reporting expertise to TriMedia clientele.

Ms. Pliska's project management experience includes managing project budgets, scope, project kickoff and progress updates to clientele, and coordinating multi-discipline staff in their successful completion. She is also experienced in negotiations with regulatory agencies, and review and oversight of all technical project activities.

Her environmental compliance background is quite strong as well. She has completed permits, construction, operating and closure plans, and assisted sites in compliance issues, and reporting requirements. Ms. Pliska also drafts Spill Prevention Control and Countermeasure plans, NPDES permits, and Stormwater Pollution Prevention plans and has worked directly with regulatory agencies. She is skilled in the interpretation of federal and state related standards, rules and regulations.

In addition to her compliance and project management duties, Ms. Pliska performs a valuable role in environmental field activities and report writing, having worked on large scale remedial treatment projects as well as underground storage tank systems, spill sites, and other contaminated areas.

Certifications

- Engineer in Training (E.I.T), National Society of Professional Engineers
- OSHA 40-Hour Hazardous Waste Operation and Emergency Response

Education

- B.S. – General Engineering, University of Illinois, Champaign, Illinois

Areas of Specialty

- Site Investigation
- Regulatory Compliance
- Environmental Permitting & Reporting
- Stormwater Pollution/Spill Prevention Planning
- Solid Waste Management/Waste Minimization



James A. DeLiefde, EIT
Staff Environmental Engineer
jdelifde@trimediaee.com

Summary of Professional Experience

Mr. DeLiefde is an environmental engineer with a strong background in environmental studies and engineering, research, laboratory analysis, and the use of the latest environmental computer resources and programs.

DeLiefde's computer skills include Microsoft Office and environmental applications including SewerCAD, UGNX, Pro-E and EPA Net. While pursuing his degree, DeLiefde was part of a five person team charged with reducing the amount of waste generated at Michigan Technological University (MTU) by composting cafeteria waste. Implementing the proposed process would lead to an 89 ton reduction in landfilled waste and cost savings of \$5,600 annually.

As a Staff Engineer with TriMedia, DeLiefde's efforts focus on environmental compliance, risk assessment, contaminant clean-up, and remedial treatment system operation and maintenance. He assists senior personnel on environmental projects throughout Michigan, Indiana, and Wisconsin. He has provided contractor oversight during asbestos abatement projects, and the installation and retrofitting of groundwater and soil remediation systems, including excavation and back filling activities.

Certifications

- OSHA 40-Hour Hazardous Waste Operations and Emergency Response
- Michigan 40-Hour Asbestos Contractor/Supervisor
- Michigan 24-Hour Asbestos Inspector
- American Red Cross First Aid and CPR
- NCEES E.I.T. State of Michigan
- MDEQ SESC Comprehensive and Inspector
- State of Michigan Industrial and Commercial Waste Water Treatment Plant Operator Certification A-2d (air stripping) and B-3b (carbon adsorption).

Education

- B.S. – Environmental Engineering, Michigan Technological University, Houghton, Michigan

Areas of Specialty

- Site Investigation
- Remedial Treatment System Operation, Maintenance and Installation
- Environmental Software & Programs
- Soil & Groundwater Remediation Design
- Hazardous Waste Management/Waste Minimization
- Environmental Assessments
- Environmental Audits
- Environmental Sampling and Monitoring

Joe W. Melchiori

CAD/Civil Technician

*jmelchiori@trimediaee.com***Summary of Professional Experience**

Mr. Melchiori serves as CAD/Civil Technician providing computer aided drafting, land surveying and materials testing services at TriMedia.

He is responsible for a large portion of the CAD work completed for Project Managers including civil engineering, surveying and environmental divisions. Mr. Melchiori is proficient with related software programs including AutoCAD™ 2012, AutoCAD Civil 3D™, and Eagle Point™ drafting programs, Bentley Microstation™, SolidWorks™, Pro/ENGINEER™, among others.

Mr. Melchiori is experienced in residential and commercial development which enables him to generate civil engineering and survey plans from concept to final recording. He has developed site/land condominium and building condominium plans from concept to final recording and has provided research and consultation services to clients interested in land division and development. Mr. Melchiori also is experienced in land surveying, having provided construction staking, and topographic survey work serving as instrument man, rod man and GPS technician.

In addition, Mr. Melchiori is experienced with construction materials testing and lab work for soil, aggregate and concrete. He has also completed a number of AutoCAD training courses and has attended various conferences, seminars, and university courses on the topic as well.

Education

- OSHA 40-Hour Hazardous Wasted Operation and Emergency Response
- Mine Health & Safety Administration Training
- Confined Space
- First Aid/CPR/AED

Education

- Associates Degree - Computer Aided Drafting, Bay College, Escanaba, Michigan

Areas of Specialty

- Computer Aided Drafting
- CAD Software
- Residential/Commercial Development
- Engineering Plans
- Land Surveying Plans
- Environmental Diagrams
- Topographic Mapping
- Site/Land Condominium Plans
- Building Condominium Plans
- Land Surveying
- Construction Materials Testing

**TriMedia**
Environmental & Engineering

Thomas J. Myers
Senior Field Technician
tmyers@trimediaee.com

Summary of Professional Experience

Mr. Myers expertise lies within the application of environmental field activities and data collection. He assists senior staff with contamination investigations, environmental monitoring, waste management, microbiological testing, and operation and maintenance of remedial treatment systems. He is experienced with environmental drilling techniques, and possesses expertise in the advancement of soil borings and the installation of monitoring and purge wells as well as various sampling methods and applications, including Hydropunch, Splitspoon and Shelby Tube sampling.

As an experienced Field Technician, Mr. Myers has conducted waste characterization sampling programs, hydrogeological studies, remedial investigations, and sampling programs involving sludge, contaminated soil and groundwater. He is proficient in the use, calibration and maintenance of environmental instrumentation, including photoionization devices, water level probes and interface probes, water quality meters, data loggers, and combustible gas meters.

Mr. Myers has directed field construction activities for the installation of remedial treatment systems using granular activated carbon, air sparging, soil venting, bioremediation, soil-vapor extraction, air stripping, and ozonation, and he is experienced in the operation, maintenance and documentation requirements of these treatment systems.

Education

- B.S. – Physical Geography, Northern Michigan University, Marquette, Michigan

Certifications

- OSHA 40-Hour Hazardous Waste Operation and Emergency Response

Areas of Specialty

- Environmental and Geotechnical Subsurface Investigations
- Remedial Treatment System Construction, Operation and Maintenance
- Installation of Monitoring and Purge Wells
- Emergency Spill Response
- Groundwater, Soil, Sludge and Waste Sampling and Analysis

Danny D. McLaughlin
Project Technician
dmclaughlin@trimediaee.com

Summary of Professional Experience

Mr. McLaughlin has over twelve years of experience in conducting environmental and geotechnical investigations, including field vertical and horizontal delineation of contaminant plumes. He is an experienced environmental drilling crew chief, and possesses expertise in the advancement of soil borings and the installation of monitoring and purge wells. He is experienced in various sampling methods and applications, including Hydropunch, Splitspoon and Shelby Tube sampling.

As an experienced field crew supervisor, Mr. McLaughlin has conducted waste characterization sampling programs, hydrogeological studies, remedial investigations, and sampling programs involving sludge, contaminated soil and groundwater. He is proficient in the use, calibration and maintenance of environmental instrumentation, including photoionization devices, water level probes and interface probes, water quality meters, data loggers, and combustible gas meters.

Mr. McLaughlin has directed field construction activities for the installation of remedial treatment systems using granular activated carbon, air sparging, soil venting, bioremediation, soil-vapor extraction, air stripping, and ozonation, and he is experienced in the operation, maintenance and documentation requirements of these treatment systems.

Certifications

- OSHA 40-Hour Hazardous Waste Operation and Emergency Response

Areas of Specialty

- Environmental and Geotechnical Subsurface Investigations
- Remedial Treatment System Construction, Operation and Maintenance
- Installation of Monitoring and Purge Wells
- Emergency Spill Response
- Groundwater, Soil, Sludge and Waste Sampling and Analysis

Cindy M. Finch
Staff Technical Advisor
cfinch@trimediaee.com

Summary of Professional Experience

Ms. Finch's responsibilities include compiling and formatting project information and data, consistent with TriMedia's Quality Assurance/Quality Control standards. Duties include scheduling and monitoring project activities, preparing outgoing documents, providing contract administration services related to sub-contractor bid documents, and sub-consultant and service providers, fleet management, and corporate travel arrangements.

Ms. Finch records site-specific information and data, including analytical laboratory documentation, project correspondence, field measurements and analytical analysis, as well as training program materials. She is involved with many aspects of client service and administration, and continually strives to improve internal processes.

Ms. Finch formerly supported the Upper Peninsula Chapter of the Michigan Manufacturers Technology Center as Administrative Assistant. Based in Marquette, Michigan she assisted in the promotion and coordination of training events, creating training manuals, and with the production of the Upper Peninsula Manufacturers Directory. Responsibilities included grant administration, including budgeting, research, and report generation, project administration, and development of filing and job aid systems to increase efficiency.

Education

- Mason High School, Mason, Michigan
- Lansing Community College, Lansing, Michigan
- Northern Michigan University
- American Travel Schools, Grand Rapids, Michigan

Areas of Specialty

- Quality Assurance/Quality Control
- Report Data Dissemination
- Computer Applications: MicroSoft Word, Excel, Access, Power Point
- Office Administration
- Client Service

Tom Anthos
TriMedia
Page 2
January 15, 2014

If your company is interested in participating in the MiDEAL program, please sign below and return to this letter to the letterhead address, Attention: Melissa Sambiagio

FOR THE STATE OF MICHIGAN



Robert C. Hall, RA, NCARB, Director
Design and Construction Division
Facilities Administration

FOR THE PROFESSIONAL

TriMedia agrees to extend the terms, conditions, and pricing of our 2013 General ISID Environmental Expanded Triage Services contract, No. 00422, to MiDEAL members and will remit the one percent (.01) administrative payment fee along with the quarterly report as outlined.



Signature

1/24/2014
Date

Lorelei Sorensen/Controller

Print Name/Title