FINAL REMEDIAL DESIGN WORK PLAN
ALSY MANUFACTURING

NYSDEC CONTRACT NO. D003826

WORK ASSIGNMENT NO. D003826-27

Submitted to:
New York State Department of Environmental Conservation
Albany, New York

Submitted by:
MACTEC Engineering and Consulting, P.C.
Portland, Maine
MACTEC: 3612062043

MAY 2006

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Submitted by:	Approved by:
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Project Manager	Program Manager

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ACRONYMS

ASP	Analytical Services Program
EEO	Equal Employment Opportunity
IDW	investigation derived waste
MACTEC	MACTEC Engineering and Consulting, P.C.
M/WBE	Minority and Women Owned Business Enterprise
NYSDEC	New York State Department of Environmental Protection
NYSDOH	New York State Department of Health
PID	photo ionization detector
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Program Plan
QAPjP	Quality Assurance Project Plan
RAO	Remedial Action Oversight
RD	Remedial Design
RDWP	Remedial Design Work Plan
ROD	Record of Decision
SCGs	Standards, Criteria, and Guidelines
SIM	selective ion monitoring
Site	Alsy Manufacturing site
SPLP	synthetic precipitation leaching procedure
TCL	target compound list
USDOT	United States Department of Transportation
VOCs	volatile organic compounds
WA	Work Assignment

1.0 INTRODUCTION

MACTEC Engineering and Consulting, P.C. (MACTEC) is submitting this Remedial Design Work Plan (RDWP) to the New York State Department of Environmental Conservation (NYSDEC) in response to Work Assignment (WA) No. D0003826-27, and in accordance with the requirements of the July 1997 Superfund Standby Contract (Contract) Number D003826 between the NYSDEC and MACTEC (formerly Harding Lawson Associates). This WA includes the Remedial Design (RD) and the Remedial Action Oversight (RAO) for the Alsy Manufacturing site (Site) (No. 1-30-027) in Hicksville, Nassau County, New York. RD for the Site will be conducted in accordance with Work Element III, and RAO will be conducted in accordance with Work Element IV, of Schedule 1 of the Contract.

The Site history and background are presented in Section 2.0 of this RDWP. This RDWP provides a description of the scope of work, and outlines the major project tasks in Section 3.0. Section 4.0 provides information regarding the project organization, schedule, and budget. Appended to this WP are:

- Quality Assurance Project Plan (Appendix A),
- Health and Safety Plan (Appendix B),
- Detailed Project Schedule (Appendix C),
- Detailed Cost Tables (Appendix D),
- A Minority and Women Owned Business Enterprise (M/WBE) and Equal Employment Opportunity (EEO) Utilization Plan (Appendix E).

2.0 SITE HISTORY AND BACKGROUND

The Site is located at 270 and 280 Duffy Avenue approximately 4000 feet east of the Wantaugh Parkway in an urban area in Hicksville, Nassau County, New York. It is situated on approximately 4 acres of land. The site contains two (2) one-story commercial buildings (270 and 280 Duffy Avenue) with adjacent paved parking areas. For more detailed information refer to the Record of Decision (ROD) (NYSDEC, 2005). The remedy for the Site was selected in the ROD, which was signed in March 2005.

AIsy Manufacturing manufactured electric lamps and lampshades at this facility from 1975 through 1991. Alsy's manufacturing processes included bronze plating, electroplating, and antiquing. Waste material that was generated included metals p1ating waste, wastewater treatment sludge, paint thinner, acidic paint stripper, alkaline paint stripper, and 1,1,1 -trichloroethane.

Alsy was issued a permit in 1977 for an on-site discharge point for industrial discharges consisting of copper, nickel, zinc, and cyanide. Between 1977 and 1983, Alsy repeatedly violated the discharge limitations for its state pollutant discharge elimination system permit. Sampling also revealed disposal of unauthorized metals and volatile organic compounds (VOCs). Four non-permitted discharge points were also identified. Behind the building leaching pools, several discharge pipes, and two trenches were found to contain metals and VOC contamination. One formerly abandoned leaching pool was determined during the RI to be the suspected main remaining source of the dissolved nickel plume.

NYSDEC selected targeted source soil removal, engineering controls to limit infiltration and direct contact, groundwater monitoring, and institutional controls as the remedy. Based upon additional sampling (to be completed), sub-slab soil vapor mitigation systems and/or a soil vapor extraction system may be required. The components of the remedy are as follows:

- A limited pre-design investigation will be performed to provide data to support the design of the remedy. The investigation will refine the quantity of soil to be removed, the depth and

location of the sheet piling, and whether or not deep metals stabilization will be required. Enough deep soil sample volume will be retrieved for bench-scale test stabilization if required. This investigation will also verify concentrations of VOCs in soil gas immediately beneath the building slab to determine if mitigation or remediation is required, and sampling to determine if any shallow VOC-contaminated soil vapor is migrating toward the residential neighborhood south of the Site.

- A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. The design will provide for the following:
  - The excavation and appropriate off-site disposal of contaminated soil.
  - Rerouting of the storm water system to eliminate infiltration into the former source areas
  - Restoration of the Site by backfilling the excavation and re-paving the courtyard area with asphalt.
  - Development of a site management plan to: (a) address residual contaminated soils that may be excavated from the Site in the future through implementation of a soils management plan; (b) evaluate the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified; (c) identify any use restrictions; and (d) provide for the operation, maintenance, and monitoring components of the remedy.
  - Imposition of an institutional control in the form of an environmental easement that will (a) require compliance with the approved site management plan; (b) limit the use and development of the property to commercial or industrial uses only; (c) restrict the use of groundwater as a source of potable or process water, without necessary water treatment as determined by the NYSDEC and/or New York State Department of Health (NYSDOH); and (d) require the property owner to complete and submit to the NYSDEC an annual certification.
  - Implementation of a long-term monitoring program. The monitoring program will include sampling, analysis, and reporting of on-site and off-site groundwater quality, and monitoring for soil vapor extraction or soil vapor issues as necessary.

3.0 STATEMENT OF WORK

The purpose of this WA is to:

- Prepare a Remedial Design Work Plan presenting a description and purpose of the proposed work plan tasks. The work plan is described in Task 1.
- Conduct a limited pre-design investigation to provide data to support the design of the remedy. This work is described below in Task 2.
- Prepare the detailed design of the remedial action for the Site in accordance with Work Element III of Schedule 1 of the Contract. This includes the preparation of engineering reports, preliminary designs, final designs, plans and specifications, cost estimates, formal bid documents, additional studies and pre-award services. This work is described in Tasks 3 and 4.
- Provide engineering services during remedial construction in accordance with Work Element IV of Schedule 1 of the Contract. This work is described in Task 5.
- Prepare a Health and Safety Plan and conduct Citizen Participation activities and Quality Assurance/Quality Control (QA/QC) activities. This work is described in Tasks 6, 7, and 8, respectively.

3.1 Task 1: Remedial Design Work Plan

Task 1 of the WA is the preparation of this Work Plan, which includes the following:

- A statement of work which includes a description and purpose of the tasks (included in Section 3.0);
- A staffing plan identifying management and technical staff to be assigned to the WA (included in Section 4.0);
- A list of proposed subcontractors (included in Section 4.0);
- Quality Assurance Project Plan (Appendix A);
- Health and Safety Plan (Appendix B);
- Detailed Project Schedule (Appendix C);

- Detailed Cost Tables (Appendix D); and
- A Minority and Women Owned Business Enterprise (M/WBE) and Equal Employment Opportunity (EEO) Utilization Plan (Appendix E).

3.1.1 Subtask 1.1: Background Review

MACTEC has reviewed the ROD (NYSDEC, 2005) and the Remedial Investigation/Feasibility Study (RI/FS) Reports (ERM, 2003; ERM, 1998; LMS, 1997) for the Site.

3.1.2 Subtask 1.2: Scoping Meeting and Remedial Design Work Plan

On April 11, 2006 MACTEC's Project Manager Mark Stelmack and Lead Design Engineer Ryan Belcher participated in a scoping meeting at the site with the NYSDEC Project Manager, Gerard Burke. At the site meeting, MACTEC toured the Site and the surrounding area, and discussed possible locations for placement of a groundwater sampling probe transect, the purpose of which will be to identify the proper location(s) for long-term groundwater monitoring wells to be installed under the construction contract.

3.2 TASK 2 – PRE-DESIGN STUDIES

Pre-design studies shall be performed to determine or refine information necessary to design the remedy. These studies have been identified as:

1. Source area soil investigations to provide information to design a source removal action;
2. Groundwater profiling south of the Site to identify the proper location(s) for long-term monitoring wells;
3. Soil vapor investigations to verify sub-slab VOC concentrations and down gradient on-site shallow soil vapor concentrations.

The scope of work planned for these studies are described below. All fieldwork will be conducted in accordance with the specifications presented in the Quality Assurance Program Plan (QAPP) (ABB-ES, 1994), a stand-alone document, and the Site specific Quality Assurance Project Plan (QAPjP), included as Appendix A to this Site Work Plan. QA/QC procedures for sample handling

and sample shipment are presented in Section 5.0 of the QAPP. QA/QC sample frequencies are presented in the Site-specific QAPjP. Health and Safety procedures for on site activities are presented in the Program HASP (ABB ES, 1994) and the Site specific HASP, included as Appendix B to this Site Work Plan. Survey and base-map preparation will be conducted by YEC, Inc./YEC Engineering, P.C. Off-site laboratory analyses will be performed by Columbia Analytical Services (air samples) and Katahdin Analytical Services (soil and water). Off-site laboratory analysis will comply with the NYSDEC Analytical Services Protocols (ASP) (NYSDEC, 2000). Proposed sample IDs and analyses are provided in Table 3-1.

Additionally, MACTEC will provide to NYSDEC an updated tax map identifying all potentially impacted property owners and/or those parties with property rights as part of this Task (This work is requested under Task 3 of this WA).

3.2.1 General Field Activities

General field activities, including mobilization, health and safety, and decontamination, are summarized in this subsection. Upon approval of the Work Plan, MACTEC will complete procurement of subcontractors and begin mobilization. Subcontractors include:

1. Direct-push drilling contractor (a single contractor to be used for all work tasks)
2. Analytical laboratories and
3. Survey and Mapping.

Mobilization. Upon receiving the NYSDEC authorization, MACTEC and its subcontractors will mobilize to the Site to accomplish the pre-design studies. Mobilization will include obtaining utility clearances and acquisition of the following:

- Transportation to and from the Site;
- Direct-push drilling equipment and field supplies;
- Health and Safety equipment;
- Decontamination supplies and equipment; and
- Sampling and Analytical equipment and supplies.

A field team orientation meeting will be held on-site with MACTEC and subcontractor personnel to familiarize field workers with Site history, health and safety requirements, equipment calibration procedures, and all other investigation methods and procedures.

Health and Safety. The Site specific HASP is provided as Appendix B to this document. Based on available Site information, MACTEC anticipates that the RI fieldwork will be conducted in Level D personal protection. Specific investigation activities and required level of personal protection are set forth in the Site specific HASP. Criteria for upgrading or downgrading the specified level of protection are also provided in the Site specific HASP. Additional health and safety requirements are set forth in the Program HASP (ABB, 1994). Should Site conditions pose a threat to those present on-site, and/or should Site conditions warrant an upgrade from Level D, as defined by the HASP, work will stop and the situation will be reevaluated by the NYSDEC and MACTEC.

Decontamination. Sampling methods and equipment for this field program have been chosen to minimize decontamination requirements mitigating potential for cross contamination. Disposable sampling equipment will be used as much as practical to minimize decontamination time and water disposal. Non disposable sampling equipment will be decontaminated before and after the collection of each sample. Decontamination methods and materials are described in detail in Subsection 4.3 of the QAPP.

Non disposable sampling equipment will be decontaminated by 1) washing the sample collection equipment with potable water and Liquinox, rinsing with potable water, rinsing with deionized water, and then allowing the equipment to air dry, or 2) steam cleaning the equipment and then allowing the equipment to air dry. Drilling equipment will be decontaminated by steam cleaning with potable water prior to each boring, and before leaving the Site. Drilling equipment (i.e. drill rods and casing) will be decontaminated on a temporary decontamination pad constructed in the parking area of the Site. Decontamination fluids will be released on-site to the ground surface in the area of decontamination. In the event that decontamination fluids exhibit visual or olfactory evidence of contamination, fluids will be containerized for testing and off-site disposal.

Investigation Derived Wastes. The method of disposing investigation derived wastes (IDW) generated during this RI will be based upon whether the wastes are considered hazardous or non

hazardous. The approach to field screening and handling of the IDW are described in the following paragraphs.

United States Department of Transportation (USDOT) approved 55 gallon containers filled during the field investigation will be staged on site in an area designated by the NYSDEC, and approved by the Site owner. Transport and disposal of these containers will be arranged by MACTEC on behalf of NYSDEC. Containers will be labeled as described in the Site specific QAPjP (see Appendix A).

Disposable Sampling Equipment. Used disposable equipment will be double bagged in polyethylene trash bags and sealed with twist ties. MACTEC personnel will measure the headspace in the closed bags with a photoionization detector (PID) at least one hour after sealing the bags. If the headspace is below 5 ppm, the disposable equipment will be disposed of as non-hazardous municipal solid waste. If the headspace readings do not drop below 5 ppm, the disposable equipment will be placed in USDOT approved 55-gallon containers for off-site disposal.

Personal Protective Equipment. Used protective clothing will be double bagged in polyethylene trash bags and sealed with twist ties. The bags will be disposed of as municipal solid waste.

Well Purge Water. Purge water generated during sampling of monitoring wells or during groundwater profiling activities will be released on-site to the ground surface in the area of the well, so as to allow the liquids to infiltrate into the soil and not run off-site. In the event that purge water exhibits visual or olfactory evidence of contamination, fluids will be containerized in USDOT approved 55-gallon containers for off-site disposal.

Drill Cuttings. Direct push and drilling soil cuttings will be screened for VOCs with a PID. Soils with visual evidence of contamination or with sustained PID readings greater than 5 ppm will be containerized for off-site disposal in USDOT approved 55-gallon drums. Soils with sustained PID readings of less than or equal to 5 ppm will be considered non-contaminated and will be used as backfill for the borings from which they were extracted. Remaining uncontaminated soils will be spread evenly on the ground surface in unpaved areas of the Site. If no on-site space is available, remaining soil will be containerized in USDOT 55-gallon drums for off-Site disposal. Direct push technology will be used for all work tasks; therefore no drill cuttings are anticipated as part of this

work.

3.2.2 Source Area Investigation

Subsurface soil samples will be collected from the vicinity of three former dry wells located in the northwestern part of the Site. The objective of the sampling is to provide additional information to support the remedial design. In particular the sampling is designed to:

1. confirm the target vertical and areal extent of excavation at dry well DW-4, and
2. evaluate the soil immediately outside and adjacent to dry wells DW-1 and DW-2.

A total of eleven (11) soil borings are planned (Figure 3.1). Five borings will be completed in an array adjacent to DW-4 and three borings each will be completed around DW-1 and around DW-2. It is assumed that eleven borings will be completed in 3 to 4 days.

The borings will be advanced using direct-push (e.g., Geoprobe®) methods. Geoprobe® drilling methods are described in Section 4.6 of the QAPP. Subsurface soil samples will be collected continuously using a three or four-foot long 1-to-2 inch diameter core sampler with an acrylic liner.

PID headspace readings will be used to screen soil samples for the presence of VOCs as each soil sample is removed from the sample collection tube. Samples will be described using the Unified Soil Classification System. The sample description and classification, VOC headspace reading, and boring observations will be recorded on the Data Record as discussed in Subsection 4.6 of the QAPP.

Historical investigations indicate green staining (nickel) of soils at these locations. Based on physical evidence such as color and lithology, up to 33 unsaturated subsurface soil samples (three from each boring), will be submitted to the off-site laboratory for analyses of total nickel and SPLP nickel using USEPA 6010 methods as described in the NYSDEC ASP of June 2000. Actual sample numbers and depths may be modified upon further inspection of the construction of DW-1 and DW-2. Furthermore, MACTEC anticipates collecting two representative samples from DW-4 for off-site grain size analysis to support future sheeting/shoring design.

3.2.3 Groundwater Profiling

Groundwater Sampling.

Groundwater grab samples will be collected from multiple depths at six boring locations to evaluate groundwater quality south of the property. The objective of the profiling is to provide data to design and position long-term monitoring well(s) that will be installed under Task 5. The borings are planned to be conducted in a 250-foot linear transect along Border Street, within the public right of way (see Figure 3.2). Border Street is a residential street trending east-west approximately 750 feet to the south (downgradient) of the Site. It is assumed that this work could be completed in 5 days.

Direct-push drilling methods will be used to advance drill rods equipped with a groundwater sampler such as a HydroPunch. Depth to water is approximately 60 feet below ground surface. Grab samples will be collected at four depths from each boring (70, 80, 90, and 100 feet) using a Hydropunch or approved alternate method. Groundwater samples will be collected using a small diameter stainless steel wire wound screen that will be exposed to the aquifer, after being pushed to the desired depth interval. A check valve will be used for the collection of discrete groundwater samples. One tubing volume of water will be purged and one set of parameters including temperature, conductivity, pH, and turbidity will be collected before sampling. VOC samples will be collected at a low purge rate (approximately 100 milliliters per minute) to minimize potential volatilization. The actual number of samples per boring and sample collection depths may vary according to actual field conditions. After sampling, each open borehole will be filled with bentonite or bentonite-cement grout as directed by MACTEC and the hole will be sealed at the surface using asphalt patch, as appropriate.

Groundwater Analysis. Groundwater samples will be shipped to an off-site laboratory for analyses for Nickel and Zinc using USEPA 6010 methods as described in the NYSDEC ASP of June 2000. The shallowest sample from each location will also be analyzed for target compound list (TCL) VOCs using USEPA OLM04.2 methods as described in the NYSDEC ASP of June 2000. Off-site laboratory analysis will include Category B deliverables.

3.2.4 Soil Vapor Investigation

This WA includes the need for an investigation to verify concentrations of VOCs in soil gas immediately beneath the building slab to determine if mitigation or remediation is required, and sampling to determine if any shallow VOC-contaminated soil vapor is migrating toward the residential neighborhood south of the Site. In October 2005, Roux Associates, Inc., under contract to the property (270 and 280 Duffy Avenue) owner, conducted a sub-slab vapor and indoor air sampling program. The following subsection presents a proposed scope of work for sub-slab vapor and indoor air sampling patterned after the work conducted by Roux Associates, Inc. (Roux, 2005); however, it is assumed that the NYSDEC and NYSDOH will find the previously conducted work sufficient, precluding the need to conduct the work under this WA. As such, the Cost Tables presented in Appendix D for this WA do not include sub-slab and indoor air sampling. The downgradient soil vapor sampling work and associated costs are include in this Work Plan.

Sub-slab vapor and Indoor Air Sampling. The scope of the sub-slab vapor and indoor air sampling presented in the following paragraphs is based upon the sampling program conducted by Roux Associates, Inc. in October 2005 (Roux, 2005); sampling and analysis procedures are based upon the QAPjP.

Sub-slab vapor sampling and indoor air sampling will be conducted at the Site to investigate the potential for vapor migration of contaminants from the groundwater and soil beneath the Site into the occupied indoor spaces. Up to 16 sub-slab vapor samples and 16 indoor air samples will be collected within the facility buildings (270 and 280 Duffy Avenue), and five ambient air samples will be collected from outside of the building. Prior to the selection of final sample locations, the layout of the heating, venting, and air conditioning system and the circulation of air inside of the buildings will be determined to the extent practicable. Final locations will be reviewed and approved by the NYSDEC and the NYSDOH.

Sample collection procedures are further described in the QAPjP. Vapor samples will be collected from below the building concrete slab. A one-inch diameter hole will be drilled with a hammer drill two inches into the building floor. The hole will be continued with a 3/8-inch drill bit, until the building slab is penetrated. The hole will be continued approximately 3-inches below the slab. A ¼-

inch piece of Teflon tubing will be inserted through a 1" diameter rubber stopper, and placed into the hole, so that the bottom of the tubing is below the slab floor and the stopper rests inside the one-inch hole, forming a seal. The stopper will then be covered with bees wax to provide an impenetrable seal for the migration of indoor air into the sub-slab. One 60 cubic centimeter volume of air will be purged from the tubing with a polyethylene syringe. The syringe will be capped and the air released outside the building as to not interfere with the indoor air sample collection. A second syringe will be used to pull a 60 cubic centimeters volume of air for on-site VOC analyses with the Photovac® GC. Upon completion of the collection of the on-site sample, a 6-liter SUMMA®-type canister with an 8-hour flow valve will be connected to the tubing as described in the QAPjP.

Indoor air samples will be collected in 6-liter SUMMA®-type canisters from the vicinity of the sub-slab vapor sample collection points. Samples will be collected from approximately three to five feet above the floor level. Indoor air samples will be set up with 8-hour flow valves.

Samples will be collected in groups of six, collected over the course of four days. Once the six sub-slab vapor sample canisters, six indoor air sample canisters, and one (two during one of the days of sampling) exterior ambient air canister have been set up with 8-hr flow valves, the valves from all containers will be opened. The time of sample collection, canister vacuum (in inches Hg), weather conditions, and barometric pressure will be recorded in the field log book.

Approximately 8 hours after sample collection, the flow valves will be shut off. The time, vacuum remaining in the canister, and barometric pressure will be noted in the field log book. The samples will be shipped to Columbia Analytical Services for analyses of VOCs by USEPA Method TO-15 (43 Compound List - 0.25 micrograms per cubic meter Method Reporting Limit).

Upon completion of the sampling, the tubing and stopper will be removed from the building floor and the holes will be sealed with a solid 1-inch stopper and covered with a fast drying hydraulic concrete (i.e. Quickcrete). On-site analyses of vapor samples will be used to add data points to the grid of soil gas samples collected with the Geoprobe® from around the Site building.

Downgradient Soil Vapor Sampling. A soil vapor survey, consisting of 6 temporary locations, will be conducted to determine downgradient on-site shallow soil vapor concentrations (see Figure 3.2). Soil gas samples will be collected using a Geoprobe® sampling device. It is assumed that this work could

be completed in 2 days.

The Geoprobe® rods will be pushed to between 6 and 8 feet bgs (expected to be below the rain infiltration line). Upon reaching the target depth, the Geoprobe® rods are pulled back slightly, exposing the bottom of the open rods to the soil. Soil gas samples will be collected from temporary Geoprobe® points, using either the Geoprobe PRT System, or approved alternative. The outside of the rods will be sealed at the ground surface with pre-hydrated bentonite. Approximately 2 liters of soil gas, plus the volume of the tubing, will be purged using a personal air monitoring pump before collecting samples. During the soil gas purge, vapors will be screened with a PID. In addition, helium leak tests will be conducted on a subset of samples to ensure samples are representative of sub-surface conditions and not outdoor ambient air. Helium tests will be conducted by encapsulating the sample point (such as with a bucket sealed to the ground surface with bentonite. The encapsulated area will be filled with helium, but care will be taken not to pressurize the enclosure. The soil gas sample port will be tested for helium breakthrough with a portable monitoring device both before and after collection of the soil gas sample. If > 20 percent of the tracer gas are detected in the screening sample, the sample point seal will be enhanced and the procedure repeated. The soil gas samples will be collected with one-liter SUMMA®-type canisters with flow valves (set to approximately 20 minutes per sample). Flow into the canisters will be less than 0.1 liters per minute, as requested by the NYSDOH. Samples will be sent to Columbia Analytical Services for analyses of VOCs by USEPA Method TO-15 (43 Compound List - 1.0 micrograms per cubic meter Method Reporting Limit).

3.2.5 Pre-design Investigation Report

A report will be prepared following completion of the pre-design investigation and review of the analytical data. The report will present the analytical and discuss the pre-design investigation results. Furthermore, the report will discuss the results of the pre-design investigation in the context of any changes in understanding of the scope compared to the design and cost estimate of the FS, and make any recommended changes to the conceptual design as proposed in the ROD.

3.3 Task 3: Plans and Specifications

Using the information derived from the RI/FS report, the ROD, and the pre-design studies, complete plans and specifications (including design and construction drawings) for the purpose of competitively bidding the construction of the selected alternative in conformance with standard building and construction practices, New York State laws, rules, regulations and guidelines will be prepared. New York State Standards, Criteria and Guidelines (SCGs) identified in the RI/FS will be analyzed and incorporated into the remedial design. The biddable plans and specifications will incorporate the latest edition of the Division of Environmental Remediation's Standard Construction Contract Boilerplate.

MACTEC proposes to prepare the following technical design specifications for this project:

01010 Summary of Work
01330 Submittal Procedures
01350 Safety, Health, and Emergency Response
01400 Environment Protection
01410 Regulatory Requirements
01450 Contractor Quality Control
01460 Field Engineering and Survey Control
01500 Construction Facilities and Temporary Controls
01560 Dust Control
01611 Material Handling and Management
01780 Project Record Documents
02081 Off-Site Transportation
02082 Off-Site Disposal
02140 Dewatering
02152 Shoring (Sheeting and Bracing)
02210 Subsurface Information
02216 Existing Utilities and Underground Structures
02221 Site Demolition
02315 Earthwork
02465 Sheet Piling
02602 Precast Concrete Structures
02610 Storm Drain and Culvert Pipe
02650 Field Testing of Non-Pressure Pipe
02741 Road Construction
03300 Cast-In-Place Concrete

Note: This list is proposed and may be reduced or increased based upon the pre-design investigation results and/or the remedial design approach.

MACTEC proposes to prepare the following design drawings for this project:

- Cover sheet providing Site Location, Abbreviations and Acronyms, and Legend
- Existing Conditions sheet based upon pre-design site survey
- Excavation Plan sheet providing proposed limits of excavation and the limits of work
- Proposed Conditions sheet presenting final grading, proposed storm sewer configuration, extent of proposed asphalt paving, and an inset showing proposed groundwater monitoring well locations.
- Details sheet providing details for pavement buildup, typical pipe trench, groundwater monitoring wells, and catch basins.

The Preliminary, Intermediate, and Final Design deliverables are described in the following subsections.

3.3.1 Subtask 3.1: Preliminary Design

MACTEC will submit to the NYSDEC Authorized Representative at least three copies of preliminary construction plans and specifications when the design is 30 percent complete. The Preliminary Design will include the following:

- Preliminary construction plans and specifications.
- Supporting data, documentation, and design calculations.
- Property survey including parcels, rights of way, and easements existing or necessary to implement the remedy will be presented.
- An updated tax map identifying all potentially impacted property owners and/or those parties with property rights.
- A preliminary listing of all temporary and permanent easements, rights of way and permits necessary in order to implement the proposed RD and associated operation and maintenance.
- A listing of all non-property permits that would be needed and regulations with which the design must be in substantive compliance. The preliminary design will also address these permits and demonstrate substantive compliance when necessary. The design will also include a completed permit application with supporting data/information if applicable.

- A schedule for meeting the critical access and permit requirements and an agreement between MACTEC and NYSDEC as to who will be responsible for obtaining which permits, completing applications and obtaining access agreements.

MACTEC assumes the following with respect to costs established for Subtask 3.3.1:

- Tax map and property owner information can be obtained from the municipality/county by telephone/fax/email communication
- All easements, rights of way permits, and non-property permits can be identified and obtained as necessary by telephone/fax/email communication

3.3.2 Subtask 3.2: Intermediate Design

An intermediate design review will be required when the design is 60 percent complete. Documentation similar to the final design stage will be required (see Subtask 3.3 below).

3.3.3 Subtask 3.3: Final Design

Upon completion of the design documents, MACTEC will submit to the Department for review at least five (5) copies of the final plans, specifications, supporting data/documentation (including information to be subsequently used in the preparation of a Site Management Plan), and design calculations in the format of a design report.

MACTEC will have thoroughly coordinated and cross-checked the bid form, specifications and drawings to ensure consistency within the Contract documents. The design will be signed and sealed by an Engineer licensed to work in the State of New York. The design will include a list of applicable permits and properties which will require access agreements.

After approval of the final design by the NYSDEC, MACTEC will submit one (1) copy of the final plans and specifications for NYSDEC review. Upon the return of this copy to MACTEC, MACTEC will submit seventy-five (75) signed and stamped copies of the plans and specifications for bidding.

3.3.4 Subtask 3.4: Project Cost Estimate

Coincident with preparation of the Final Design MACTEC will prepare an Engineer's project pre-bid estimate. The pre-bid estimate will be supported by quantity take off sheets and the basis for the development of unit and lump sum prices used in the estimate.

3.4 Task 4: Pre-Award Services

MACTEC will provide support services to the NYSDEC for the purpose of competitively bidding the site remediation contracts.

3.4.1 Subtask 4.1: Prebid Conference and Public Meetings

MACTEC will assist the NYSDEC in advertising the project in a manner consistent with New York State Procurement laws and regulations. MACTEC will conduct a pre-bid conference with prospective bidders. At the pre-bid conference MACTEC will emphasize to the prospective bidders important items of the project, tour the project site, answer any questions and prepare minutes of the meeting. If a public meeting is scheduled, MACTEC will answer questions raised concerning the design of the project, construction techniques, project scheduling, and prepare meeting minutes. MACTEC may be required to make a presentation at the NYSDEC's request. No verbal interpretation of the contract documents during the bidding shall be made by MACTEC.

MACTEC assumes the following with respect to costs established for Subtask 4.1:

- One person from MACTEC will attend the pre-bid conference
- One person from MACTEC will attend the public meeting

3.4.2 Subtask 4.2: Addenda

MACTEC will prepare necessary addenda to the plans and specifications for the timely transmittal to prospective bidders. MACTEC will promptly respond to questions from prospective bidders in writing. MACTEC will consult with NYSDEC as appropriate.

MACTEC assumes the following with respect to costs established for Subtask 4.2:

- No more than ten bidders will furnish questions during the bidding

3.4.3 Subtask 4.3: Bid Review

MACTEC will conduct a review of bids received for the purpose of identifying the lowest responsive, responsible bidder, identifying bid irregularities and preparing a tabulation of the bids.

- MACTEC will notify the Department's Authorized Representative of any informality in the bids and of any unbalanced or non-responsive bids.
- MACTEC will submit to the Department a recommendation for award of the remedial contract, the basis for the recommendation, a discussion of all significant issues concerning the bids and an evaluation of bid protests if necessary. The recommendation will include the basis for the rejection of non responsive and unbalanced bids.
- MACTEC will review plans required by the contract documents and submitted by the contractor with the bid, including, but not limited to, the health and safety plan.
- MACTEC will issue the following within the time frames noted or as required by the bid documents, unless an extension is granted by the NYSDEC.
    1. Written clarifications and interpretation of Contract documents - 3 days
    2. Addenda and pre-bid meeting minutes - 3 days.
    3. Review of bid documents including comparison to the Engineer's estimate - 3 days.
    4. Review the Construction Contractor's plan submitted during bidding (HASP, Work Plan, QA/QC Plan, Contingency Plan) - 10 days.
    5. Review bid breakdowns - 5 days.
    6. Recommendation of successful bidder - 3 days.

MACTEC assumes the following with respect to costs established for Subtask 4.3:

- No more than ten bids will be submitted

3.5 Task 5: Remedial Action Oversight

MACTEC will oversee and document construction related activities for the Department during the Remedial Action according to the Contract as specified in Article 10, paragraph (1) and Schedule I, Work Element IV.

3.5.1 Subtask 5.1: Pre-construction Meeting

MACTEC will hold a pre-construction meeting with the Contractor and complete a thorough review of the Scope of Work and Health and Safety Plan submitted with the bid and project schedule. Additionally, lines of communication and reporting will be established concerning technical and contractual issues. MACTEC will prepare and distribute meeting minutes.

MACTEC assumes the following with respect to costs established for Subtask 5.1:

- One person from MACTEC will attend the pre-construction meeting

3.5.2 Subtask 5.2: Review of Submittals

Prior to construction commencement, MACTEC will obtain written submittals and shop drawings, as required by the Contract. MACTEC will evaluate these according to project objectives and requirements and will be authorized to accept, reject, or require modifications. Proposals made by the Contractor which constitute a significant change in the work will be discussed with the NYSDEC Project Manager. MACTEC will obtain and review shop drawings, perimeter or dust monitoring results, and as-built drawings for the duration of the project and will make recommendations for acceptance/rejection of these to the NYSDEC.

MACTEC will continually monitor the Contractors progress, review the Contractors progress schedule bi-weekly, notifying the Contractor of its status, and require the Contractor propose actions to get back on schedule, if needed. MACTEC will sign manifests and bills of lading for disposal of hazardous and non-hazardous waste on behalf of the NYSDEC. MACTEC will review and make recommendations for approval or modification of all requests for payment submitted by the Contractor. MACTEC will sign off on the Contractor's payment requests and forward them to the NYSDEC on a monthly basis.

3.5.3 Subtask 5.3: Inspections

MACTEC will ensure that the Contractor follows all requirements of the contract by providing an experienced on-site inspector during construction activities. The inspector will be of sufficient experience and level to oversee the work but should not be of a level more suited to office management. MACTEC will notify the Contractor and the NYSDEC in the event that the Contractor fails to perform the work as specified in the contract and will recommend to the NYSDEC the acceptance, disapproval, or rejection of the Contractor's work. MACTEC also will issue instructions, field orders, interpretations and clarifications of contract language to the Contractor. In the event that a change order is required, MACTEC will negotiate, develop, and submit the change order and recommendations documented with an independently developed, detailed cost estimate and other pertinent information, as needed, to the NYSDEC. MACTEC will document, evaluate, and recommend a course of action for disputes and claims with the Contractor.

MACTEC will maintain complete and detailed records associated with all construction and related activities during the project at the site office. These records and reports include, but are not limited to, information on the following:

- maintenance of a daily log book;
- daily work completed, on-site visitors, and important conversations (ex. notice of claim); Contractor's daily use of personnel, material, and equipment;
- records documenting contractor's deviation from work, as specified in the contract, and
- instructions issued regarding deviations;
- unusual circumstances such as weather conditions, labor disputes, environmental health and safety hazards encountered, etc.;
- Contractor's site visitor's log, security and health logs, drum log, air monitoring log,
- sampling log, and the Standby Contractor's assurance that these are accurate and up to date (ex. sign-off sheets or daily reconciliation sheets);
- progress record of Contractor in reference to the work schedule submitted by the contractor (ex. approvals or rejections);
- security and health and safety logs;

- general files including correspondence, and other documentation related to the project; documentation of job meetings;
- records of Contractor submittals, including shop drawings, change orders, soil tests,
- material tests, and actions taken;
- construction photos;
- weekly and monthly narrative status reports which will be submitted to the NYSDEC project manager;
- logs of telephone conversations; and
- changed field conditions and claims by the contractor of such conditions.

MACTEC assumes the following with respect to costs established for Subtask 5.3:

- One MACTEC full-time field inspector for a maximum of four 40-hour work weeks

3.5.4 Subtask 5.4: Final Inspections and Payment Reviews and Remediation Report

MACTEC will regularly inspect work to verify compliance with contract requirements and to evaluate the degree of completion. MACTEC will also:

- conduct an inspection upon substantial completion of the work; and
- conduct a final inspection upon project completion.

If applicable, MACTEC will prepare a detailed list of unfinished work items and an estimate of the value of the work that must still be completed. MACTEC will participate in the final inspection to determine that all work is completed and meets the requirements of the construction contract. Once this inspection has been performed, MACTEC will deliver to the NYSDEC a written notice regarding the disposition of the project. If MACTEC determines that the project has been satisfactorily completed as specified in the contract plans and specifications, certification to this fact will be made to the NYSDEC by a licensed professional engineer employed by MACTEC. The licensed professional engineer will sign and stamp the certification. A Certification Report, with adequate appendixes, will be provided to the NYSDEC.

MACTEC will document construction results in a report that summarizes the WA, provides "as-built" drawings, and includes the oversight records and the confirmatory sampling results in

appendices. The report will describe variations from the Contract Documents (including change orders), surveys, and a summary of wastes and their disposition.

MACTEC assumes the following with respect to costs established for Subtask 5.4:

- The substantial completion inspection and the final completion inspection will occur during the four-week inspection period described in Subtask 5.3, and will not be separate inspections.

3.6 Task 6: Health & Safety Plan Review

This task involves preparation of site and community health plans for use during field activities, monitoring of site operations for adherence to the plan, review of health and safety plans submitted by others and monitoring their implementation.

Cindy Sundquist, CIH, of MACTEC, will be responsible for the review of health and safety plans prepared by other contractors or consultants and the development and/or review of "off-site" community and the environment health and safety plans. Cindy Sundquist is both a Certified Safety Professional and Certified Industrial Hygienist, and has over three decades in the evaluation of physical, health, and environmental hazards in the industrial, construction, municipal, and environmental sectors, both nationally and internationally.

3.7 Task 7: Citizen Participation

MACTEC will help the NYSDEC in citizen participation activities such as public meetings as requested by the NYSDEC. MACTEC will prepare summary documents, maps, sketches, and other handouts for these meetings. MACTEC will plan to attend at least one public meeting as part of these activities. MACTEC will answer questions raised at the public meeting that concern the design of the project, construction techniques, and the project scheduling. MACTEC will record questions and comments raised at the public meeting and submit the list of questions and comments to the Department within two working days. This task will be implemented upon written authorization from the Department.

MACTEC assumes the following with respect to costs established for Task 7:

- One person from MACTEC will attend one public meeting

3.8 Task 8: Quality Assurance/Quality Control Activities

MACTEC will develop the required Quality Assurance Plans. MACTEC's Quality Assurance Officer (QAO) will oversee independent third party data validation and/or data usability assessments according to the Contract as specified in Schedule 1, Work Element IV.

4.0 PROJECT ORGANIZATION, SCHEDULE, AND BUDGET

Project organization, including principal functions and responsibilities, is described below. The proposed project schedule is provided in Appendix C.

Program Manager – Mr. William Weber, P.E., has overall responsibility for organizing and setting program operating procedures with the NYSDEC, and confirming that work assignments are implemented in accordance with contract requirements. Mr. Weber will provide senior review and technical support.

Project Manager – Mr. Mark Stelmack, P.E., will be the primary contact with Mr. Gerard Burke, the NYSDEC Project Manager. He will be responsible for managing all work tasks, and for budgeting and scheduling efforts.

Technical Review –Mr. Wes Judge will provide technical review on bid document preparation and remedial action oversight guidance.

Technical Review – Mr. Eric Sandin, C.G., will provide technical support on scoping and implementation of groundwater profiling and other hydrogeological issues associated with execution of the work.

Technical Review – Mr. Jeff McCrady will provide technical support on preparation of design drawings and specifications.

Pre-Design Study Lead – Mr. Charles Staples will be responsible for managing execution of the pre-design study and associated task-specific budgeting and scheduling issues. During field activities, Mr. Staples will be the liaison among field staff, subcontractors, and representatives from the NYSDEC, and county or municipal agencies. Mr. Staples will be responsible for preparation of Task 2 deliverables.

Project Engineer – Mr. Ryan Belcher, P.E., will be responsible for preparation of design plans and

specifications in accordance with Task 3 of the WA. Mr. Belcher will be on-site during Task 5 to provide the construction inspection services.

Health and Safety – Cynthia Sundquist, C.I.H., the Health and Safety Supervisor, is responsible for review and approval of health and safety plans prepared by other contractors or consultants, the development and/or review of "off-site" community and the environment health and safety plans, and throughout the duration of field activities, has authority to stop work should unacceptable health and safety risks occur.

Contract Specialist – Ms. Theresa Casavant will prepare the monthly cost control reports.

Sr. Project Assistant – Ms. Erva Gardner will participate in budget tracking, management of files, data management, and report production.

Analytical Laboratory – Columbia Analytical Services, Inc. will provide air sample analytical chemistry services for this project. Katahdin Analytical Services will provide soil and water analytical chemistry services for this project.

Survey and Mapping – YEC, Inc./YEC Engineering, P.C. will provide survey and map generation services for this project.

The project schedule is provided in Appendix C. The cost tables are provided in Appendix D. The M/WBE utilization plan is provided in Appendix E.

5.0 REFERENCES

Environmental Resources Management (ERM), 2003. Feasibility Study Report - Alsy Manufacturing Site, Hicksville, NY, NYSDEC Site No. 130027. December 2003.

Environmental Resources Management (ERM), 1998. Feasibility Study Report - Alsy Manufacturing Site, Hicksville, NY, NYSDEC Site No. 130027. August 31, 1998.

Lawler, Matusky & Skelly Engineers, LLP (LMS), 1997. Remedial Investigation – Alsy Manufacturing, Oyster Bay, Nassau County, Site No. 130027. December 1997

New York State Department of Environmental Protection (NYSDEC), 2005. Record of Decision - Alsy Manufacturing, Inc. Site, Hicksville, Nassau County, New York, Site Number 1-30-027. March 2005.

Roux Associates, Inc. (Roux), 2005. Vapor Intrusion Evaluation Sampling Results, prepared for 270-280 Duffy LLC, November 28, 2005.

ABB Environmental Services, 1994. *Program Quality Assurance Program Plan*. Prepared for the New York State Department of Environmental Conservation, Albany, New York. June 1995.

ABB Environmental Services, 1994. *Program Health and Safety Plan, Part II, Revision 1*. Prepared for New York State Department of Environmental Conservation, Albany, New York. June 1994.

TABLES

FIGURES

APPENDIX A

QUALITY ASSURANCE PROJECT PLAN

APPENDIX B

HEALTH AND SAFETY PLAN

APPENDIX C

SCHEDULE

APPENDIX D

COST TABLES

APPENDIX E

M/WBE AND EEO UTILIZATION PLAN

Table 3.1: Proposed Sample Identification and Analyses

							Water Samples		Soil Samples			Air Samples	
Site Type	**Media**	**Site ID**	**Sample ID**	**MS/MSD**	**DUP**	**RINS**	**VOCs**	**Nickel and Zinc**	**Nickel**	**SPLP Nickel**	**Grain Size (*)**	**VOCs (TO-15) 6-Liter**	**VOCs (TO-15) 1-Liter**
Groundwater Profiling													
Geoprobe Groundwater Sampling													
Water	Groundwater	GW-1	AMGW00107001XX	1	1		1	1					
Water	Groundwater	GW-1	AMGW00108001XX					1					
Water	Groundwater	GW-1	AMGW00109001XX					1					
Water	Groundwater	GW-1	AMGW00110001XX					1					
Water	Groundwater	GW-2	AMGW00207001XX				1	1					
Water	Groundwater	GW-2	AMGW00208001XX					1					
Water	Groundwater	GW-2	AMGW00209001XX					1					
Water	Groundwater	GW-2	AMGW00210001XX					1					
Water	Groundwater	GW-3	AMGW00307001XX	1	1		1	1					
Water	Groundwater	GW-3	AMGW00308001XX					1					
Water	Groundwater	GW-3	AMGW00309001XX					1					
Water	Groundwater	GW-3	AMGW00310001XX					1					
Water	Groundwater	GW-4	AMGW00407001XX				1	1					
Water	Groundwater	GW-4	AMGW00408001XX					1					
Water	Groundwater	GW-4	AMGW00409001XX					1					
Water	Groundwater	GW-4	AMGW00410001XX					1					
Water	Groundwater	GW-5	AMGW00507001XX	1	1		1	1					
Water	Groundwater	GW-5	AMGW00508001XX					1					
Water	Groundwater	GW-5	AMGW00509001XX					1					
Water	Groundwater	GW-5	AMGW00510001XX					1					
Water	Groundwater	GW-6	AMGW00607001XX	1	1		1	1					
Water	Groundwater	GW-6	AMGW00608001XX					1					
Water	Groundwater	GW-6	AMGW00609001XX					1					
Water	Groundwater	GW-6	AMGW00610001XX					1					
Indoor Air and Sub-Slab Sampling (see Note 1)													
Soil Gas	Vapor	SV-1	AMSV00100101XX		1							1	
Soil Gas	Vapor	SV-2	AMSV00200101XX									1	
Soil Gas	Vapor	SV-3	AMSV00300101XX									1	
Soil Gas	Vapor	SV-4	AMSV00400101XX									1	

Table 3.1: Proposed Sample Identification and Analyses

							Water Samples		Soil Samples			Air Samples	
Site Type	**Media**	**Site ID**	**Sample ID**	**MS/MSD**	**DUP**	**RINS**	**VOCs**	**Nickel and Zinc**	**Nickel**	**SPLP Nickel**	**Grain Size (*)**	**VOCs (TO-15) 6-Liter**	**VOCs (TO-15) 1-Liter**
Soil Gas	Vapor	SV-5	AMSV00500101XX									1	
Soil Gas	Vapor	SV-6	AMSV00600101XX									1	
Soil Gas	Vapor	SV-7	AMSV00700101XX									1	
Soil Gas	Vapor	SV-8	AMSV00800101XX									1	
Soil Gas	Vapor	SV-9	AMSV00900101XX									1	
Soil Gas	Vapor	SV-10	AMSV01000101XX									1	
Soil Gas	Vapor	SV-11	AMSV01100101XX									1	
Soil Gas	Vapor	SV-12	AMSV01200101XX									1	
Soil Gas	Vapor	SV-13	AMSV01300101XX									1	
Soil Gas	Vapor	SV-14	AMSV01400101XX									1	
Soil Gas	Vapor	SV-15	AMSV01500101XX									1	
Soil Gas	Vapor	SV-16	AMSV01600101XX									1	
Air	Indoor Air	IA-1	AMIA001XXX01XX		1							1	
Air	Indoor Air	IA-2	AMIA002XXX01XX									1	
Air	Indoor Air	IA-3	AMIA003XXX01XX									1	
Air	Indoor Air	IA-4	AMIA004XXX01XX									1	
Air	Indoor Air	IA-5	AMIA005XXX01XX									1	
Air	Indoor Air	IA-6	AMIA006XXX01XX									1	
Air	Indoor Air	IA-7	AMIA007XXX01XX									1	
Air	Indoor Air	IA-8	AMIA008XXX01XX									1	
Air	Indoor Air	IA-9	AMIA009XXX01XX									1	
Air	Indoor Air	IA-10	AMIA010XXX01XX									1	
Air	Indoor Air	IA-11	AMIA011XXX01XX									1	
Air	Indoor Air	IA-12	AMIA012XXX01XX									1	
Air	Indoor Air	IA-13	AMIA013XXX01XX		1							1	
Air	Indoor Air	IA-14	AMIA014XXX01XX									1	
Air	Indoor Air	IA-15	AMIA015XXX01XX									1	
Air	Indoor Air	IA-16	AMIA016XXX01XX									1	
Air	Ambient Air	AA-1	AMAA001XXX01XX									1	
Air	Ambient Air	AA-2	AMAA002XXX01XX									1	
Air	Ambient Air	AA-3	AMAA003XXX01XX									1	
Air	Ambient Air	AA-4	AMAA004XXX01XX									1	

Table 3.1: Proposed Sample Identification and Analyses

							Water Samples		Soil Samples			Air Samples	
Site Type	**Media**	**Site ID**	**Sample ID**	**MS/MSD**	**DUP**	**RINS**	**VOCs**	**Nickel and Zinc**	**Nickel**	**SPLP Nickel**	**Grain Size (*)**	**VOCs (TO-15) 6-Liter**	**VOCs (TO-15) 1-Liter**
Air	Ambient Air	AA-5	AMAA005XXX01XX									1	
On-Site Downgradient Geoprobe Soil Gas Sampling													
Soil Gas	Vapor	GV-01	HVGV00100601XX										1
Soil Gas	Vapor	GV-02	HVGV00200601XX										1
Soil Gas	Vapor	GV-03	HVGV00300601XX		1								1
Soil Gas	Vapor	GV-04	HVGV00400601XX										1
Soil Gas	Vapor	GV-05	HVGV00500601XX										1
Soil Gas	Vapor	GV-06	HVGV00600601XX										1
Geoprobe Soil													
Soil	Soil	GS-1	HVGS001___01XX	1	1	1			1	1	1		
Soil	Soil	GS-1	HVGS001___01XX						1	1			
Soil	Soil	GS-1	HVGS001___01XX						1	1			
Soil	Soil	GS-2	HVGS002___01XX						1	1			
Soil	Soil	GS-2	HVGS002___01XX						1	1			
Soil	Soil	GS-2	HVGS002___01XX						1	1			
Soil	Soil	GS-3	HVGS003___01XX	1	1				1	1			
Soil	Soil	GS-3	HVGS003___01XX						1	1			
Soil	Soil	GS-3	HVGS003___01XX						1	1			
Soil	Soil	GS-4	HVGS004___01XX						1	1			
Soil	Soil	GS-4	HVGS004___01XX						1	1			
Soil	Soil	GS-4	HVGS004___01XX						1	1			
Soil	Soil	GS-5	HVGS005___01XX	1	1				1	1	1		
Soil	Soil	GS-5	HVGS005___01XX						1	1			
Soil	Soil	GS-5	HVGS005___01XX						1	1			
Soil	Soil	GS-6	HVGS006___01XX	1	1				1	1			
Soil	Soil	GS-6	HVGS006___01XX						1	1			
Soil	Soil	GS-6	HVGS006___01XX						1	1			
Soil	Soil	GS-7	HVGS007___01XX	1	1				1	1			
Soil	Soil	GS-7	HVGS007___01XX						1	1			
Soil	Soil	GS-7	HVGS007___01XX						1	1			
Soil	Soil	GS-8	HVGS008___01XX						1	1			
Soil	Soil	GS-8	HVGS008___01XX						1	1			

Table 3.1: Proposed Sample Identification and Analyses

							Water Samples		Soil Samples			Air Samples	
Site Type	**Media**	**Site ID**	**Sample ID**	**MS/MSD**	**DUP**	**RINS**	**VOCs**	**Nickel and Zinc**	**Nickel**	**SPLP Nickel**	**Grain Size (*)**	**VOCs (TO-15) 6-Liter**	**VOCs (TO-15) 1-Liter**
Soil	Soil	GS-8	HVGS008___01XX						1	1			
Soil	Soil	GS-9	HVGS009___01XX	1	1				1	1			
Soil	Soil	GS-9	HVGS009___01XX						1	1			
Soil	Soil	GS-9	HVGS009___01XX						1	1			
Soil	Soil	GS-10	HVGS010___01XX						1	1			
Soil	Soil	GS-10	HVGS010___01XX						1	1			
Soil	Soil	GS-10	HVGS010___01XX						1	1			
Soil	Soil	GS-11	HVGS011___01XX	1	1				1	1			
Soil	Soil	GS-11	HVGS011___01XX						1	1			
Soil	Soil	GS-11	HVGS011___01XX						1	1			
TOTAL SAMPLES							6	24	33	33	2	37	6

Notes:
1. Indoor Air and Sub-Slab Sampling work conducted by Roux Associates in October 2005 (Roux, 2005). Therefore, this work not included in this Remedial Design Work Plan (see Subsection 3.2.4 of the RDWP). Scope presented in this table based upon the October 2005 program.
Sample ID = 14-digit sample identification as outlined in the QAPjP. The 8,9, and 10 digit locations represent the sample depth below ground surface (__ = be determined in field)
MS/MSD = matrix spike and matrix spike duplicate sample collected
DUP = Duplicate sample collected
RINS = rinseate sample collected
VOCs water and soil = Target Compond List Volatile Organic Compounds analyzed by NYSDEC ASP Method 95-1 for soils, and 95-4 for water.
Nickel and Zinc by 6010. Leaching for SPLP Nickel by ASTM 1312
Grain Size by ASTM method D422
Sample totals do not include QA/QC samples.

Table Created By: RTB
Date: 5/9/2006
Table Checked By: MJS
Date: 6/9/2006

NYSDEC
Alsy Manufacturing Site
Hicksville, New York

MACTEC

Proposed Geoprobe Soil Boring Sample Locations

Project 3612-06-2043 Figure 3.1

Prepared/Date: BRP 05/08/06
Checked/Date: RTB 05/09/06

NYSDEC
Alsy Manufacturing Site
Hicksville, New York

MACTEC

Proposed Geoprobe Soil Vapor and Groundwater Sample Locations

Project 3612-06-2043 Figure 3.2

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(a)
Summary of Work Assignment Price

1	DIRECT SALARY COSTS (Schedules 2.10(a) and 2.11 (b))	**$ 42,928**
2	INDIRECT COSTS (Schedule 2.10(g))	**$ 66,882**
3	DIRECT NON-SALARY COSTS (Schedules 2.10(d)(e)(f) and 2.11 (c) and (d))	**$ 19,296**

SUBCONTRACT COSTS
COST-PLUS-FIXED-FEE SUBCONTRACTS
(Schedule 2.11(e))

Name of Subcontractor	Services to be Performed	Subcontract Price
YEC	Survey and CAD	$ 14,999
		$ -
		$ -

4	TOTAL COST-PLUS-FIXED-FEE SUBCONTRACTS	**$ 14,999**

UNIT PRICE SUBCONTRACTS
(Schedule 2.11(f))

Name of Subcontractor	Services to be Performed	Subcontract Price
Katahdin Analytical	Analytical	$ 8,316
Columbia	Analytical	$ 1,838
ADT	Direct Push Drilling	$ 14,380
		$ -

5	TOTAL UNIT PRICE SUBCONTRACTS	**$ 24,534**
6	SUBCONTRACT MANAGEMENT FEE	**$ 575**
7	TOTAL SUBCONTRACT COSTS (Lines 4 + 5 + 6)	**$ 40,107**
8	FIXED FEE (Schedule 2.10(h))	**$ 7,687**
9	**TOTAL WORK ASSIGNMENT PRICE (Lines 1 + 2 + 3 + 7 + 8)**	**$ 176,900**

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing **Schedule 2.11(b)**
Work Assignment Number: D003826-27 **Direct Labor Hours Budgeted**

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	**$54.44**	**$48.94**	**$45.30**	**$40.39**	**$36.43**	**$33.00**	**$30.63**	**$26.95**	**$22.18**	
2007 Rates	**$54.44**	**$48.94**	**$45.30**	**$40.39**	**$36.43**	**$33.00**	**$30.63**	**$26.95**	**$22.18**	
2008 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2009 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2010 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
Task 1 - Work Plan										
2006 Hours	3	0	0	23	16	0	0	62	13	117
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**3**	**0**	**0**	**23**	**16**	**0**	**0**	**62**	**13**	**117**
2006 Labor Cost	$ 163.32	$ -	$ -	$ 928.97	$ 582.88	$ -	$ -	$ 1,670.90	$ 288.34	$ 3,634.41
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 163.32**	**$ -**	**$ -**	**$ 928.97**	**$ 582.88**	**$ -**	**$ -**	**$ 1,670.90**	**$ 288.34**	**$ 3,634.41**
Task 2 - Pre-Design										
2006 Hours	1	0	0	11	0	0	6	194	28	240
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**11**	**0**	**0**	**6**	**194**	**28**	**240**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 444.29	$ -	$ -	$ 183.78	$ 5,228.30	$ 621.04	$ 6,531.85
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 444.29**	**$ -**	**$ -**	**$ 183.78**	**$ 5,228.30**	**$ 621.04**	**$ 6,531.85**
Task 3 - Plans and Specifications										
2006 Hours	10	0	0	53	0	0	36	292	183	574
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**10**	**0**	**0**	**53**	**0**	**0**	**36**	**292**	**183**	**574**
2006 Labor Cost	$ 544.40	$ -	$ -	$ 2,140.67	$ -	$ -	$ 1,102.68	$ 7,869.40	$ 4,058.94	$ 15,716.09
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 544.40**	**$ -**	**$ -**	**$ 2,140.67**	**$ -**	**$ -**	**$ 1,102.68**	**$ 7,869.40**	**$ 4,058.94**	**$ 15,716.09**
Task 4 - PreAward Services										
2006 Hours	3	0	0	19	0	32	0	37	15	106
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**3**	**0**	**0**	**19**	**0**	**32**	**0**	**37**	**15**	**106**
2006 Labor Cost	$ 163.32	$ -	$ -	$ 767.41	$ -	$ 1,056.00	$ -	$ 997.15	$ 332.70	$ 3,316.58

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing **Schedule 2.11(b)**
Work Assignment Number: D003826-27 **Direct Labor Hours Budgeted**

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2007 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2008 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2009 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 163.32**	**$ -**	**$ -**	**$ 767.41**	**$ -**	**$ 1,056.00**	**$ -**	**$ 997.15**	**$ 332.70**	**$ 3,316.58**
Task 5 - Remedial Oversight										
2006 Hours	4	0	0	24	0	46	0	246	27	347
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**4**	**0**	**0**	**24**	**0**	**46**	**0**	**246**	**27**	**347**
2006 Labor Cost	$ 217.76	$ -	$ -	$ 969.36	$ -	$ 1,518.00	$ -	$ 6,629.70	$ 598.86	$ 9,933.68
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 217.76**	**$ -**	**$ -**	**$ 969.36**	**$ -**	**$ 1,518.00**	**$ -**	**$ 6,629.70**	**$ 598.86**	**$ 9,933.68**
Task 6 - Health and Safety Plan										
2006 Hours	0	0	0	8	0	0	0	27	19	54
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**27**	**19**	**54**
2006 Labor Cost	$ -	$ -	$ -	$ 323.12	$ -	$ -	$ -	$ 727.65	$ 421.42	$ 1,472.19
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ 323.12**	**$ -**	**$ -**	**$ -**	**$ 727.65**	**$ 421.42**	**$ 1,472.19**
Task 7 - Citizen Participation										
2006 Hours	0	0	0	14	0	0	0	22	14	50
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**22**	**14**	**50**
2006 Labor Cost	$ -	$ -	$ -	$ 565.46	$ -	$ -	$ -	$ 592.90	$ 310.52	$ 1,468.88
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ 565.46**	**$ -**	**$ -**	**$ -**	**$ 592.90**	**$ 310.52**	**$ 1,468.88**
Task 8 - QA/QC Activities										
2006 Hours	0	0	0	2	0	16	0	5	5	28
2007 Hours	0	0	0	0	0	0	0	0	0	0

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing **Schedule 2.11(b)**
Work Assignment Number: D003826-27 **Direct Labor Hours Budgeted**

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	**$54.44**	**$48.94**	**$45.30**	**$40.39**	**$36.43**	**$33.00**	**$30.63**	**$26.95**	**$22.18**	
2007 Rates	**$54.44**	**$48.94**	**$45.30**	**$40.39**	**$36.43**	**$33.00**	**$30.63**	**$26.95**	**$22.18**	
2008 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2009 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2010 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**2**	**0**	**16**	**0**	**5**	**5**	**28**
2006 Labor Cost	$ -	$ -	$ -	$ 80.78	$ -	$ 528.00	$ -	$ 134.75	$ 110.90	$ 854.43
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ 80.78**	**$ -**	**$ 528.00**	**$ -**	**$ 134.75**	**$ 110.90**	**$ 854.43**
2006 Total Labor Hours	**21**	**0**	**0**	**154**	**16**	**94**	**42**	**885**	**304**	**1516**
2006 Total Direct Labor Cost ($)	**$ 1,143.24**	**$ -**	**$ -**	**$ 6,220.06**	**$ 582.88**	**$ 3,102.00**	**$ 1,286.46**	**$ 23,850.75**	**$ 6,742.72**	**$ 42,928.11**
2007 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2007 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2008 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2008 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2009 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2009 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2010 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2010 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
TOTAL LABOR HOURS	**21**	**0**	**0**	**154**	**16**	**94**	**42**	**885**	**304**	**1,516**
TOTAL DIRECT LABOR COST	**$ 1,143.24**	**$ -**	**$ -**	**$ 6,220.06**	**$ 582.88**	**$ 3,102.00**	**$ 1,286.46**	**$ 23,850.75**	**$ 6,742.72**	**$ 42,928.11**

Contract/Project administrative hours would include (subject to contract allowability)
but not necessarily be limited to the following activities:

1) Work Plan Development
   - Conflict of Interest
   - Develop budget schedules & supporting documentation
2) Review work assignment (WA) progress
   - Conduct progress reviews
   - Prepare monthly project report
   - Update WA progress schedule
   - Prepare monthly M/WBE Utilization Report
3) Review WA costs
   - Prepare monthly cost control report
   - Cost control reviews

Contract/Project administration hours would not include activities such as:

1) QA/QC reviews
2) Technical oversight by management
3) Develop subcontracts
4) CAP Preparation
   - Oversee and prepare monthly CAP
   - Respond to payment issues/disallowances
   - NSPE list updates
   - Equipment Inventory
5) Manage subcontracts
6) Implement and manage program management and staffing plans
7) Conduct Health and Safety Reviews
8) Word processing and graphic artists
9) Report editing
10) Review of deliverables

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(b-1)
Direct Adminstrative Labor Hours Budgeted

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2007 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2008 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2009 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
Task 1 - Work Plan										
2006 Hours	1	0	0	1	0	0	0	2	2	6
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**2**	**6**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 40.39	$ -	$ -	$ -	$ 53.90	$ 44.36	193
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 40.39**	**$ -**	**$ -**	**$ -**	**$ 53.90**	**$ 44.36**	**$ 193.09**
Task 2 - Pre-Design										
2006 Hours	1	0	0	3	0	0	0	4	4	12
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**4**	**12**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 121.17	$ -	$ -	$ -	$ 107.80	$ 88.72	372
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 121.17**	**$ -**	**$ -**	**$ -**	**$ 107.80**	**$ 88.72**	$ 372.13
Task 3 - Plans and Specifications										
2006 Hours	3	0	0	5	0	0	0	10	10	28
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**3**	**0**	**0**	**5**	**0**	**0**	**0**	**10**	**10**	**28**
2006 Labor Cost	$ 163.32	$ -	$ -	$ 201.95	$ -	$ -	$ -	$ 269.50	$ 221.80	857
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 163.32**	**$ -**	**$ -**	**$ 201.95**	**$ -**	**$ -**	**$ -**	**$ 269.50**	**$ 221.80**	**$ 856.57**
Task 4 - PreAward Services										
2006 Hours	1	0	0	1	0	1	0	1	1	5
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**1**	**5**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 40.39	$ -	$ 33.00	$ -	$ 26.95	$ 22.18	177
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(b-1)
Direct Adminstrative Labor Hours Budgeted

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2007 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2008 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2009 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 40.39**	**$ -**	**$ 33.00**	**$ -**	**$ 26.95**	**$ 22.18**	**$ 176.96**
Task 5 - Remedial Oversight										
2006 Hours	1	0	0	2	0	2	0	4	5	14
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**2**	**0**	**2**	**0**	**4**	**5**	**14**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 80.78	$ -	$ 66.00	$ -	$ 107.80	$ 110.90	420
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 80.78**	**$ -**	**$ 66.00**	**$ -**	**$ 107.80**	**$ 110.90**	**$ 419.92**
Task 6 - Health and Safety Plan										
2006 Hours	0	0	0	0	0	0	0	1	1	2
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
2006 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 26.95	$ 22.18	49
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 26.95**	**$ 22.18**	**$ 49.13**
Task 7 - Citizen Participation										
2006 Hours	0	0	0	0	0	0	0	1	1	2
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
2006 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 26.95	$ 22.18	49
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 26.95**	**$ 22.18**	**$ 49.13**
Task 8 - QA/QC Activities										
2006 Hours	0	0	0	0	0	0	0	0	1	1
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
2006 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 22.18	22
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(b-1)
Direct Adminstrative Labor Hours Budgeted

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2007 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2008 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2009 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 22.18**	**$ 22.18**
2006 Total Labor Hours	**7**	**0**	**0**	**12**	**0**	**3**	**0**	**23**	**25**	**70**
2006 Total Direct Labor Cost ($)	**$ 381.08**	**$ -**	**$ -**	**$ 484.68**	**$ -**	**$ 99.00**	**$ -**	**$ 619.85**	**$ 554.50**	**$ 2,139.11**
2007 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2007 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2008 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2008 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2009 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2009 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2010 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2010 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
TOTAL LABOR HOURS	**7**	**0**	**0**	**12**	**0**	**3**	**0**	**23**	**25**	**70**
TOTAL DIRECT LABOR COST	**$ 381.08**	**$ -**	**$ -**	**$ 484.68**	**$ -**	**$ 99.00**	**$ -**	**$ 619.85**	**$ 554.50**	**$ 2,139.11**

Contract/Project administrative hours would include (subject to contract allowability)
but not necessarily be limited to the following activities:

1) Work Plan Development
   - Conflict of Interest
   - Develop budget schedules & supporting documentation
2) Review work assignment (WA) progress
   - Conduct progress reviews
   - Prepare monthly project report
   - Update WA progress schedule
   - Prepare monthly M/WBE Utilization Repo
3) Review WA costs
   - Prepare monthly cost control report
   - Cost control reviews

Contract/Project administration hours would not include activities such as:

1) QA/QC reviews
2) Technical oversight by management
3) Develop subcontracts
4) CAP Preparation
   - Oversee and prepare monthly CAP
   - Respond to payment issues/disallowances
   - NSPE list updates
   - Equipment Inventory
5) Manage subcontracts
6) Implement and manage program management and staffing plans
7) Conduct Health and Safety Reviews
8) Word processing and graphic artists
9) Report editing
10) Review of deliverables

Engineer: MACTEC Engineering and Consulting Date Prepared: 06/13/06
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(c)
Direct Non-Salary Costs

Item	Maximum Reimbursement Rate	Unit	Estimated No. of Units	Total Estimated Cost
A) Sample Analysis Rates (In-House Cost Only)				
1) Groundwater	$0.00	each	0	$0.00
2) Soil Vapor	$0.00	each	0	$0.00
3) Sub-slab samples	$0.00	each	0	$0.00
	TOTAL			**$0.00**
B) Miscellaneous				
1) TRAVEL				
Lodging	$ 176.99	night+taxes	0	$0.00
Meals and Incidentals[1]	$ 64.00	day	37	$2,160.00
Car Rental	$ 52.99	day	37	$ 1,960.63
Cargo Van Rental	$ -	day	0	$ -
Mileage	$ 0.445	mile	0	$0.00
Parking and Tolls	$ 259.00	LS	1	$259.00
Gas	Actual Costs	N/A	N/A	$0.00
Air Fare	$ 726	avg. RT price	12	$ 8,712
	TOTAL			**$13,091.63**
2) CONSULTANT OTHER DIRECT COSTS				
Printing/Photocopy	$0.05	page	1260	$63.00
CAD Computer	$7.50	hour	0	$0.00
Telephone & Fax	Actual Costs	N/A	N/A	$0.00
Shipping	Actual Costs	N/A	N/A	$0.00
Consumables	Actual Costs	N/A	N/A	$ 316
Other	$0.00	N/A	N/A	$5,000.00
	TOTAL			**$5,379.27**
Total ODCs				**$18,470.90**

Notes:
1. Total estimated cost for Meals and Incidentals adjusted to account for travel days.

Engineer: MACTEC Engineering and Consulting **Date Prepared:** **06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(d) 3
Maximum Reimbursement Rates for Vendor Rented Equipment

(1) Item	(2) Task No.	(3) Max. Reimbursement Rate ($)*	(4) Est. Usage (Unit of Time) +	(5) Est. Rental Cost ($) (Col. 3 x 4)
Photovac Portable GC		$ 210.00	wk	$ -
Turbidity Meter		$ 64.00	wk	$ -
Hammer Drill	2	$ 65.00	5 days	$ 325
Minirae PID (ppb)	2	$ 350.00	1 wk	$ 350
Helium/butane meter	2	$ 150.00	1 wk	$ 150
Geophysical Equipment		$ 1,250.00	day	$ -
Electroshocker		$ 250.00	day	$ -
GPS unit		$ 250.00	day	$ -
Minnow trap		$ 3.00	day	$ -
Rock basket		$ 3.00	day	$ -
Dexsil PCB analyzer		$ 500.00	mo	$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
Total Vendor Rented Equipment				**$ 825**

Notes:
* Reimbursement will be made at the Maximum Reimbursement rate or the actual rental rate, whichever is less.
+ Usage time includes shipping to and from site.

Schedule 2.11(d) 5
Consumable Supplies

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Date Prepared: 06/13/06

Task 2 - Pre-Design

Item	Estimated Quantity	Unit Cost ($)	Unit	Total Budgeted Cost ($) (Col. 2 x 3)
FIELD BOOK - HARDCOVER	2	$ 10.50	EACH	$ 21.00
TOPOGRAPHIC MAPS		$ 8.25	EACH	$ -
AERIAL PHOTOGRAPHS		$ 6.50	EACH	$ -
GC Standards		$ 35.00	EACH	$ -
MISCELLANEOUS	2	$ 50.00	EACH	$ 100.00
FILM AND DEVELOPMENT	2	$ 15.00		$ 30.00
			TOTAL COST:	**$ 151**
1 LITER SQUIRT BOTTLE		$ 2.43	EACH	$ -
2 OZ SOIL JAR		$ 2.13	EACH	$ -
4 OZ SOIL JAR		$ 2.69	EACH	$ -
40 ML GLASS VIAL		$ 1.33	EACH	$ -
5 GALLON COLLAPSIBLE JUG		$ 4.45	EACH	$ -
ACETONE, PESTICIDE GRADE		$ 34.98	LITER	$ -
BRUSH - LONG HANDLED		$ 6.04	EACH	$ -
BUBBLE PACK		$ 0.16	FOOT	$ -
CAUTION TAPE	1	$ 17.30	ROLL	$ 17.30
DEIONIZED WATER		$ 2.29	GALLON	$ -
DISPOSALE BAILER		$ 7.65	EACH	$ -
DISPOSABLE INLINE FILTER		$ 14.14	EACH	$ -
DRAEGER TUBE	1	$ 5.70	EACH	$ 5.70
EMERGENCY HORN		$ 13.13	EACH	$ -
EYE WASH BOTTLES - DISPOSABLE		$ 5.64	EACH	$ -
FIELD BOOK		$ 7.47	EACH	$ -
FLAGGING		$ 1.11	ROLL	$ -
GRADE STAKES		$ 12.36	BUNDLE	$ -
HEXANE, PESTICIDE GRADE		$ 38.06	LITER	$ -
LIQUINOX		$ 23.42	GALLON	$ -
METHANOL		$ 28.89	LITER	$ -
NITRIC ACID		$ 47.00	500 mL	$ -
pH PAPER		$ 9.08	PACKAGE	$ -
PLASTIC SHEETING		$ 34.06	ROLL	$ -
PLASTIC TUB		$ 16.66	EACH	$ -
RECORDABLE CD MEDIA		$ 9.00	EACH	$ -
SPAN GAS (ISOBUTYLENE & ZERO AIR)	1	$ 33.63	CYLINDER	$ 33.63
STAINLESS STEEL BOWL	1	$ 16.21	EACH	$ 16.21
STAINLESS STEEL SPATULA	2	$ 1.55	EACH	$ 3.10
STAINLESS STEEL SPOON	1	$ 2.68	EACH	$ 2.68
SUPER WHALE PUMP - COMPLETE **		$ 46.35	EACH	$ -
SUPER WHALE PUMP ONLY **		$ 28.23	EACH	$ -
TAPE DISPENSER	1	$ 6.80	EACH	$ 6.80
TEFLON COATED BAILER LINE		$ 0.89	FOOT	$ -
TUBING - PVC -CLEAR	100	$ 0.33	FOOT	$ 33.00
TUBING - PVC - REINFORCED		$ 0.57	FOOT	$ -
TUBING - TEFLON/SILICON		$ 3.22	FOOT	$ -
			SUBTOTAL:	**$ 118**
Personal Protective Equipment				
BOOTIES		$ 2.57	PAIR	$ -
COVERALLS		$ 1.28	EACH	$ -
COVERALLS, INSULATED		$ 5.74	EACH	$ -
EAR PLUGS	50	$ 0.15	PAIR	$ 7.50
GLOVES - NITRILE		$ 1.34	PAIR	$ -
GLOVES - VITON *		$ 54.00	PAIR	$ -
GLOVES - COTTON LINERS		$ 0.33	PAIR	$ -
GLOVES - DISPOSABLE, VINYL	50	$ 0.36	PAIR	$ 18.00
GLOVES - SILVER SHIELD		$ 4.15	PAIR	$ -
GOGGLES/SAFETY GLASSES		$ 0.64	EACH	$ -
PACKING/DUCT TAPE		$ 4.27	ROLL	$ -
RESPIRATOR CARTRIDGES	1	$ 17.25	PAIR	$ 17.25
TYVEK SUIT - POLY COATED	1	$ 4.10	SUIT	$ 4.10
			SUBTOTAL:	**$ 47**
TOTAL CONSUMABLE SUPPLIES			**TOTAL COST:**	**$ 316.27**

Notes:
* Rates are in accordance with Table 2.10(c)5 of contract.
* * Shall only be used on a case by case basis subject to DEC project manager approval.

Schedule 2.11(d) 5
Consumable Supplies

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Date Prepared: 06/13/06

Task 2 - Pre-Design

Item	Estimated Quantity	Unit Cost ($)	Unit	Total Budgeted Cost ($) (Col. 2 x 3)
TOPOGRAPHIC MAPS		$ 8.25	EACH	$ -
AERIAL PHOTOGRAPHS		$ 6.50	EACH	$ -
GC Standards		$ 35.00	EACH	$ -
MISCELLANEOUS		$ 50.00	EACH	$ -
FILM AND DEVELOPMENT		$ 15.00		$ -
			TOTAL COST:	**$ -**
1 LITER SQUIRT BOTTLE		$ 2.43	EACH	$ -
2 OZ SOIL JAR		$ 2.13	EACH	$ -
4 OZ SOIL JAR		$ 2.69	EACH	$ -
40 ML GLASS VIAL		$ 1.33	EACH	$ -
5 GALLON COLLAPSIBLE JUG		$ 4.45	EACH	$ -
ACETONE, PESTICIDE GRADE		$ 34.98	LITER	$ -
BRUSH - LONG HANDLED		$ 6.04	EACH	$ -
BUBBLE PACK		$ 0.16	FOOT	$ -
CAUTION TAPE		$ 17.30	ROLL	$ -
DEIONIZED WATER		$ 2.29	GALLON	$ -
DISPOSALE BAILER		$ 7.65	EACH	$ -
DISPOSABLE INLINE FILTER		$ 14.14	EACH	$ -
DRAEGER TUBE		$ 5.70	EACH	$ -
EMERGENCY HORN		$ 13.13	EACH	$ -
EYE WASH BOTTLES - DISPOSABLE		$ 5.64	EACH	$ -
FIELD BOOK		$ 7.47	EACH	$ -
FLAGGING		$ 1.11	ROLL	$ -
GRADE STAKES		$ 12.36	BUNDLE	$ -
HEXANE, PESTICIDE GRADE		$ 38.06	LITER	$ -
LIQUINOX		$ 23.42	GALLON	$ -
METHANOL		$ 28.89	LITER	$ -
NITRIC ACID		$ 47.00	500 mL	$ -
pH PAPER		$ 9.08	PACKAGE	$ -
PLASTIC SHEETING		$ 34.06	ROLL	$ -
PLASTIC TUB		$ 16.66	EACH	$ -
RECORDABLE CD MEDIA		$ 9.00	EACH	$ -
SPAN GAS (ISOBUTYLENE & ZERO AIR)		$ 33.63	CYLINDER	$ -
STAINLESS STEEL BOWL		$ 16.21	EACH	$ -
STAINLESS STEEL SPATULA		$ 1.55	EACH	$ -
STAINLESS STEEL SPOON		$ 2.68	EACH	$ -
SUPER WHALE PUMP - COMPLETE **		$ 46.35	EACH	$ -
SUPER WHALE PUMP ONLY **		$ 28.23	EACH	$ -
TAPE DISPENSER		$ 6.80	EACH	$ -
TEFLON COATED BAILER LINE		$ 0.89	FOOT	$ -
TUBING - PVC -CLEAR		$ 0.33	FOOT	$ -
TUBING - PVC - REINFORCED		$ 0.57	FOOT	$ -
TUBING - TEFLON/SILICON		$ 3.22	FOOT	$ -
			SUBTOTAL:	**$ -**
Personal Protective Equipment				
BOOTIES		$ 2.57	PAIR	$ -
COVERALLS		$ 1.28	EACH	$ -
COVERALLS, INSULATED		$ 5.74	EACH	$ -
EAR PLUGS		$ 0.15	PAIR	$ -
GLOVES - NITRILE		$ 1.34	PAIR	$ -
GLOVES - VITON *		$ 54.00	PAIR	$ -
GLOVES - COTTON LINERS		$ 0.33	PAIR	$ -
GLOVES - DISPOSABLE, VINYL		$ 0.36	PAIR	$ -
GLOVES - SILVER SHIELD		$ 4.15	PAIR	$ -
GOGGLES/SAFETY GLASSES		$ 0.64	EACH	$ -
PACKING/DUCT TAPE		$ 4.27	ROLL	$ -
RESPIRATOR CARTRIDGES		$ 17.25	PAIR	$ -
TYVEK SUIT - POLY COATED		$ 4.10	SUIT	$ -
			SUBTOTAL:	**$ -**
TOTAL CONSUMABLE SUPPLIES			**TOTAL COST:**	**$ -**

Notes:
* Rates are in accordance with Table 2.10(c)5 of contract.
* * Shall only be used on a case by case basis subject to DEC project manager approval.

Schedule 2.11(d) 5
Consumable Supplies

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Date Prepared: 06/13/06

Task 5 - Remedial Oversight

Item	Estimated Quantity	Unit Cost ($)	Unit	Total Budgeted Cost ($) (Col. 2 x 3)
TOPOGRAPHIC MAPS		$ 8.25	EACH	$ -
AERIAL PHOTOGRAPHS		$ 6.50	EACH	$ -
GC Standards		$ 35.00	EACH	$ -
MISCELLANEOUS		$ 50.00	EACH	$ -
FILM AND DEVELOPMENT		$ 15.00		$ -
			TOTAL COST:	**$ -**
1 LITER SQUIRT BOTTLE		$ 2.43	EACH	$ -
2 OZ SOIL JAR		$ 2.13	EACH	$ -
4 OZ SOIL JAR		$ 2.69	EACH	$ -
40 ML GLASS VIAL		$ 1.33	EACH	$ -
5 GALLON COLLAPSIBLE JUG		$ 4.45	EACH	$ -
ACETONE, PESTICIDE GRADE		$ 34.98	LITER	$ -
BRUSH - LONG HANDLED		$ 6.04	EACH	$ -
BUBBLE PACK		$ 0.16	FOOT	$ -
CAUTION TAPE		$ 17.30	ROLL	$ -
DEIONIZED WATER		$ 2.29	GALLON	$ -
DISPOSALE BAILER		$ 7.65	EACH	$ -
DISPOSABLE INLINE FILTER		$ 14.14	EACH	$ -
DRAEGER TUBE		$ 5.70	EACH	$ -
EMERGENCY HORN		$ 13.13	EACH	$ -
EYE WASH BOTTLES - DISPOSABLE		$ 5.64	EACH	$ -
FIELD BOOK		$ 7.47	EACH	$ -
FLAGGING		$ 1.11	ROLL	$ -
GRADE STAKES		$ 12.36	BUNDLE	$ -
HEXANE, PESTICIDE GRADE		$ 38.06	LITER	$ -
LIQUINOX		$ 23.42	GALLON	$ -
METHANOL		$ 28.89	LITER	$ -
NITRIC ACID		$ 47.00	500 mL	$ -
pH PAPER		$ 9.08	PACKAGE	$ -
PLASTIC SHEETING		$ 34.06	ROLL	$ -
PLASTIC TUB		$ 16.66	EACH	$ -
RECORDABLE CD MEDIA		$ 9.00	EACH	$ -
SPAN GAS (ISOBUTYLENE & ZERO AIR)		$ 33.63	CYLINDER	$ -
STAINLESS STEEL BOWL		$ 16.21	EACH	$ -
STAINLESS STEEL SPATULA		$ 1.55	EACH	$ -
STAINLESS STEEL SPOON		$ 2.68	EACH	$ -
SUPER WHALE PUMP - COMPLETE **		$ 46.35	EACH	$ -
SUPER WHALE PUMP ONLY **		$ 28.23	EACH	$ -
TAPE DISPENSER		$ 6.80	EACH	$ -
TEFLON COATED BAILER LINE		$ 0.89	FOOT	$ -
TUBING - PVC -CLEAR		$ 0.33	FOOT	$ -
TUBING - PVC - REINFORCED		$ 0.57	FOOT	$ -
TUBING - TEFLON/SILICON		$ 3.22	FOOT	$ -
			SUBTOTAL:	**$ -**
Personal Protective Equipment				
BOOTIES		$ 2.57	PAIR	$ -
COVERALLS		$ 1.28	EACH	$ -
COVERALLS, INSULATED		$ 5.74	EACH	$ -
EAR PLUGS		$ 0.15	PAIR	$ -
GLOVES - NITRILE		$ 1.34	PAIR	$ -
GLOVES - VITON *		$ 54.00	PAIR	$ -
GLOVES - COTTON LINERS		$ 0.33	PAIR	$ -
GLOVES - DISPOSABLE, VINYL		$ 0.36	PAIR	$ -
GLOVES - SILVER SHIELD		$ 4.15	PAIR	$ -
GOGGLES/SAFETY GLASSES		$ 0.64	EACH	$ -
PACKING/DUCT TAPE		$ 4.27	ROLL	$ -
RESPIRATOR CARTRIDGES		$ 17.25	PAIR	$ -
TYVEK SUIT - POLY COATED		$ 4.10	SUIT	$ -
			SUBTOTAL:	**$ -**
TOTAL CONSUMABLE SUPPLIES			**TOTAL COST:**	**$ -**

Notes:
* Rates are in accordance with Table 2.10(c)5 of contract.
* * Shall only be used on a case by case basis subject to DEC project manager approval.

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(e)
Cost-Plus-Fixed-Fee Subcontracts

Pre-Design

Name of Subcontractor	**Services to be Performed**	**Year**	**Subcontract Price**
YEC	Survey and CAD	2006	**$ 14,999**

A) Direct Salary Costs

Professional Responsibility Level	Labor Grade	Ave. Reimbursement Rate ($/hr)	Max. Reimbursement Rate ($/hr)	Est. No. of Hours	Total Est. Direct Salary Cost (Ave. Reimb. Rate x Est. # of Hrs.)
Principal	VIII	$ 63.16	$ 68.23	0	$ -
Senior Geologist/Scientist/ Engineer/ Licensed Surveyor	VIII	$ 41.77	$ 45.94	46	$ 1,921.42
Staff Geologist/ Scientist/Engineer	IV	$ 36.28	$ 39.93	0	$ -
Staff Geologist/ Scientist/Engineer/CAD Operator	III	$ 31.51	$ 34.96	14	$ 441.14
Senior Technician/Staff Engineer/Scientist/Geologist	III	$ 23.30	$ 26.12	40	$ 932.00
Technician/Draftsperson	I	$ 21.11	$ 23.66	40	$ 844.40
			Total Direct Salary Costs		$ 4,139

B) Indirect Costs

Indirect costs shall be paid based on a percentage of direct salary costs incurred which shall not exceed a maximum of 117% or the actual rate calculated in accordance with 48 CFR Federal Acquisition Regulation, whichever is lower.

Amount budgeted for indirect costs is: $ 4,843

C) Maximum Reimbursement Rates for Direct Non-Salary Costs

Item	**Max. Reimbursement Rate (Specify Unit)**	**Est. No. of Units**	**Total Est. Cost**
Mileage	$ 0.445 /mi.	1000	$ 445.00
Tolls	$ 16.00 /trip	5	$ 80.00
			$ -
Survey Equipment Rental	$ 65.00 /day	5	$ 325.00
CAD Equipment	$ 15.00 /hour	12	$ 180.00
GPS NYS Plane Coordinates*	$ 1,500.00 /site	1	$ 1,000.00
Aerial Photography Mapping (1' contour, 1'=20', 13 acres)	$ 2,640.00	1	$ 2,640.00
Total Direct Non-Salary Costs			$ 4,670

D) Fixed Fee

The fixed fee is: (15% of Total Direct and Indirect Salary Costs) $ 1,347
See Schedule 2.10(h) for how the fixed fee should be claimed.

1) These rates will be held firm until October 31, 2006
2) Reimbursement will be limited to the lesser of either the individuals actual hourly rate or the maximum rate for each labor category.
3) Reimbursement will be limited to the maximum reimbursement rate for the professional responsibility level of the actual work performed.
4) Only those labor classifications indicated with an asterisk will be entitled to overtime premium.
5) Reimbursement for technical time of principals, owners and officers will be limited to the maximum reimbursement rate of that labor category, the actual hourly labor rate paid, or the State M-6 job rate, whichever is lower.
6) The maximum rates in each labor category can be modified only by mutual written agreement and approved by both the contractor and the Department.
7) This Footnote applies to Schedules for years 4 through 7 only. If the U.S. cost-of-living index increases at a rate greater than 6% compounded annually, the maximum salary rates will be subject to renegotiation for future years of the contract. There shall be no retroactive adjustments of payment as a result of renegotiated salary schedules.

Assumptions:

Samples as per workplan including 2 contingency subsurface soil samples
QA/QC sampling as per workplan
2 rounds of site survey (1st round - certified boundary, 2 round -sample locations)

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(e)
Cost-Plus-Fixed-Fee Subcontracts

Septic sampling conducted during non freeze conditions
Drilling conducted when ground is frozen over.
Core sampler by driller
All laboratory analytical, IDW (investigation derived waste) and drillers costs will be provided by MACTEC

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(f)
Unit Price Subcontracts

Pre-Design

Name of Subcontractor	Service		Price	Management Fee
neither minority or woman owned business				
Katahdin Analytical	Analytical		$ 8,316	$ -
Item	**Units**	**UOM**	**Unit Cost**	**Total Cost**
Groundwater Profiling				$ -
Water TCL- VOCs	9	ea	$ 85.00	$ 765.00
Nickel and Zinc	33	ea	$ 32.00	$ 1,056.00
				$ -
				$ -
Geotech and Delineation Soil Samples				$ -
Nickel	45	ea	$ 32.00	$ 1,440.00
SPLP Nickel	45	ea	$ 107.00	$ 4,815.00
Grain Size	2	ea	$ 120.00	$ 240.00

Subtotal Cost:	$	8,316.00
Management Fee:	$	-
Total:	**$**	**8,316.00**

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(f)
Unit Price Subcontracts

Pre-Design

Name of Subcontractor	Service		Price	Management Fee
neither minority or woman owned business Columbia	Analytical		$ 1,838	$ -
Item	**Units**	**UOM**	**Unit Cost**	**Total Cost**
TCL - VOCs TO15				$ -
Indoor Air and SubSlab		ea	$ 265.00	$ -
Soil Vapor	7	ea	$ 250.00	$ 1,750.00
Reporting	1	LS	5%	$ 87.50
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

Subtotal Cost:	$	1,838
Management Fee:	$	-
Total:	**$**	**1,838**

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(f)
Unit Price Subcontracts

Pre-Design 2

Name of Subcontractor	Service	Price	Management Fee
neither minority or woman owned business ADT	Direct Push Drilling	$ 14,380	$ 575

Item	Units	UOM	Unit Cost	Total Cost
Mobilization	1	$/ls	$1,200.00	$ 1,200.00
Modified Level C personal protection	*	$/psn/d.	$50.00	
DIRECT PUSH SYSTEMS				
Direct Push System - Truck Mounted	10	$/day	$1,200.00	$ 12,000.00
Direct Push System - Special Access Mounted (ATV Skid)		$/day	$1,400.00	$ -
Direct Push System - Special Access Mounted (tripod, cart for inside buildings)		$/day	$1,400.00	$ -
Additional Items				
Temporary Decon Pad (Mobil)	1	$/ls	$300.00	$ 300.00
Piezometer installed in direct push hole - 1" diameter Sch. 40 PVC, including riser, screen, sandpack and bentonite seals/grout Depths of 0 ft to < 30 ft		$/lf.	$6.00	$ -
Piezometer installed in direct push hole - 1" diameter Sch. 40 PVC, including riser, screen, sandpack and bentonite seals/grout Depths of < 30 ft to <60 ft		$/lf.	$8.00	$ -
6" steel flush mounted vault w/water tight seal		$/ea	$175.00	$ -
Cost to supply USDOT 55 gallon drum (solid and/or liquid)	1	$/ls	$50.00	$ 50.00
Goundwater sample with hydropunch (or equivalent)	24	$/ea	$20.00	$ 480.00
Soil gas sample with sealed sample point (i.e.geoprobe PRT)	6	$/ea	$50.00	$ 300.00
Concrete		$/bag	$10.00	$ -
Asphalt patch	5	$/bag	$10.00	$ 50.00
**Membrane Interface Probe with FID, PID, ECD Detectors		$/ls	N/A	

Subtotal Cost:	$	14,380
Management Fee:	$	575
Total:	**$**	**14,955**

Engineer: MACTEC Engineering and Consulting **Date Prepared:** **06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(f)
Unit Price Subcontracts

Pre-Design

Name of Subcontractor	Service		Price	Management Fee
neither minority or woman owned business			$ -	$ -

Item	Units	UOM	Unit Cost	Total Cost
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

Subtotal Cost: $ -
Management Fee: $ -
Total: **$ -**

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: All Tasks
Complete: 0.0%

Page: 1 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 42,928	$ -
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 66,882	$ -
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 109,810	$ -
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,092	$ -
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,204	$ -
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 19,296	$ -
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,107	$ -
8. Total Site Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 169,213	$ -
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,687	$ -
10. Total Site Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 176,900	$ -

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 1 - Work Plan
Complete: 0.0%

Page: 2 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,634	$ 3,634
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,662	$ 5,662
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,297	$ 9,297
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,608	$ 1,608
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,608	$ 1,608
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,905	$ 10,905
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 651	$ 651
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,556	$ 11,556

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 2 - Pre-Design
Complete: 0.0%

Page: 3 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,532	$ 6,532
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,177	$ 10,177
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 16,708	$ 16,708
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,628	$ 2,628
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,141	$ 1,141
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,769	$ 3,769
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,107	$ 40,107
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 60,585	$ 60,585
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,170	$ 1,170
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 61,755	$ 61,755

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 3 - Plans and Specifications
Complete: 0.0%

Page: 4 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,716	$ 15,716
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 24,486	$ 24,486
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,202	$ 40,202
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,000	$ 5,000
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,000	$ 5,000
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 45,202	$ 45,202
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,814	$ 2,814
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 48,016	$ 48,016

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 4 - PreAward Services
Complete: 0.0%

Page: 5 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,317	$ 3,317
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,167	$ 5,167
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 8,484	$ 8,484
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,728	$ 1,728
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,728	$ 1,728
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,212	$ 10,212
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 594	$ 594
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,806	$ 10,806

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 5 - Remedial Oversight
Complete: 0.0%

Page: 6 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,934	$ 9,934
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,477	$ 15,477
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,410	$ 25,410
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,186	$ 6,186
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,186	$ 6,186
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 31,596	$ 31,596
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,779	$ 1,779
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 33,375	$ 33,375

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 6 - Health and Safety Plan
Complete: 0.0%

Page: 7 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,472	$ 1,472
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,294	$ 2,294
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,766	$ 3,766
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 27	$ 27
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 27	$ 27
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,793	$ 3,793
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 264	$ 264
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,056	$ 4,056

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 7 - Citizen Participation
Complete: 0.0%

Page: 8 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,469	$ 1,469
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,289	$ 2,289
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,757	$ 3,757
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 942	$ 942
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 31	$ 31
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 973	$ 973
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,730	$ 4,730
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 263	$ 263
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,993	$ 4,993

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 8 - QA/QC Activities
Complete: 0.0%

Page: 9 OF 9
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 854	$ 854
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,331	$ 1,331
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,186	$ 2,186
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 5	$ 5
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 5	$ 5
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,191	$ 2,191
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 153	$ 153
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,344	$ 2,344

Program Manager (Engineer) _____ Date: _____

Schedule 2.11(g) - Supplemental
COST CONTROL REPORT FOR SUBCONTRACTS

Engineer: MACTEC Engineering and Consulting **Page 1 of 1**
Contract Number: D003826 **Date Prepared: 06/13/06**
Project Name: Alsy Manufacturing **Billing Period:**
Work Assignment Number: D003826-27 **Invoice No.**

Pre-Design

Subcontract Name	A Subcontract Costs Claimed This Application Incl. Resubmittals	B Subcontract Costs Approved For Payment on Previous Applications	C Total Subcontract Costs To Date (A plus B)	D Subcontract Approved Budget	E Management Fee Budget	F Management Fee Paid	G Total Costs To Date (C plus F)
YEC			$ -	$ 14,998.77	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
Katahdin Analytical			$ -	$ 8,316.00	$ -		$ -
Columbia			$ -	$ 1,837.50	$ -		$ -
ADT			$ -	$ 14,380.00	$ 575.20		$ -
			$ -	$ -	$ -		$ -
TOTALS	$ -	$ -	$ -	$ 39,532.27	$ 575.20	$ -	$ -

Project Manager: _____ Date: _____

NOTES:
(1) Costs listed in Columns A, B, C & D do not include any management fee costs.
(2) Management fee is applicable to only properly procured, satisfactorily completed, unit price subcontracts over $10,000.
(3) Line 11, Column G should equal Line 7 (Subcontractors), Column D of Summary Cost Control Report.

Schedule 2.11(g) - Supplemental
COST CONTROL REPORT FOR SUBCONTRACTS

Engineer: MACTEC Engineering and Consulting **Page 1 of 1**
Contract Number: D003826 **Date Prepared: 06/13/06**
Project Name: Alsy Manufacturing **Billing Period:**
Work Assignment Number: D003826-27 **Invoice No.**
Work Plan

Subcontract Name	A Subcontract Costs Claimed This Application Incl. Resubmittals	B Subcontract Costs Approved For Payment on Previous Applications	C Total Subcontract Costs To Date (A plus B)	D Subcontract Approved Budget	E Management Fee Budget	F Management Fee Paid	G Total Costs To Date (C plus F)
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
TOTALS	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Project Manager: _____ Date: _____

NOTES:
(1) Costs listed in Columns A, B, C & D do not include any management fee costs.
(2) Management fee is applicable to only properly procured, satisfactorily completed, unit price subcontracts over $10,000.
(3) Line 11, Column G should equal Line 7 (Subcontractors), Column D of Summary Cost Control Report.

Schedule 2.11(g) - Supplemental
COST CONTROL REPORT FOR SUBCONTRACTS

Engineer: MACTEC Engineering and Consulting **Page 1 of 1**
Contract Number: D003826 **Date Prepared: 06/13/06**
Project Name: Alsy Manufacturing **Billing Period:**
Work Assignment Number: D003826-27 Plans and Specifications **Invoice No.**

Subcontract Name	A Subcontract Costs Claimed This Application Incl. Resubmittals	B Subcontract Costs Approved For Payment on Previous Applications	C Total Subcontract Costs To Date (A plus B)	D Subcontract Approved Budget	E Management Fee Budget	F Management Fee Paid	G Total Costs To Date (C plus F)
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
TOTALS	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Project Manager: _____ Date: _____

NOTES:
(1) Costs listed in Columns A, B, C & D do not include any management fee costs.
(2) Management fee is applicable to only properly procured, satisfactorily completed, unit price subcontracts over $10,000.
(3) Line 11, Column G should equal Line 7 (Subcontractors), Column D of Summary Cost Control Report.

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(a)
Summary of Work Assignment Price

1	DIRECT SALARY COSTS (Schedules 2.10(a) and 2.11 (b))	**$ 42,928**
2	INDIRECT COSTS (Schedule 2.10(g))	**$ 66,882**
3	DIRECT NON-SALARY COSTS (Schedules 2.10(d)(e)(f) and 2.11 (c) and (d))	**$ 19,296**

SUBCONTRACT COSTS
COST-PLUS-FIXED-FEE SUBCONTRACTS
(Schedule 2.11(e))

Name of Subcontractor	Services to be Performed	Subcontract Price
YEC	Survey and CAD	$ 14,999
		$ -
		$ -

4	TOTAL COST-PLUS-FIXED-FEE SUBCONTRACTS	**$ 14,999**

UNIT PRICE SUBCONTRACTS
(Schedule 2.11(f))

Name of Subcontractor	Services to be Performed	Subcontract Price
Katahdin Analytical	Analytical	$ 8,316
Columbia	Analytical	$ 1,838
ADT	Direct Push Drilling	$ 14,380
		$ -

5	TOTAL UNIT PRICE SUBCONTRACTS	**$ 24,534**
6	SUBCONTRACT MANAGEMENT FEE	**$ 575**
7	TOTAL SUBCONTRACT COSTS (Lines 4 + 5 + 6)	**$ 40,107**
8	FIXED FEE (Schedule 2.10(h))	**$ 7,687**
9	**TOTAL WORK ASSIGNMENT PRICE (Lines 1 + 2 + 3 + 7 + 8)**	**$ 176,900**

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing **Schedule 2.11(b)**
Work Assignment Number: D003826-27 **Direct Labor Hours Budgeted**

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	**$54.44**	**$48.94**	**$45.30**	**$40.39**	**$36.43**	**$33.00**	**$30.63**	**$26.95**	**$22.18**	
2007 Rates	**$54.44**	**$48.94**	**$45.30**	**$40.39**	**$36.43**	**$33.00**	**$30.63**	**$26.95**	**$22.18**	
2008 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2009 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2010 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
Task 1 - Work Plan										
2006 Hours	3	0	0	23	16	0	0	62	13	117
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**3**	**0**	**0**	**23**	**16**	**0**	**0**	**62**	**13**	**117**
2006 Labor Cost	$ 163.32	$ -	$ -	$ 928.97	$ 582.88	$ -	$ -	$ 1,670.90	$ 288.34	$ 3,634.41
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 163.32**	**$ -**	**$ -**	**$ 928.97**	**$ 582.88**	**$ -**	**$ -**	**$ 1,670.90**	**$ 288.34**	**$ 3,634.41**
Task 2 - Pre-Design										
2006 Hours	1	0	0	11	0	0	6	194	28	240
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**11**	**0**	**0**	**6**	**194**	**28**	**240**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 444.29	$ -	$ -	$ 183.78	$ 5,228.30	$ 621.04	$ 6,531.85
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 444.29**	**$ -**	**$ -**	**$ 183.78**	**$ 5,228.30**	**$ 621.04**	**$ 6,531.85**
Task 3 - Plans and Specifications										
2006 Hours	10	0	0	53	0	0	36	292	183	574
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**10**	**0**	**0**	**53**	**0**	**0**	**36**	**292**	**183**	**574**
2006 Labor Cost	$ 544.40	$ -	$ -	$ 2,140.67	$ -	$ -	$ 1,102.68	$ 7,869.40	$ 4,058.94	$ 15,716.09
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 544.40**	**$ -**	**$ -**	**$ 2,140.67**	**$ -**	**$ -**	**$ 1,102.68**	**$ 7,869.40**	**$ 4,058.94**	**$ 15,716.09**
Task 4 - PreAward Services										
2006 Hours	3	0	0	19	0	32	0	37	15	106
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**3**	**0**	**0**	**19**	**0**	**32**	**0**	**37**	**15**	**106**
2006 Labor Cost	$ 163.32	$ -	$ -	$ 767.41	$ -	$ 1,056.00	$ -	$ 997.15	$ 332.70	$ 3,316.58

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing **Schedule 2.11(b)**
Work Assignment Number: D003826-27 **Direct Labor Hours Budgeted**

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2007 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2008 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2009 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 163.32**	**$ -**	**$ -**	**$ 767.41**	**$ -**	**$ 1,056.00**	**$ -**	**$ 997.15**	**$ 332.70**	**$ 3,316.58**
Task 5 - Remedial Oversight										
2006 Hours	4	0	0	24	0	46	0	246	27	347
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**4**	**0**	**0**	**24**	**0**	**46**	**0**	**246**	**27**	**347**
2006 Labor Cost	$ 217.76	$ -	$ -	$ 969.36	$ -	$ 1,518.00	$ -	$ 6,629.70	$ 598.86	$ 9,933.68
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ 217.76**	**$ -**	**$ -**	**$ 969.36**	**$ -**	**$ 1,518.00**	**$ -**	**$ 6,629.70**	**$ 598.86**	**$ 9,933.68**
Task 6 - Health and Safety Plan										
2006 Hours	0	0	0	8	0	0	0	27	19	54
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**27**	**19**	**54**
2006 Labor Cost	$ -	$ -	$ -	$ 323.12	$ -	$ -	$ -	$ 727.65	$ 421.42	$ 1,472.19
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ 323.12**	**$ -**	**$ -**	**$ -**	**$ 727.65**	**$ 421.42**	**$ 1,472.19**
Task 7 - Citizen Participation										
2006 Hours	0	0	0	14	0	0	0	22	14	50
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**22**	**14**	**50**
2006 Labor Cost	$ -	$ -	$ -	$ 565.46	$ -	$ -	$ -	$ 592.90	$ 310.52	$ 1,468.88
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ 565.46**	**$ -**	**$ -**	**$ -**	**$ 592.90**	**$ 310.52**	**$ 1,468.88**
Task 8 - QA/QC Activities										
2006 Hours	0	0	0	2	0	16	0	5	5	28
2007 Hours	0	0	0	0	0	0	0	0	0	0

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing **Schedule 2.11(b)**
Work Assignment Number: D003826-27 **Direct Labor Hours Budgeted**

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	**$54.44**	**$48.94**	**$45.30**	**$40.39**	**$36.43**	**$33.00**	**$30.63**	**$26.95**	**$22.18**	
2007 Rates	**$54.44**	**$48.94**	**$45.30**	**$40.39**	**$36.43**	**$33.00**	**$30.63**	**$26.95**	**$22.18**	
2008 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2009 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2010 Rates	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	**$1.00**	
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**2**	**0**	**16**	**0**	**5**	**5**	**28**
2006 Labor Cost	$ -	$ -	$ -	$ 80.78	$ -	$ 528.00	$ -	$ 134.75	$ 110.90	$ 854.43
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ 80.78**	**$ -**	**$ 528.00**	**$ -**	**$ 134.75**	**$ 110.90**	**$ 854.43**
2006 Total Labor Hours	**21**	**0**	**0**	**154**	**16**	**94**	**42**	**885**	**304**	**1516**
2006 Total Direct Labor Cost ($)	**$ 1,143.24**	**$ -**	**$ -**	**$ 6,220.06**	**$ 582.88**	**$ 3,102.00**	**$ 1,286.46**	**$ 23,850.75**	**$ 6,742.72**	**$ 42,928.11**
2007 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2007 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2008 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2008 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2009 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2009 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2010 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2010 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
TOTAL LABOR HOURS	**21**	**0**	**0**	**154**	**16**	**94**	**42**	**885**	**304**	**1,516**
TOTAL DIRECT LABOR COST	**$ 1,143.24**	**$ -**	**$ -**	**$ 6,220.06**	**$ 582.88**	**$ 3,102.00**	**$ 1,286.46**	**$ 23,850.75**	**$ 6,742.72**	**$ 42,928.11**

Contract/Project administrative hours would include (subject to contract allowability)
but not necessarily be limited to the following activities:

1) Work Plan Development
   - Conflict of Interest
   - Develop budget schedules & supporting documentation
2) Review work assignment (WA) progress
   - Conduct progress reviews
   - Prepare monthly project report
   - Update WA progress schedule
   - Prepare monthly M/WBE Utilization Report
3) Review WA costs
   - Prepare monthly cost control report
   - Cost control reviews

Contract/Project administration hours would not include activities such as:

1) QA/QC reviews
2) Technical oversight by management
3) Develop subcontracts
4) CAP Preparation
   - Oversee and prepare monthly CAP
   - Respond to payment issues/disallowances
   - NSPE list updates
   - Equipment Inventory
5) Manage subcontracts
6) Implement and manage program management and staffing plans
7) Conduct Health and Safety Reviews
8) Word processing and graphic artists
9) Report editing
10) Review of deliverables

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(b-1)
Direct Adminstrative Labor Hours Budgeted

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2007 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2008 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2009 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
Task 1 - Work Plan										
2006 Hours	1	0	0	1	0	0	0	2	2	6
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**2**	**6**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 40.39	$ -	$ -	$ -	$ 53.90	$ 44.36	193
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 40.39**	**$ -**	**$ -**	**$ -**	**$ 53.90**	**$ 44.36**	**$ 193.09**
Task 2 - Pre-Design										
2006 Hours	1	0	0	3	0	0	0	4	4	12
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**4**	**12**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 121.17	$ -	$ -	$ -	$ 107.80	$ 88.72	372
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 121.17**	**$ -**	**$ -**	**$ -**	**$ 107.80**	**$ 88.72**	$ 372.13
Task 3 - Plans and Specifications										
2006 Hours	3	0	0	5	0	0	0	10	10	28
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**3**	**0**	**0**	**5**	**0**	**0**	**0**	**10**	**10**	**28**
2006 Labor Cost	$ 163.32	$ -	$ -	$ 201.95	$ -	$ -	$ -	$ 269.50	$ 221.80	857
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 163.32**	**$ -**	**$ -**	**$ 201.95**	**$ -**	**$ -**	**$ -**	**$ 269.50**	**$ 221.80**	**$ 856.57**
Task 4 - PreAward Services										
2006 Hours	1	0	0	1	0	1	0	1	1	5
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**1**	**5**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 40.39	$ -	$ 33.00	$ -	$ 26.95	$ 22.18	177
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(b-1)
Direct Adminstrative Labor Hours Budgeted

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2007 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2008 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2009 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 40.39**	**$ -**	**$ 33.00**	**$ -**	**$ 26.95**	**$ 22.18**	**$ 176.96**
Task 5 - Remedial Oversight										
2006 Hours	1	0	0	2	0	2	0	4	5	14
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**1**	**0**	**0**	**2**	**0**	**2**	**0**	**4**	**5**	**14**
2006 Labor Cost	$ 54.44	$ -	$ -	$ 80.78	$ -	$ 66.00	$ -	$ 107.80	$ 110.90	420
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ 54.44**	**$ -**	**$ -**	**$ 80.78**	**$ -**	**$ 66.00**	**$ -**	**$ 107.80**	**$ 110.90**	**$ 419.92**
Task 6 - Health and Safety Plan										
2006 Hours	0	0	0	0	0	0	0	1	1	2
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
2006 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 26.95	$ 22.18	49
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 26.95**	**$ 22.18**	**$ 49.13**
Task 7 - Citizen Participation										
2006 Hours	0	0	0	0	0	0	0	1	1	2
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
2006 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 26.95	$ 22.18	49
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 26.95**	**$ 22.18**	**$ 49.13**
Task 8 - QA/QC Activities										
2006 Hours	0	0	0	0	0	0	0	0	1	1
2007 Hours	0	0	0	0	0	0	0	0	0	0
2008 Hours	0	0	0	0	0	0	0	0	0	0
2009 Hours	0	0	0	0	0	0	0	0	0	0
2010 Hours	0	0	0	0	0	0	0	0	0	0
Total Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
2006 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 22.18	22
2007 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(b-1)
Direct Adminstrative Labor Hours Budgeted

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
2006 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2007 Rates	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18	
2008 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2009 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2010 Rates	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	
2008 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2009 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2010 Labor Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
Total Labor Cost	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 22.18**	**$ 22.18**
2006 Total Labor Hours	**7**	**0**	**0**	**12**	**0**	**3**	**0**	**23**	**25**	**70**
2006 Total Direct Labor Cost ($)	**$ 381.08**	**$ -**	**$ -**	**$ 484.68**	**$ -**	**$ 99.00**	**$ -**	**$ 619.85**	**$ 554.50**	**$ 2,139.11**
2007 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2007 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2008 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2008 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2009 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2009 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
2010 Total Labor Hours	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2010 Total Direct Labor Cost ($)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
TOTAL LABOR HOURS	**7**	**0**	**0**	**12**	**0**	**3**	**0**	**23**	**25**	**70**
TOTAL DIRECT LABOR COST	**$ 381.08**	**$ -**	**$ -**	**$ 484.68**	**$ -**	**$ 99.00**	**$ -**	**$ 619.85**	**$ 554.50**	**$ 2,139.11**

Contract/Project administrative hours would include (subject to contract allowability)
but not necessarily be limited to the following activities:

1) Work Plan Development
   - Conflict of Interest
   - Develop budget schedules & supporting documentation
2) Review work assignment (WA) progress
   - Conduct progress reviews
   - Prepare monthly project report
   - Update WA progress schedule
   - Prepare monthly M/WBE Utilization Repo
3) Review WA costs
   - Prepare monthly cost control report
   - Cost control reviews

Contract/Project administration hours would not include activities such as:

1) QA/QC reviews
2) Technical oversight by management
3) Develop subcontracts
4) CAP Preparation
   - Oversee and prepare monthly CAP
   - Respond to payment issues/disallowances
   - NSPE list updates
   - Equipment Inventory
5) Manage subcontracts
6) Implement and manage program management and staffing plans
7) Conduct Health and Safety Reviews
8) Word processing and graphic artists
9) Report editing
10) Review of deliverables

Engineer: MACTEC Engineering and Consulting Date Prepared: 06/13/06
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(c)
Direct Non-Salary Costs

Item	Maximum Reimbursement Rate	Unit	Estimated No. of Units	Total Estimated Cost
A) Sample Analysis Rates (In-House Cost Only)				
1) Groundwater	$0.00	each	0	$0.00
2) Soil Vapor	$0.00	each	0	$0.00
3) Sub-slab samples	$0.00	each	0	$0.00
	TOTAL			**$0.00**
B) Miscellaneous				
1) TRAVEL				
Lodging	$ 176.99	night+taxes	0	$0.00
Meals and Incidentals[1]	$ 64.00	day	37	$2,160.00
Car Rental	$ 52.99	day	37	$ 1,960.63
Cargo Van Rental	$ -	day	0	$ -
Mileage	$ 0.445	mile	0	$0.00
Parking and Tolls	$ 259.00	LS	1	$259.00
Gas	Actual Costs	N/A	N/A	$0.00
Air Fare	$ 726	avg. RT price	12	$ 8,712
	TOTAL			**$13,091.63**
2) CONSULTANT OTHER DIRECT COSTS				
Printing/Photocopy	$0.05	page	1260	$63.00
CAD Computer	$7.50	hour	0	$0.00
Telephone & Fax	Actual Costs	N/A	N/A	$0.00
Shipping	Actual Costs	N/A	N/A	$0.00
Consumables	Actual Costs	N/A	N/A	$ 316
Other	$0.00	N/A	N/A	$5,000.00
	TOTAL			**$5,379.27**
Total ODCs				**$18,470.90**

Notes:
1. Total estimated cost for Meals and Incidentals adjusted to account for travel days.

Engineer: MACTEC Engineering and Consulting **Date Prepared:** **06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(d) 3
Maximum Reimbursement Rates for Vendor Rented Equipment

(1) Item	(2) Task No.	(3) Max. Reimbursement Rate ($)*	(4) Est. Usage (Unit of Time) +	(5) Est. Rental Cost ($) (Col. 3 x 4)
Photovac Portable GC		$ 210.00	wk	$ -
Turbidity Meter		$ 64.00	wk	$ -
Hammer Drill	2	$ 65.00	5 days	$ 325
Minirae PID (ppb)	2	$ 350.00	1 wk	$ 350
Helium/butane meter	2	$ 150.00	1 wk	$ 150
Geophysical Equipment		$ 1,250.00	day	$ -
Electroshocker		$ 250.00	day	$ -
GPS unit		$ 250.00	day	$ -
Minnow trap		$ 3.00	day	$ -
Rock basket		$ 3.00	day	$ -
Dexsil PCB analyzer		$ 500.00	mo	$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
Total Vendor Rented Equipment				**$ 825**

Notes:
* Reimbursement will be made at the Maximum Reimbursement rate or the actual rental rate, whichever is less.
+ Usage time includes shipping to and from site.

Schedule 2.11(d) 5
Consumable Supplies

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Date Prepared: 06/13/06

Task 2 - Pre-Design

Item	Estimated Quantity	Unit Cost ($)	Unit	Total Budgeted Cost ($) (Col. 2 x 3)
FIELD BOOK - HARDCOVER	2	$ 10.50	EACH	$ 21.00
TOPOGRAPHIC MAPS		$ 8.25	EACH	$ -
AERIAL PHOTOGRAPHS		$ 6.50	EACH	$ -
GC Standards		$ 35.00	EACH	$ -
MISCELLANEOUS	2	$ 50.00	EACH	$ 100.00
FILM AND DEVELOPMENT	2	$ 15.00		$ 30.00
			TOTAL COST:	**$ 151**
1 LITER SQUIRT BOTTLE		$ 2.43	EACH	$ -
2 OZ SOIL JAR		$ 2.13	EACH	$ -
4 OZ SOIL JAR		$ 2.69	EACH	$ -
40 ML GLASS VIAL		$ 1.33	EACH	$ -
5 GALLON COLLAPSIBLE JUG		$ 4.45	EACH	$ -
ACETONE, PESTICIDE GRADE		$ 34.98	LITER	$ -
BRUSH - LONG HANDLED		$ 6.04	EACH	$ -
BUBBLE PACK		$ 0.16	FOOT	$ -
CAUTION TAPE	1	$ 17.30	ROLL	$ 17.30
DEIONIZED WATER		$ 2.29	GALLON	$ -
DISPOSALE BAILER		$ 7.65	EACH	$ -
DISPOSABLE INLINE FILTER		$ 14.14	EACH	$ -
DRAEGER TUBE	1	$ 5.70	EACH	$ 5.70
EMERGENCY HORN		$ 13.13	EACH	$ -
EYE WASH BOTTLES - DISPOSABLE		$ 5.64	EACH	$ -
FIELD BOOK		$ 7.47	EACH	$ -
FLAGGING		$ 1.11	ROLL	$ -
GRADE STAKES		$ 12.36	BUNDLE	$ -
HEXANE, PESTICIDE GRADE		$ 38.06	LITER	$ -
LIQUINOX		$ 23.42	GALLON	$ -
METHANOL		$ 28.89	LITER	$ -
NITRIC ACID		$ 47.00	500 mL	$ -
pH PAPER		$ 9.08	PACKAGE	$ -
PLASTIC SHEETING		$ 34.06	ROLL	$ -
PLASTIC TUB		$ 16.66	EACH	$ -
RECORDABLE CD MEDIA		$ 9.00	EACH	$ -
SPAN GAS (ISOBUTYLENE & ZERO AIR)	1	$ 33.63	CYLINDER	$ 33.63
STAINLESS STEEL BOWL	1	$ 16.21	EACH	$ 16.21
STAINLESS STEEL SPATULA	2	$ 1.55	EACH	$ 3.10
STAINLESS STEEL SPOON	1	$ 2.68	EACH	$ 2.68
SUPER WHALE PUMP - COMPLETE **		$ 46.35	EACH	$ -
SUPER WHALE PUMP ONLY **		$ 28.23	EACH	$ -
TAPE DISPENSER	1	$ 6.80	EACH	$ 6.80
TEFLON COATED BAILER LINE		$ 0.89	FOOT	$ -
TUBING - PVC -CLEAR	100	$ 0.33	FOOT	$ 33.00
TUBING - PVC - REINFORCED		$ 0.57	FOOT	$ -
TUBING - TEFLON/SILICON		$ 3.22	FOOT	$ -
			SUBTOTAL:	**$ 118**
Personal Protective Equipment				
BOOTIES		$ 2.57	PAIR	$ -
COVERALLS		$ 1.28	EACH	$ -
COVERALLS, INSULATED		$ 5.74	EACH	$ -
EAR PLUGS	50	$ 0.15	PAIR	$ 7.50
GLOVES - NITRILE		$ 1.34	PAIR	$ -
GLOVES - VITON *		$ 54.00	PAIR	$ -
GLOVES - COTTON LINERS		$ 0.33	PAIR	$ -
GLOVES - DISPOSABLE, VINYL	50	$ 0.36	PAIR	$ 18.00
GLOVES - SILVER SHIELD		$ 4.15	PAIR	$ -
GOGGLES/SAFETY GLASSES		$ 0.64	EACH	$ -
PACKING/DUCT TAPE		$ 4.27	ROLL	$ -
RESPIRATOR CARTRIDGES	1	$ 17.25	PAIR	$ 17.25
TYVEK SUIT - POLY COATED	1	$ 4.10	SUIT	$ 4.10
			SUBTOTAL:	**$ 47**
TOTAL CONSUMABLE SUPPLIES			**TOTAL COST:**	**$ 316.27**

Notes:
* Rates are in accordance with Table 2.10(c)5 of contract.
* * Shall only be used on a case by case basis subject to DEC project manager approval.

Schedule 2.11(d) 5
Consumable Supplies

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Date Prepared: 06/13/06

Task 2 - Pre-Design

Item	Estimated Quantity	Unit Cost ($)	Unit	Total Budgeted Cost ($) (Col. 2 x 3)
TOPOGRAPHIC MAPS		$ 8.25	EACH	$ -
AERIAL PHOTOGRAPHS		$ 6.50	EACH	$ -
GC Standards		$ 35.00	EACH	$ -
MISCELLANEOUS		$ 50.00	EACH	$ -
FILM AND DEVELOPMENT		$ 15.00		$ -
			TOTAL COST:	**$ -**
1 LITER SQUIRT BOTTLE		$ 2.43	EACH	$ -
2 OZ SOIL JAR		$ 2.13	EACH	$ -
4 OZ SOIL JAR		$ 2.69	EACH	$ -
40 ML GLASS VIAL		$ 1.33	EACH	$ -
5 GALLON COLLAPSIBLE JUG		$ 4.45	EACH	$ -
ACETONE, PESTICIDE GRADE		$ 34.98	LITER	$ -
BRUSH - LONG HANDLED		$ 6.04	EACH	$ -
BUBBLE PACK		$ 0.16	FOOT	$ -
CAUTION TAPE		$ 17.30	ROLL	$ -
DEIONIZED WATER		$ 2.29	GALLON	$ -
DISPOSALE BAILER		$ 7.65	EACH	$ -
DISPOSABLE INLINE FILTER		$ 14.14	EACH	$ -
DRAEGER TUBE		$ 5.70	EACH	$ -
EMERGENCY HORN		$ 13.13	EACH	$ -
EYE WASH BOTTLES - DISPOSABLE		$ 5.64	EACH	$ -
FIELD BOOK		$ 7.47	EACH	$ -
FLAGGING		$ 1.11	ROLL	$ -
GRADE STAKES		$ 12.36	BUNDLE	$ -
HEXANE, PESTICIDE GRADE		$ 38.06	LITER	$ -
LIQUINOX		$ 23.42	GALLON	$ -
METHANOL		$ 28.89	LITER	$ -
NITRIC ACID		$ 47.00	500 mL	$ -
pH PAPER		$ 9.08	PACKAGE	$ -
PLASTIC SHEETING		$ 34.06	ROLL	$ -
PLASTIC TUB		$ 16.66	EACH	$ -
RECORDABLE CD MEDIA		$ 9.00	EACH	$ -
SPAN GAS (ISOBUTYLENE & ZERO AIR)		$ 33.63	CYLINDER	$ -
STAINLESS STEEL BOWL		$ 16.21	EACH	$ -
STAINLESS STEEL SPATULA		$ 1.55	EACH	$ -
STAINLESS STEEL SPOON		$ 2.68	EACH	$ -
SUPER WHALE PUMP - COMPLETE **		$ 46.35	EACH	$ -
SUPER WHALE PUMP ONLY **		$ 28.23	EACH	$ -
TAPE DISPENSER		$ 6.80	EACH	$ -
TEFLON COATED BAILER LINE		$ 0.89	FOOT	$ -
TUBING - PVC -CLEAR		$ 0.33	FOOT	$ -
TUBING - PVC - REINFORCED		$ 0.57	FOOT	$ -
TUBING - TEFLON/SILICON		$ 3.22	FOOT	$ -
			SUBTOTAL:	**$ -**
Personal Protective Equipment				
BOOTIES		$ 2.57	PAIR	$ -
COVERALLS		$ 1.28	EACH	$ -
COVERALLS, INSULATED		$ 5.74	EACH	$ -
EAR PLUGS		$ 0.15	PAIR	$ -
GLOVES - NITRILE		$ 1.34	PAIR	$ -
GLOVES - VITON *		$ 54.00	PAIR	$ -
GLOVES - COTTON LINERS		$ 0.33	PAIR	$ -
GLOVES - DISPOSABLE, VINYL		$ 0.36	PAIR	$ -
GLOVES - SILVER SHIELD		$ 4.15	PAIR	$ -
GOGGLES/SAFETY GLASSES		$ 0.64	EACH	$ -
PACKING/DUCT TAPE		$ 4.27	ROLL	$ -
RESPIRATOR CARTRIDGES		$ 17.25	PAIR	$ -
TYVEK SUIT - POLY COATED		$ 4.10	SUIT	$ -
			SUBTOTAL:	**$ -**
TOTAL CONSUMABLE SUPPLIES			**TOTAL COST:**	**$ -**

Notes:
* Rates are in accordance with Table 2.10(c)5 of contract.
* * Shall only be used on a case by case basis subject to DEC project manager approval.

Schedule 2.11(d) 5
Consumable Supplies

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Date Prepared: 06/13/06

Task 5 - Remedial Oversight

Item	Estimated Quantity	Unit Cost ($)	Unit	Total Budgeted Cost ($) (Col. 2 x 3)
TOPOGRAPHIC MAPS		$ 8.25	EACH	$ -
AERIAL PHOTOGRAPHS		$ 6.50	EACH	$ -
GC Standards		$ 35.00	EACH	$ -
MISCELLANEOUS		$ 50.00	EACH	$ -
FILM AND DEVELOPMENT		$ 15.00		$ -
			TOTAL COST:	**$ -**
1 LITER SQUIRT BOTTLE		$ 2.43	EACH	$ -
2 OZ SOIL JAR		$ 2.13	EACH	$ -
4 OZ SOIL JAR		$ 2.69	EACH	$ -
40 ML GLASS VIAL		$ 1.33	EACH	$ -
5 GALLON COLLAPSIBLE JUG		$ 4.45	EACH	$ -
ACETONE, PESTICIDE GRADE		$ 34.98	LITER	$ -
BRUSH - LONG HANDLED		$ 6.04	EACH	$ -
BUBBLE PACK		$ 0.16	FOOT	$ -
CAUTION TAPE		$ 17.30	ROLL	$ -
DEIONIZED WATER		$ 2.29	GALLON	$ -
DISPOSALE BAILER		$ 7.65	EACH	$ -
DISPOSABLE INLINE FILTER		$ 14.14	EACH	$ -
DRAEGER TUBE		$ 5.70	EACH	$ -
EMERGENCY HORN		$ 13.13	EACH	$ -
EYE WASH BOTTLES - DISPOSABLE		$ 5.64	EACH	$ -
FIELD BOOK		$ 7.47	EACH	$ -
FLAGGING		$ 1.11	ROLL	$ -
GRADE STAKES		$ 12.36	BUNDLE	$ -
HEXANE, PESTICIDE GRADE		$ 38.06	LITER	$ -
LIQUINOX		$ 23.42	GALLON	$ -
METHANOL		$ 28.89	LITER	$ -
NITRIC ACID		$ 47.00	500 mL	$ -
pH PAPER		$ 9.08	PACKAGE	$ -
PLASTIC SHEETING		$ 34.06	ROLL	$ -
PLASTIC TUB		$ 16.66	EACH	$ -
RECORDABLE CD MEDIA		$ 9.00	EACH	$ -
SPAN GAS (ISOBUTYLENE & ZERO AIR)		$ 33.63	CYLINDER	$ -
STAINLESS STEEL BOWL		$ 16.21	EACH	$ -
STAINLESS STEEL SPATULA		$ 1.55	EACH	$ -
STAINLESS STEEL SPOON		$ 2.68	EACH	$ -
SUPER WHALE PUMP - COMPLETE **		$ 46.35	EACH	$ -
SUPER WHALE PUMP ONLY **		$ 28.23	EACH	$ -
TAPE DISPENSER		$ 6.80	EACH	$ -
TEFLON COATED BAILER LINE		$ 0.89	FOOT	$ -
TUBING - PVC -CLEAR		$ 0.33	FOOT	$ -
TUBING - PVC - REINFORCED		$ 0.57	FOOT	$ -
TUBING - TEFLON/SILICON		$ 3.22	FOOT	$ -
			SUBTOTAL:	**$ -**
Personal Protective Equipment				
BOOTIES		$ 2.57	PAIR	$ -
COVERALLS		$ 1.28	EACH	$ -
COVERALLS, INSULATED		$ 5.74	EACH	$ -
EAR PLUGS		$ 0.15	PAIR	$ -
GLOVES - NITRILE		$ 1.34	PAIR	$ -
GLOVES - VITON *		$ 54.00	PAIR	$ -
GLOVES - COTTON LINERS		$ 0.33	PAIR	$ -
GLOVES - DISPOSABLE, VINYL		$ 0.36	PAIR	$ -
GLOVES - SILVER SHIELD		$ 4.15	PAIR	$ -
GOGGLES/SAFETY GLASSES		$ 0.64	EACH	$ -
PACKING/DUCT TAPE		$ 4.27	ROLL	$ -
RESPIRATOR CARTRIDGES		$ 17.25	PAIR	$ -
TYVEK SUIT - POLY COATED		$ 4.10	SUIT	$ -
			SUBTOTAL:	**$ -**
TOTAL CONSUMABLE SUPPLIES			**TOTAL COST:**	**$ -**

Notes:
* Rates are in accordance with Table 2.10(c)5 of contract.
* * Shall only be used on a case by case basis subject to DEC project manager approval.

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(e)
Cost-Plus-Fixed-Fee Subcontracts

Pre-Design

Name of Subcontractor	**Services to be Performed**	**Year**	**Subcontract Price**
YEC	Survey and CAD	2006	**$ 14,999**

A) Direct Salary Costs

Professional Responsibility Level	Labor Grade	Ave. Reimbursement Rate ($/hr)	Max. Reimbursement Rate ($/hr)	Est. No. of Hours	Total Est. Direct Salary Cost (Ave. Reimb. Rate x Est. # of Hrs.)
Principal	VIII	$ 63.16	$ 68.23	0	$ -
Senior Geologist/Scientist/ Engineer/ Licensed Surveyor	VIII	$ 41.77	$ 45.94	46	$ 1,921.42
Staff Geologist/ Scientist/Engineer	IV	$ 36.28	$ 39.93	0	$ -
Staff Geologist/ Scientist/Engineer/CAD Operator	III	$ 31.51	$ 34.96	14	$ 441.14
Senior Technician/Staff Engineer/Scientist/Geologist	III	$ 23.30	$ 26.12	40	$ 932.00
Technician/Draftsperson	I	$ 21.11	$ 23.66	40	$ 844.40
			Total Direct Salary Costs		$ 4,139

B) Indirect Costs

Indirect costs shall be paid based on a percentage of direct salary costs incurred which shall not exceed a maximum of 117% or the actual rate calculated in accordance with 48 CFR Federal Acquisition Regulation, whichever is lower.

Amount budgeted for indirect costs is: $ 4,843

C) Maximum Reimbursement Rates for Direct Non-Salary Costs

Item	**Max. Reimbursement Rate (Specify Unit)**	**Est. No. of Units**	**Total Est. Cost**
Mileage	$ 0.445 /mi.	1000	$ 445.00
Tolls	$ 16.00 /trip	5	$ 80.00
			$ -
Survey Equipment Rental	$ 65.00 /day	5	$ 325.00
CAD Equipment	$ 15.00 /hour	12	$ 180.00
GPS NYS Plane Coordinates*	$ 1,500.00 /site	1	$ 1,000.00
Aerial Photography Mapping (1' contour, 1'=20', 13 acres)	$ 2,640.00	1	$ 2,640.00
Total Direct Non-Salary Costs			$ 4,670

D) Fixed Fee

The fixed fee is: (15% of Total Direct and Indirect Salary Costs) $ 1,347
See Schedule 2.10(h) for how the fixed fee should be claimed.

1) These rates will be held firm until October 31, 2006
2) Reimbursement will be limited to the lesser of either the individuals actual hourly rate or the maximum rate for each labor category.
3) Reimbursement will be limited to the maximum reimbursement rate for the professional responsibility level of the actual work performed.
4) Only those labor classifications indicated with an asterisk will be entitled to overtime premium.
5) Reimbursement for technical time of principals, owners and officers will be limited to the maximum reimbursement rate of that labor category, the actual hourly labor rate paid, or the State M-6 job rate, whichever is lower.
6) The maximum rates in each labor category can be modified only by mutual written agreement and approved by both the contractor and the Department.
7) This Footnote applies to Schedules for years 4 through 7 only. If the U.S. cost-of-living index increases at a rate greater than 6% compounded annually, the maximum salary rates will be subject to renegotiation for future years of the contract. There shall be no retroactive adjustments of payment as a result of renegotiated salary schedules.

Assumptions:

Samples as per workplan including 2 contingency subsurface soil samples
QA/QC sampling as per workplan
2 rounds of site survey (1st round - certified boundary, 2 round -sample locations)

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(e)
Cost-Plus-Fixed-Fee Subcontracts

Septic sampling conducted during non freeze conditions
Drilling conducted when ground is frozen over.
Core sampler by driller
All laboratory analytical, IDW (investigation derived waste) and drillers costs will be provided by MACTEC

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(f)
Unit Price Subcontracts

Pre-Design

Name of Subcontractor	Service		Price	Management Fee
neither minority or woman owned business				
Katahdin Analytical	Analytical		$ 8,316	$ -
Item	**Units**	**UOM**	**Unit Cost**	**Total Cost**
Groundwater Profiling				$ -
Water TCL- VOCs	9	ea	$ 85.00	$ 765.00
Nickel and Zinc	33	ea	$ 32.00	$ 1,056.00
				$ -
				$ -
Geotech and Delineation Soil Samples				$ -
Nickel	45	ea	$ 32.00	$ 1,440.00
SPLP Nickel	45	ea	$ 107.00	$ 4,815.00
Grain Size	2	ea	$ 120.00	$ 240.00

Subtotal Cost:	$	8,316.00
Management Fee:	$	-
Total:	**$**	**8,316.00**

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(f)
Unit Price Subcontracts

Pre-Design

Name of Subcontractor	Service		Price	Management Fee
neither minority or woman owned business Columbia	Analytical		$ 1,838	$ -
Item	**Units**	**UOM**	**Unit Cost**	**Total Cost**
TCL - VOCs TO15				$ -
Indoor Air and SubSlab		ea	$ 265.00	$ -
Soil Vapor	7	ea	$ 250.00	$ 1,750.00
Reporting	1	LS	5%	$ 87.50
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

Subtotal Cost:	$	1,838
Management Fee:	$	-
Total:	**$**	**1,838**

Engineer: MACTEC Engineering and Consulting **Date Prepared: 06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(f)
Unit Price Subcontracts

Pre-Design 2

Name of Subcontractor	Service	Price	Management Fee
neither minority or woman owned business ADT	Direct Push Drilling	$ 14,380	$ 575

Item	Units	UOM	Unit Cost	Total Cost
Mobilization	1	$/ls	$1,200.00	$ 1,200.00
Modified Level C personal protection	*	$/psn/d.	$50.00	
DIRECT PUSH SYSTEMS				
Direct Push System - Truck Mounted	10	$/day	$1,200.00	$ 12,000.00
Direct Push System - Special Access Mounted (ATV Skid)		$/day	$1,400.00	$ -
Direct Push System - Special Access Mounted (tripod, cart for inside buildings)		$/day	$1,400.00	$ -
Additional Items				
Temporary Decon Pad (Mobil)	1	$/ls	$300.00	$ 300.00
Piezometer installed in direct push hole - 1" diameter Sch. 40 PVC, including riser, screen, sandpack and bentonite seals/grout Depths of 0 ft to < 30 ft		$/lf.	$6.00	$ -
Piezometer installed in direct push hole - 1" diameter Sch. 40 PVC, including riser, screen, sandpack and bentonite seals/grout Depths of < 30 ft to <60 ft		$/lf.	$8.00	$ -
6" steel flush mounted vault w/water tight seal		$/ea	$175.00	$ -
Cost to supply USDOT 55 gallon drum (solid and/or liquid)	1	$/ls	$50.00	$ 50.00
Goundwater sample with hydropunch (or equivalent)	24	$/ea	$20.00	$ 480.00
Soil gas sample with sealed sample point (i.e.geoprobe PRT)	6	$/ea	$50.00	$ 300.00
Concrete		$/bag	$10.00	$ -
Asphalt patch	5	$/bag	$10.00	$ 50.00
**Membrane Interface Probe with FID, PID, ECD Detectors		$/ls	N/A	

Subtotal Cost:	$	14,380
Management Fee:	$	575
Total:	**$**	**14,955**

Engineer: MACTEC Engineering and Consulting **Date Prepared:** **06/13/06**
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27

Schedule 2.11(f)
Unit Price Subcontracts

Pre-Design

Name of Subcontractor	Service		Price	Management Fee
neither minority or woman owned business			$ -	$ -

Item	Units	UOM	Unit Cost	Total Cost
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

Subtotal Cost: $ -
Management Fee: $ -
Total: **$ -**

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: All Tasks
Complete: 0.0%

Page: 1 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 42,928	$ -
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 66,882	$ -
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 109,810	$ -
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,092	$ -
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,204	$ -
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 19,296	$ -
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,107	$ -
8. Total Site Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 169,213	$ -
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,687	$ -
10. Total Site Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 176,900	$ -

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 1 - Work Plan
Complete: 0.0%

Page: 2 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,634	$ 3,634
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,662	$ 5,662
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,297	$ 9,297
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,608	$ 1,608
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,608	$ 1,608
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,905	$ 10,905
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 651	$ 651
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,556	$ 11,556

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 2 - Pre-Design
Complete: 0.0%

Page: 3 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,532	$ 6,532
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,177	$ 10,177
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 16,708	$ 16,708
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,628	$ 2,628
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,141	$ 1,141
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,769	$ 3,769
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,107	$ 40,107
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 60,585	$ 60,585
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,170	$ 1,170
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 61,755	$ 61,755

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 3 - Plans and Specifications
Complete: 0.0%

Page: 4 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,716	$ 15,716
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 24,486	$ 24,486
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,202	$ 40,202
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,000	$ 5,000
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,000	$ 5,000
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 45,202	$ 45,202
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,814	$ 2,814
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 48,016	$ 48,016

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 4 - PreAward Services
Complete: 0.0%

Page: 5 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,317	$ 3,317
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,167	$ 5,167
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 8,484	$ 8,484
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,728	$ 1,728
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,728	$ 1,728
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,212	$ 10,212
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 594	$ 594
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,806	$ 10,806

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 5 - Remedial Oversight
Complete: 0.0%

Page: 6 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,934	$ 9,934
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,477	$ 15,477
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,410	$ 25,410
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,186	$ 6,186
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,186	$ 6,186
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 31,596	$ 31,596
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,779	$ 1,779
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 33,375	$ 33,375

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 6 - Health and Safety Plan
Complete: 0.0%

Page: 7 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,472	$ 1,472
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,294	$ 2,294
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,766	$ 3,766
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 27	$ 27
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 27	$ 27
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,793	$ 3,793
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 264	$ 264
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,056	$ 4,056

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 7 - Citizen Participation
Complete: 0.0%

Page: 8 OF 8
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,469	$ 1,469
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,289	$ 2,289
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,757	$ 3,757
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ 942	$ 942
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 31	$ 31
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 973	$ 973
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,730	$ 4,730
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 263	$ 263
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,993	$ 4,993

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: MACTEC Engineering and Consulting
Contract Number: D003826
Project Name: Alsy Manufacturing
Work Assignment Number: D003826-27
Task #/Name: Task 8 - QA/QC Activities
Complete: 0.0%

Page: 9 OF 9
Date Prepared: 06/13/06
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 854	$ 854
2. Indirect Costs 155.8%	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,331	$ 1,331
3. Subtotal Direct Salary Costs and Indirect Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,186	$ 2,186
4. Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5. Other Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 5	$ 5
6. Subtotal Direct Non-Salary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 5	$ 5
7. Subcontractors	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8. Total Task Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,191	$ 2,191
9. Fixed Fee 7%	$ -	$ -	$ -	$ -	$ -	$ -	$ 153	$ 153
10. Total Task Price	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,344	$ 2,344

Program Manager (Engineer) _____ Date: _____

Schedule 2.11(g) - Supplemental
COST CONTROL REPORT FOR SUBCONTRACTS

Engineer: MACTEC Engineering and Consulting **Page 1 of 1**
Contract Number: D003826 **Date Prepared: 06/13/06**
Project Name: Alsy Manufacturing **Billing Period:**
Work Assignment Number: D003826-27 **Invoice No.**

Pre-Design

Subcontract Name	A Subcontract Costs Claimed This Application Incl. Resubmittals	B Subcontract Costs Approved For Payment on Previous Applications	C Total Subcontract Costs To Date (A plus B)	D Subcontract Approved Budget	E Management Fee Budget	F Management Fee Paid	G Total Costs To Date (C plus F)
YEC			$ -	$ 14,998.77	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
Katahdin Analytical			$ -	$ 8,316.00	$ -		$ -
Columbia			$ -	$ 1,837.50	$ -		$ -
ADT			$ -	$ 14,380.00	$ 575.20		$ -
			$ -	$ -	$ -		$ -
TOTALS	$ -	$ -	$ -	$ 39,532.27	$ 575.20	$ -	$ -

Project Manager: _____ Date: _____

NOTES:
(1) Costs listed in Columns A, B, C & D do not include any management fee costs.
(2) Management fee is applicable to only properly procured, satisfactorily completed, unit price subcontracts over $10,000.
(3) Line 11, Column G should equal Line 7 (Subcontractors), Column D of Summary Cost Control Report.

Schedule 2.11(g) - Supplemental
COST CONTROL REPORT FOR SUBCONTRACTS

Engineer: MACTEC Engineering and Consulting **Page 1 of 1**
Contract Number: D003826 **Date Prepared: 06/13/06**
Project Name: Alsy Manufacturing **Billing Period:**
Work Assignment Number: D003826-27 **Invoice No.**
Work Plan

Subcontract Name	A Subcontract Costs Claimed This Application Incl. Resubmittals	B Subcontract Costs Approved For Payment on Previous Applications	C Total Subcontract Costs To Date (A plus B)	D Subcontract Approved Budget	E Management Fee Budget	F Management Fee Paid	G Total Costs To Date (C plus F)
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
TOTALS	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Project Manager: _____ Date: _____

NOTES:
(1) Costs listed in Columns A, B, C & D do not include any management fee costs.
(2) Management fee is applicable to only properly procured, satisfactorily completed, unit price subcontracts over $10,000.
(3) Line 11, Column G should equal Line 7 (Subcontractors), Column D of Summary Cost Control Report.

Schedule 2.11(g) - Supplemental
COST CONTROL REPORT FOR SUBCONTRACTS

Engineer: MACTEC Engineering and Consulting **Page 1 of 1**
Contract Number: D003826 **Date Prepared: 06/13/06**
Project Name: Alsy Manufacturing **Billing Period:**
Work Assignment Number: D003826-27 Plans and Specifications **Invoice No.**

Subcontract Name	A Subcontract Costs Claimed This Application Incl. Resubmittals	B Subcontract Costs Approved For Payment on Previous Applications	C Total Subcontract Costs To Date (A plus B)	D Subcontract Approved Budget	E Management Fee Budget	F Management Fee Paid	G Total Costs To Date (C plus F)
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
			$ -	$ -	$ -		$ -
TOTALS	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Project Manager: _____ Date: _____

NOTES:
(1) Costs listed in Columns A, B, C & D do not include any management fee costs.
(2) Management fee is applicable to only properly procured, satisfactorily completed, unit price subcontracts over $10,000.
(3) Line 11, Column G should equal Line 7 (Subcontractors), Column D of Summary Cost Control Report.

QUALITY ASSURANCE PROJECT PLAN

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

This QAPjP identifies sections of the QAPP (ABB-ES, 1994) that apply to the activities described in the Alsy Manufacturing site Remedial Design (RD) Work Plan (Work Plan), describes variances to those procedures, and specifies the analytical methods used for laboratory analysis of environmental samples.

1.0 GENERAL PROCEDURES AND PRACTICES

The general procedures used to conduct the RD at the Alsy site will be taken from the following sections of the QAPP:

Section 2.0	Program Organization and Responsibilities (Personnel for this project are identified in the RDWP)
Section 9.0	Internal Quality Control
Section 11.0	Preventive Maintenance
Section 12.0	Data Assessment
Section 13.0	Corrective Action
Section 14.0	Reports to Management

2.0 FIELD PROCEDURES AND SAMPLING

The following field investigation techniques and procedures set forth in the QAPP will be used at the site:

QA/QC Procedures	Section 3.0
Decontamination	Subsection 4.3
Sample Handling	Sections 4.0 and 5.0
General Soil Sampling Methodology	Subsection 4.6
General Water Sampling Methodology	Subsection 4.6
Terraprobe Sampling	Subsection 4.6.5
Hydraulic Conductivity Testing	Subsection 4.8.2.2
Field Instrument Calibration	Section 6.0

Variances to the above procedures are described in the following subsections 2.1 to 2.6.

2.1 Low Flow Overburden Groundwater Sampling

The following procedure was developed in accordance with the USEPA guidance document "Low Stress (low flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells", dated July 30, 1996. A Low Flow Groundwater Sampling Data Sheet will be completed for each sample.

Basic Materials and Equipment Required

- Geopump™ or Bladder Pump with Teflon™ or Teflon™ lined tubing capable of reaching the estimated depth of the well screen;
- Air compressor or compressed gas for bladder pump power supply;
- Water quality unit(s) capable of measuring pH, temperature, specific conductance, dissolved oxygen, redox potential and turbidity;
- Water level meter;
- Photoionization Detector;
- Graduated measuring device and stopwatch;
- Sample bottles and labels;
- Calculator, field data sheets, and logbook; and
- Well construction data.

Procedure

1. Remove well cap and immediately measure VOC concentrations at the well mouth using a PID.

2. If the well casing does not have a reference point [usually an indelible ink mark on the highest rim of the PVC casing], make one, and document it in the field logbook.

3. A static water level measurement will be collected using the top of riser as a reference point. Submersion of the water level meter probe should be minimized within the standing water column to avoid disturbance of colloidal particles.

4. The pump will be lowered into the water column so that the pump intake is located at the mid-point of the saturated screen interval. The pump should be lowered slowly into the water column to minimize the amount of mixing in the well. The discharge line should be secured to minimize movement of the pump during sampling activities.

5. Assemble air lines, bladder pump control box, and in-line water quality monitoring system for bladder pump. Assemble tubing and in-line water quality monitoring system for peristaltic pump. The water quality system should include the following parameters monitored in-line: pH, temperature, specific conductance, redox potential, dissolved oxygen. Turbidity will be monitored separately from those parameters monitored in-line.

6. The depth to water in the well will be re-measured after pump insertion and compared to the initial water level measurement; if the readings vary by greater than 0.5 feet, wait a period of 5 minutes and re-measure the water level and document the measurement before purging is initiated.

7. The initial purging rate should be at the lowest rate obtainable with the pump. The pump start time should be recorded and the flow rate will be measured and recorded using a graduated measuring device and a stopwatch. Purging rates should not exceed 500 milliliters per minute. During the initial period of pumping, an estimated 5 to 10 minutes, the depth to water in the well should be measured frequently (approximately once per minute) to enable timely pumping rate adjustments in attempts to minimize significant drawdown (i.e., = 0.3 feet) in

the well. If significant drawdown is observed, pumping rates should be decreased until drawdown is no longer occurring.

8. The initial groundwater sample discharged from the tubing will be monitored for in-line field parameters as described above and documented along with start time a Low Flow Groundwater Sampling Data Sheet.

9. In-line field parameters (as depicted in step 5) and the depth to water will be measured at five minute intervals (initially the water level will be measured more frequently as described in step 7). The data and the associated time will be documented on the Low Flow Groundwater Sampling Data Sheet. Attempts will be made to minimize the drawdown in the well during pumping to less than 0.3 feet, by adjusting the pump flow rate. Drawdown for each well will vary depending on the recharge capacity of the overburden and bedrock units.

10. During pump start-up, drawdown may exceed the 0.3 feet target and recover as flow adjustments are made. Purge volume calculations should include the stabilized drawdown value, not the initial drawdown. Do not allow the water level to fall below the intake of the pump (if the static water level is above the well screen, do not allow the water level to fall below the top of the well screen). The final purge volume must be greater than the stabilized drawdown volume, plus the extraction of the tubing volume.

11. Purging requirements are met once at least the minimum required purge volume is met (See #10) and when in-line (collected via a flow through cell) water quality readings (three consecutive readings at five minute intervals) meet the following criteria:

    - Turbidity (± 10% for values greater than 10 NTU);
    - Temperature (± 10%)
    - Dissolved Oxygen (±10%);
    - Specific Conductance (±3%);
    - pH (± 0.1 unit); and
    - Redox Potential (± 10 millivolts).

    If the final drawdown measures greater than 0.3 feet, the volume of water drawdown will be calculated and the calculated volume purged in addition to the minimum purge volume.

    If the above criteria are not achieved, due to excessive drawdown, drawdown below the pump intake or excessive purging (> 1 hours) without stabilization of water quality measurements, alternative sampling procedures can be initiated. Details of reasons why low flow criteria were not obtainable should be clearly documented in the log book and on the sample sheet. The following three options may be implemented, depending on the specific situation.

    a) Continue purging until parameter stabilization is achieved.

    b) Discontinue purging activities and do not collect a sample.

    c) Discontinue purging and collect samples documenting in the field logs the circumstances surrounding the sample collection.

If, while purging, the recharge rate is less than the lowest pumping rate obtainable with the pump, purge the saturated interval to dryness regardless of the water quality measurements. The well should be sampled as soon as the water level has recovered sufficiently to collect the appropriate volume needed for all anticipated samples (ideally the intake should not be moved during this recovery period). Samples may then be collected regardless of field water quality parameter readings.

12. Following purging procedures, the flow through cell will be disconnected, the flow rate re-adjusted to approximately 100 milliliter per minute (ml/minute). Samples will then be collected directly through the pump/tubing in the appropriate sample bottles.

    VOC samples should be collected first and directly into pre-preserved sample containers. Fill all sample containers by allowing the pump discharge to flow gently down the inside of the container with minimal disturbance.

    During purging and sampling, the tubing should remain filled with water so as to minimize possible changes in water chemistry upon contact with the atmosphere. If the sampling tube is not completely filled to the sampling point, use one of the following procedures to collect the samples, 1) add a clamp, connector (Teflon or stainless steel) or valve to constrict the discharge end of the tubing; 2) insert a small diameter Teflon tube into the discharge end of the pump tubing, collect samples from the insert tubing. 3) collect non-VOC samples first, then increase the flow rate slightly until the water completely fills the tubing, collect samples and document the new flow rate, water quality readings, and associated drawdown measurements.

    If sample containers are not pre-preserved, add preservatives immediately after sample collection. Check pH value (with pH paper) all preserved samples to ensure proper preservation. Do not check VOC samples or other samples with zero headspace.

    If filtered samples are to be collected, collect samples using the same low flow technique. The filter should be pre-rinsed with 25-50 ml of groundwater prior to sample collection. The flow rate may have to be increased due to restrictions to flow subsequent to filter placement on the discharge line.

    Label each sample with the appropriate sample identification code, sample date, and time of the last sample collected sample time. Samples requiring cooling (i.e., VOCs) will be placed in a cooler immediately after collection and kept at a temperature of 4 degrees Celsius until relinquished to the on-site laboratory or sample manager.

13. The bladder pump will then be removed and decontaminated using the following procedure: flushed with a Liquinox and potable water mixture (approximately 3 gallons), rinsed with potable water (approximately 3 gallons) and rinsed with deionized water (approximately 3 gallons). The peristaltic pump will be removed and tubing decontaminated using the following procedure: flushed with a Liquinox and potable water mixture (approximately 2 gallons), rinsed with potable water (approximately 2 gallons) and rinsed with deionized water (approximately 2 gallons). Dedicated peristaltic pump tubing will be used where possible.

Required Documentation

The following items represent the minimum required information to be documented in the field logbooks or field data records. Each individual shall document, in the field logbook or field data record, the following appropriate level of detail for each well location prior to setting up on the next exploration location.

- Page number, job number, well ID and date at the top of each page;
- Clock time of all water levels measurements and reference point used;
- Calculation for one purge volume and the total volume purged;
- Clock time purging initiated;
- All purging rate adjustments and clock time adjustment made;
- All in-line water quality readings (i.e., pH, temperature, specific conductance, dissolved oxygen, redox potential, and turbidity);
- Drawdown measurements;
- Analytical parameters collected and associated volumes;
- Assign sample identification code;
- Decontamination of pump;
- Brief description of any problems or occurrences; and
- Time of demobilization.

2.2 Investigation Derived Waste

Decontamination of equipment will follow procedures described in the QAPP except for disposal of purge water. Well water purged prior to groundwater sampling will be considered contaminated and placed in USDOT-approved 55-gallon containers if visual and olfactory signs of contamination are noted. If no visual and olfactory signs of contamination are noted, water will be considered non-hazardous and will be allowed to infiltrate into the ground surface in the vicinity of the well/exploration.

Soil cuttings will be screened for VOCs with a PID. Soils with visual evidence of contamination, or with PID readings greater than 5 ppm will be containerized in USDOT-approved 55-gallon containers for off-site disposal. Soils with sustained PID readings of less than or equal to 5 ppm will be considered non-contaminated and will be used as backfill for the borings at the approximate interval from which they were extracted. Remaining uncontaminated soils will be spread evenly on the ground surface in unpaved areas of the Site.

Off-site transport and disposal of generated wastes (hazardous and non-hazardous) will be the responsibility of MACTEC.

2.3 Sampling and Analysis Program

Data Quality Objectives (DQOs) for the sampling activities are summarized in Table A-1. DQOs are described in accordance with USEPA guidelines (USEPA, 1987) and the NYSDEC Analytical Services Protocols (ASP) (NYSDEC, 2000).

Analytical data requirements were established using the methods described in the ASP. Analytical methods to be used for laboratory analysis are presented in Table A-2. Analytical Level B deliverables as described in the ASP will be provided by the laboratory for the data. DUSR will be issued based on DEC guidelines (NYSDEC, 1997).

2.4 Sub Slab Vapor and Indoor Air Sampling

Prior to commencing the commercial sub-slab and indoor air sampling, the owner/occupant of the building will be interviewed and the Indoor Air Quality Questionnaire and Building Inventory Form will be completed by the sampler (Appendix A-1).

Indoor air samples will be collected as outlined in the SOP included as Appendix A-2. Sub-slab vapor samples will be collected as outlined in the SOP included as Appendix A-3. Ambient air samples will be collected as outlined in the SOP included as Appendix A-4.

2.5 Sampling Identification

Sample identification will adhere to the 14-digit system outlined in Subsection 4.1 of the QAPP with the following exception and clarifications:

Digits 1,2 Sample identification will begin with the site designator AM.

Digits 3,4 Sample Type will include the following identifications:
AA- Ambient Air
GS – Geoprobe® Soil
GV- Geoprobe® Vapor
GW- Geoprobe® Groundwater
IA – Indoor Air
SV – Soil Vapor

2.6 Drum Labeling

Drums will be labeled with the following information:

- Drum contents;
- Site name and the NYSDEC Site Number; and
- Date drum filling began and date drum was sealed.

Upon completion of the project, the NYSDEC Project Manager will be notified in writing about the location, number, and any relevant information regarding drums staged on the site. Drums are to be stored on wooden pallets. Drums shall be staged as directed by the NYSDEC. Final off-site transport and disposal of generated wastes will be coordinated by MACTEC.

REFERENCES

ABB Environmental Services, 1994. *Program Quality Assurance Program Plan*. Prepared for the New York State Department of Environmental Conservation, Albany, New York. June 1994.

New York State Department of Environmental Conservation (NYSDEC), 1997. "Guidance for the Development of Data Usability Reports"; Division of Environmental Remediation; September 1997.

New York State Department of Environmental Conservation (NYSDEC), 2000. *"Analytical Services Protocols"*; 6/00 Edition; June 2000.

United States Environmental Protection Agency (USEPA), 1987. *"Data Quality Objectives for Remedial Response Activities"*; Office of Emergency and Remedial Response and Office of Waste Programs Enforcement; Washington DC; EPA/540/G-87/003; March 1987.

United States Environmental Protection Agency (USEPA), 1996. "Low Stress (low flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells"; July 30,1996.

TABLES

Table A-1
Analytical DQO Levels

Parameter	Use	Data Quality Level
PH Temperature Specific Conductance Turbidity	Provides physical and chemical data on groundwater samples for use during sampling collection.	Level I
PID screening	Provides qualitative real-time information on air quality in the breathing zone for health and safety decisions, and to identify potentially contaminated groundwater.	Level I
TCL VOCs, TAL metals, and sub-slab soil vapor and indoor air.	Provides analytical information to: 1) compare to standards and guidance values, locate downgradient monitoring wells, and conduct the remedial design.	Level III

Notes:

TCL = target compound list
VOCs = volatile organic compounds
TAL = target analyte list

Table A-2
Summary of Analytical Methods

Media	Parameter	Method
Groundwater from Geoprobe® borings	TCL VOCS and TAL metals (nickel and zinc),	OLM04.2 and ILM02.1 using NYSDEC ASP 2000
Sub-slab Soil Vapor and Indoor Air	TCL VOCs	TO-15
Soil from Geoprobe® borings	TAL metals (nickel), grain size, SPLP metals (nickel)	ILM02.1 using NYSDEC ASP 2000, ASTM D422 (grain size), and ASTM 1312 (SPLP)

Notes:
TCL = target compound list
VOCs = volatile organic compounds
TAL = target analyte list

APPENDIX A-1

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

Performed by _____ Date Performed _____

Company Name _____ Phone No. _____

1. Occupant

Name:_____
Street Address:_____
Town:_____
County:_____
Home Phone No._____Office Phone No._____

2. Owner or Landlord
(if different from above)

Name:_____
Street Address:_____
Town:_____
County:_____
Home Phone No._____Office Phone No._____

A. <u>Building Construction Characteristics:</u>

Type (circle appropriate responses): Single Family Multiple Dwelling Commercial

Ranch	2-Family
Raised Ranch	Duplex
Split Level	Apartment House_____Units
Colonial	Number of Floors_____
Mobile Home	Other specify_____

Building Age_____ General Description of Building Construction Material _____
_____

Is the building insulated? Yes / No How air tight is the building_____
_____

B. Basement Construction Characteristics (circle all that apply):

1. Full basement, crawlspace, slab on grade, other_____
2. Basement floor: concrete, dirt, other _____
3. Concrete floor: unsealed, painted, covered; with _____
4. Foundation walls: poured concrete, block, laid up stone, other_____
5. The basement is: wet, damp, dry___Sump present? y / n ____water in sump y / n
   If the basement has a moisture problem, how many times a year?_____

   Comment:_____
6. The basement is: finished, unfinished_____
   If finished, how many rooms?_____
   How many used for more than 2 hours/day?_____
7. Identify potential soil vapor entry points (e.g., cracks, utility ports, floor drains, etc.)____
8. Describe how air tight the basement is:_____

_____

C. HVAC (circle all that apply):

1. The type of heating system(s) used in this residence is/are:

Hot Air Circulation	Heat Pump
Hot Water Radiation	Unvented Kerosene Heater
Steam Radiation	Wood Stove
Electric Baseboard	Other (specify)_____

2. The type(s) of fuel(s) used is/are: Natural Gas, Fuel Oil, Electric, Wood, Coal, Solar, Other (specify)_____
3. Is the heating system's power plant located in the basement or other area:_____
4. Is there air conditioning? Yes / No Central Air, or Window Units?
   Specify the location_____
5. Are there air distribution ducts present? Yes / No
6. Describe the supply and cold air return duct work in the basement including whether there is a cold air return. How tight are the duct joints?

_____
_____

D. Potential Indoor Sources of Pollution

1. Has the house ever had a fire? Yes / No
2. Is there an attached garage? Yes / No
3. Is a vehicle normally parked in the garage? Yes / No
4. Us there a kerosene heater present? Yes / No
5. Is there a workshop, hobby, or craft area in the residence? Yes / No
   If Yes, where and what _____
6. Is there a kitchen exhaust fan? Yes / No Where is it vented?_____
7. Is there a clothes dryer? Yes / No Where is it located?_____
   Where is it Vented?_____
8. Has a new carpet been installed in the home within the last year? Yes / No
   If yes, where?_____
9. Has any painting been completed in the last 6-months. Yes / No
   If yes, where?_____
10. Has the house ever been fumigated? If yes describe date, type, and location of treatment._____
11. Does anyone in the home regularly use or work in a dry cleaning service? Yes/No
    If Yes, explain (i.e. how often)_____
12. Does anyone in the home use solvents at work? Yes / No
    If yes, what solvents, and are clothes washed at home?_____
    _____
13. Use attached page to complete inventory of products used and stored in the building. Any product that contains volatile organic compounds, or chemicals similar to the target compounds should be listed, along with PID readings.

E. Water and Sewage (Circle appropriate responses):

Source of Water:

Public Water Drilled Well Driven Well Dug Well Other(specify)_____

Do you have a private well for purposes other than drinking? Yes / No
If yes, what is it used for_____

Water Specifications:

Well Diameter_____ Grouted or Ungrouted_____
Well Depth _____ Type of Storage Tank_____
Depth to Bedrock_____ Size of Storage Tank_____
Feet of Casing_____ Describe type(s) of treatment_____

Water Quality:

Taste and/or odor problems y / n If so describe_____
How long has the taste and/or odor been a present_____

Sewage Disposal: Public Sewer Septic Tank Leach Field Other (specify)_____

Distance from well to septic system_____Type of septic tank additive_____

F. Plan View:

Draw a plan view sketch for each floor of the residence and if applicable, indicate air sample locations, possible indoor air pollution sources and PID meter readings.

G. Potential Outdoor Sources of Pollution:

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on the spill location (if known), potential air contamination sources (industry, gas stations, repair shops, etc.), outdoor sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the location of the well and septic system if applicable, and a qualifying statement to help locate the site on a topographic map.

PRODUCT INVENTORY FORM

Make and Model of Field Instrument used:_____

Location	Product Description	Size (oz.)	Condition*	Chemical Ingredients	PID Reading	Photo ** Y/N

* Describe the Condition of the product container as **Unopened (UO), Used (U), or Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX A-2

INDOOR AIR SAMPLING

STANDARD OPERATING PROCEDURES USING SUMMA®-TYPE CANISTERS

Indoor Air Sampling
Standard Operating Procedures Using SUMMA®-Type Canisters

This document is a standard operating procedure (SOP) for the setup and collection of indoor air samples from residential, commercial, industrial, institutional, and multiuse buildings. This SOP is intended to be a general directive for the collection of indoor air samples using SUMMA®-type air canisters equipped with metering flow controllers for the purpose of collecting a "time-averaged" indoor air sample. This SOP is intended for 24-hour sample collection.

For the purposes of evaluating the potential vapor migration from soils and groundwater into indoor air, samples will be collected from the lowest usable area of the building. Indoor air samples may be collected from one of the following areas:

1) Unfinished basement or unfinished first floor of slab-on-grade building;
2) Finished basement or finished first floor of slab-on-grade building; or
3) First floor living area above a dirt-floored crawl space.

EQUIPMENT / MATERIAL LIST:

- Documentation of access permission from the owner to complete the sampling
- 6-liter, stainless steel, pre-evacuated SUMMA®-type canister - .laboratory provided
- Pressure gage with integrated 24-hour metering valve- laboratory provided
- Two, 9/16-inch, open-end wrenches
- PID – part per billion range detector for screening indoor air
- Wristwatch
- Digital camera
- Indoor Air Quality Questionnaire and Building Inventory Form (attached)
- Chain-of-Custody (COC) form -laboratory provided

Procedure for Indoor Air Sample Collection:

The following section provides a general guidance on the collection of indoor air samples; the sequence can be modified as needed based on site specific conditions at the time of sample collection.

Selection and Preparation of sample collection area

A. Conduct interview with occupant/owner. Complete Indoor Air Quality Questionnaire and Building Inventory Form

B. Observe the area for the apparent presence of items or materials that may potentially produce or emit VOCs and interfere with analytical laboratory analysis of the collected sample. Record relevant information on Building Inventory Form and document with digital photographs.

C. Using the PID, screen indoor air in the location intended for sampling and in the vicinity of potential VOC sources (i.e. paints, glues, household cleaners, dry cleaned clothes, etc.) to assess the potential gross presence of VOCs. Record PID readings on the sampling

form. Items or materials exhibiting PID readings shall be considered probable sources of VOCs and, given approval of the owner or occupant, will be removed prior to sampling. If practical, sampling will be rescheduled for 24-hours later.

Preparation of SUMMA®-type canister and collection of sample

A. Place SUMMA®-type canister at breathing zone height (approximately 3 to 5 feet above floor). Canister can be placed on a stable surface, such as a table or bookshelf, or affixing to a wall or ceiling support with nylon rope. Avoid placing canisters near windows or other potential sources of drafts and air supply vents.

B. Record SUMMA®-type canister serial number on sampling summary form and COC.

C. Record sample identification on canister ID tag, and record on sampling summary form and COC.

D. Remove brass plug from canister fitting.

E. Install pressure gage / metering valve on canister valve fitting and tighten. If pressure gage has additional (2nd) fitting, install brass plug from canister fitting into gage fitting and tighten.

F. Open and close canister valve.

G. Record gage pressure on sample summary form and COC. Gage pressure must read >25 inches Hg. Replace SUMMA®-type canister if gage pressure reads <25 inches Hg.

H. Remove brass plug from gage fitting and store for later use.

I. Open canister valve to initiate sample collection.

J. Record date and local time (24-hour basis) of valve opening on sampling summary form and COC.

K. Take digital photograph of SUMMA®-type canister and surrounding area.

Termination of sample collection

A. Revisit SUMMA®-type canister approximately at end of sample collection period (e.g., 24 hours after initiation of sample collection) and record gage pressure on sampling form and COC.

B. Record date and local time (24-hour basis) of valve closing on sampling form and COC.

C. Close canister valve.

D. Remove pressure gage / flow valve from canister.

E. Reinstall brass plug on canister fitting and tighten.

F. Remove SUMMA®-type canister from sample collection area.

Preparation and shipment of sample to analytical laboratory

A. Pack SUMMA®-type canister in shipping container, note presence of brass plug installed in tank fitting.

B. Complete COC and place requisite copies in shipping container.

C. Close shipping container and affix custody seal to container closure.

Quality Assurance/Quality Control (QA/QC) samples:

The collection of QA/QC samples will include the submittal of blind sample duplicates to the analytical laboratory for analyses of target compounds. Duplicate samples will be collected "side-by-side" over the same time interval.

APPENDIX A-3

SUBSTRUCTURE SOIL GAS SAMPLING
STANDARD OPERATING PROCEDURES USING SUMMA® -TYPE CANISTERS

Substructure Soil Gas Sampling
Standard Operating Procedures Using SUMMA ® type Canisters

This document is a standard operating procedure (SOP) for the setup and collection of substructure soil gas samples from beneath residential, commercial, industrial, institutional, and multiuse buildings. This SOP is intended to be a general directive for the collection substructure soil gas using SUMMA®-type air canisters equipped with metering flow controllers for the purpose of collecting a "time-averaged" indoor air sample. This SOP is intended for 24-hour sample collection. Substructure soil gas samples may be collected from one of the following areas:

Area 1) Subslab soil gas sample obtained via a temporary installed sampling port through apparent vapor barrier (such as floor slab or plastic liner); or
Area 2) Air sample obtained from crawl space or basement without an apparent vapor barrier.

EQUIPMENT / MATERIAL LIST:

- Documentation of access permission from the owner to complete the sampling
- 6-liter, stainless steel, pre-evacuated SUMMA®-type canister -laboratory provided
- Pressure gage with integrated 24-hour metering valve -laboratory prol1ided
- Two, 9/16-inch, open-end wrenches
- Photo Ionization Detector (PID) -for screening crawl space
- Utility Knife
- Electric hammer drill with 1-inch and 3/8-inch diameter drill bits
- Two 50-foot long electrical extension cords
- ¼-inch outer diameter (O.D.) Teflon® tubing
- ¼-inch stainless steel valve and stainless steel "tee" type fitting
- 60 cc polyethylene syringe for purging tubing
- 1-inch diameter rubber stopper with ¼-inch port
- Quick-drying expansive Portland cement
- Wristwatch
- Digital camera
- Flashlight
- Indoor Air Quality Questionnaire and Building Inventory Form (attached)
- Chain-of-Custody (COC) form -laboratory provided

Procedure for Substructure Soil Gas Sample Collection:

The procedures for substructure soil gas sample collections will be dependant on location category. During the occupant/owner interview and building survey the lowest accessible portion of the building (e.g., crawl space, basement, or first floor of slab-on-grade construction) will be observed to assess which substructure sampling area category is applicable. The steps provided below should be considered a general guidance on the collection of substructure soil gas samples for each location category; the sequence can be modified as needed based on site- or project-specific conditions at the time of sample collection.

Area 1: Subslab soil gas sample obtained via temporary installed sampling port through apparent vapor barrier (i.e. floor slab or plastic liner).

Selection and preparation of sample collection point

A. Observe the condition of the building floor slab for apparent penetrations such as concrete floor cracks, floor drains, or sump holes. Note the floor conditions on the sampling form and select a potential location or locations for a temporary subsurface probe. The location or locations should be central to the building away from foundation walls and apparent penetrations. Review the proposed location or locations with the occupant/owner describing how the sampling port or ports will be installed. After receiving' permission from the occupant/owner, mark the proposed location(s) and describe the location(s) on the sampling form.

B. Using the PID, screen indoor air in the area of floor penetrations such as concrete floor cracks, floor drains, or sump holes. Record the indoor air PID readings on the sampling form.

Installation of temporary subsurface sample point

A. Drill a 1-inch diameter hole about to 2 inches into the concrete slab using an electric hammer drill.

B. Extend the hole through the remaining thickness of the slab using a 3/8-inch drill bit. Extend the hold about three inches into the subslab material using either the drill bit or a steel probe rod. Vacuum hole to remove excess dust.

C. Insert a section of ¼-inch O.D. Teflon® tubing to the bottom of the floor slab. Seal the annular space between the 1-inch hole and 1/4-inch tubing by seating a tapered laboratory-grade rubber plug perforated with a 1/4.-inch hole into
the probe hole and if necessary capping the stopper with a beeswax seal. The beeswax will be melted with an electric heat gun.

D. Connect the ¼ -inch Teflon® tubing to a stainless steel valve using compression fittings. Open the in-line valve and purge the probe tubing using a polyethylene 60 cc syringe. Close the valve, remove and cap the syringe, and connect the ¼-inch Teflon® tubing and in-line valve to a SUMMA®-type canister. The air/soil gas syringe will be discharge out of doors. For duplicate sample locations connect a second canister

before purging by installing a 1/4-inch stainless steel "tee" fitting between the probe discharge tubing and the stainless steel valve.

Preparation of SUMMA®-type canister and collection of sample

A. Place SUMMA®-type canister adjacent to the temporary sampling port.

B. Record SUMMA®-type canister serial number on sampling summary form and COC.

C. Record sample identification on canister ID tag, and record on sampling summary form and COC.

D. Remove brass plug from canister fitting.

E. Install pressure gage / metering valve on canister valve fitting and tighten. If pressure gage has additional (2nd) fitting, install brass plug from canister fitting into gage fitting and tighten.

F. Open and close canister valve.

G. Record gage pressure on sample summary form and COC. Gage pressure must read >25 inches Hg. Replace SUMMA®-type canister if gage pressure reads <25 inches Hg.

H. Remove brass plug from gage fitting and store for later use.

I. Connect subsurface probe to end of in-line particular filter via ¼-inch O.D. Teflon® tubing and "swagelok®-type" fittings.

J. Open canister valve and in-line stainless steel valve to initiate sample collection.

K. Record date and local time (24-hour basis) of valve opening on sampling summary form and COC.

L. Take digital photograph of SUMMA®-type canister and surrounding area.

Termination of sample collection

A. Revisit SUMMA®-type canister approximately at end of sample collection period (e.g., 24 hours after initiation of sample collection) and record gage pressure on sampling form and COC.

B. Record date and local time (24-hour basis) of valve closing on sampling form and COC.

C. Close canister valve.

D. Disconnect Teflon® tubing and remove pressure gage / flow valve from canister.

E. Reinstall brass plug on canister fitting and tighten.

F. Remove SUMMA®-type canister from sample collection area.

G. Remove temporary probe and rubber stopper and fill the hole with a quick drying hydraulic cement. Finish flush with floor surface.

Area 2: Air sample obtained from crawl space or basement without an apparent vapor barrier.

Selection and Preparation of sample collection area

A. Conduct interview with occupant/owner. Complete Indoor Air Quality Questionnaire and Building Inventory Form

B. Observe the area for the apparent presence of items or materials that may potentially produce or emit VOCs and interfere with analytical laboratory analysis of the collected sample. Record relevant information on Building Inventory Form and document with digital photographs.

C. Using the PID, screen indoor air in the location intended for sampling and in the vicinity of potential VOC sources (i.e. paints, glues, household cleaners, dry cleaned clothes, etc.) to assess the potential gross presence of VOCs. Record PID readings on the sampling form. Items or materials exhibiting PID readings shall be considered probable sources of VOCs and, given approval of the owner or occupant, will be removed prior to sampling. If practical, sampling will be rescheduled for 24-hours later.

Preparation of SUMMA®-type canister and collection of sample

A. Place SUMMA®-type canister at breathing zone height (approximately 3 to 5 feet above basement floor or about 1 foot above floor of crawl space). Canister can be placed on a stable surface, such as a table or bookshelf, or affixing to a wall or ceiling support with nylon rope. Avoid placing canisters near windows or other potential sources of drafts and air supply vents.

B. Record SUMMA®-type canister serial number on sampling summary form and COC.

C. Record sample identification on canister ID tag, and record on sampling summary form and COC.

D. Remove brass plug from canister fitting.

E. Install pressure gage / metering valve on canister valve fitting and tighten. If pressure gage has additional (2nd) fitting, install brass plug from canister fitting into gage fitting and tighten.

F. Open and close canister valve.

G. Record gage pressure on sample summary form and COC. Gage pressure must read >25 inches Hg. Replace SUMMA®-type canister if gage pressure reads <25 inches Hg.

H. Remove brass plug from gage fitting and store for later use.

I. Open canister valve to initiate sample collection.

J. Record date and local time (24-hour basis) of valve opening on sampling summary form and COC.

K. Take digital photograph of SUMMA®-type canister and surrounding area.

Termination of sample collection

A. Revisit SUMMA®-type canister approximately at end of sample collection period (e.g., 24 hours after initiation of sample collection) and record gage pressure on sampling form and COC.

B. Record date and local time (24-hour basis) of valve closing on sampling form and COC.

C. Close canister valve.

D. Remove pressure gage / flow valve from canister.

E. Reinstall brass plug on canister fitting and tighten.

F. Remove SUMMA®-type canister from sample collection area.

Preparation and shipment of sample to analytical laboratory

A. Pack SUMMA®-type canister in shipping container, note presence of brass plug installed in tank fitting.
B. Complete COC and place requisite copies in shipping container.
C. Close shipping container and affix custody seal to container closure.

Quality Assurance/Quality Control (QA/QC) samples:

The collection of QA/QC samples will include the submittal of blind sample duplicates to the analytical laboratory for analyses of target compounds. Area 2- type duplicate samples will be collected "side-by-side" over the same time interval. Area 1- type duplicate samples will be obtained using a stainless steel "tee" type fitting and 1/4-inch O.D. Teflon- tubing connected to the same subsurface probe.

APPENDIX A-4

AMBIENT (OUTDOOR) AIR SAMPLING
STANDARD OPERATING PROCEDURES USING SUMMA®-TYPE CANISTERS

Ambient (Outdoor) Air Sampling
Standard Operating Procedures Using SUMMA®-type Canisters

This document is a standard operating procedure (SOP) for the setup and collection of ambient (outdoor) air samples from residential, commercial, industrial, institutional, and multiuse buildings. This SOP is intended to be a general directive for the collection of ambient air samples using SUMMA®-type air canisters equipped with metering flow controllers for the purpose of collecting a "time-averaged" indoor air sample. This SOP is intended for 24-hour sample collection.

EQUIPMENT / MATERIAL LIST:

- Documentation of access permission from the owner to complete the sampling
- 6-liter, stainless steel, pre-evacuated SUMMA®-type canister - .laboratory provided
- Pressure gage with integrated 24-hour metering valve- laboratory provided
- Two, 9/16-inch, open-end wrenches
- PID – part per billion range detector for screening indoor air
- Wristwatch
- Digital camera
- Indoor Air Quality Questionnaire and Building Inventory Form (attached)
- Chain-of-Custody (COC) form -laboratory provided

Procedure for Ambient (outdoor) Air Sample Collection:

The following section provides a general guidance on the collection of ambient air samples; the sequence can be modified as needed based on site specific conditions at the time of sample collection.

Selection and Preparation of sample collection area

A. Conduct interview with occupant/owner. Complete Indoor Air Quality Questionnaire and Building Inventory Form.

B. Choose an area for sample collection that is upwind of the property (properties) being assessed, if possible. Collect sample away from wind breaks, if possible.

C. Observe the area for the apparent presence of items or materials that may potentially produce or emit VOCs and interfere with analytical laboratory analysis of the collected sample (i.e. fuel tanks, gasoline, paint storage, etc.). Record relevant information on Building Inventory Form and document with digital photographs.

D. Using the PID, screen ambient air in the location intended for sampling to assess the potential gross presence of VOCs. Record PID readings on the sampling form.

Preparation of SUMMA® canister and collection of sample

A. Place SUMMA®-type canister approximately 5 feet above ground (or equivalent to the mid-point of the ground story of the building(s). Canister can be placed on a stable surface, or suspended from structure with nylon rope.

B. Record SUMMA®-type canister serial number on sampling summary form and COC.

C. Record sample identification on canister ID tag, and record on sampling summary form and COC.

D. Remove brass plug from canister fitting.

E. Install pressure gage / metering valve on canister valve fitting and tighten. If pressure gage has additional (2nd) fitting, install brass plug from canister fitting into gage fitting and tighten.

F. Open and close canister valve.

G. Record gage pressure on sample summary form and COC. Gage pressure must read >25 inches Hg. Replace SUMMA®-type canister if gage pressure reads <25 inches Hg.

H. Remove brass plug from gage fitting and store for later use.

I. Open canister valve to initiate sample collection.

J. Record date and local time (24-hour basis) of valve opening on sampling summary form and COC.

K. Take digital photograph of SUMMA®-type canister and surrounding area.

Termination of sample collection

A. Revisit SUMMA®-type canister approximately at end of sample collection period (e.g., 24 hours after initiation of sample collection) and record gage pressure on sampling form and COC.

B. Record date and local time (24-hour basis) of valve closing on sampling form and COC.

C. Close canister valve.

D. Remove pressure gage / flow valve from canister.

E. Reinstall brass plug on canister fitting and tighten.

F. Remove SUMMA®-type canister from sample collection area.

Preparation and shipment of sample to analytical laboratory

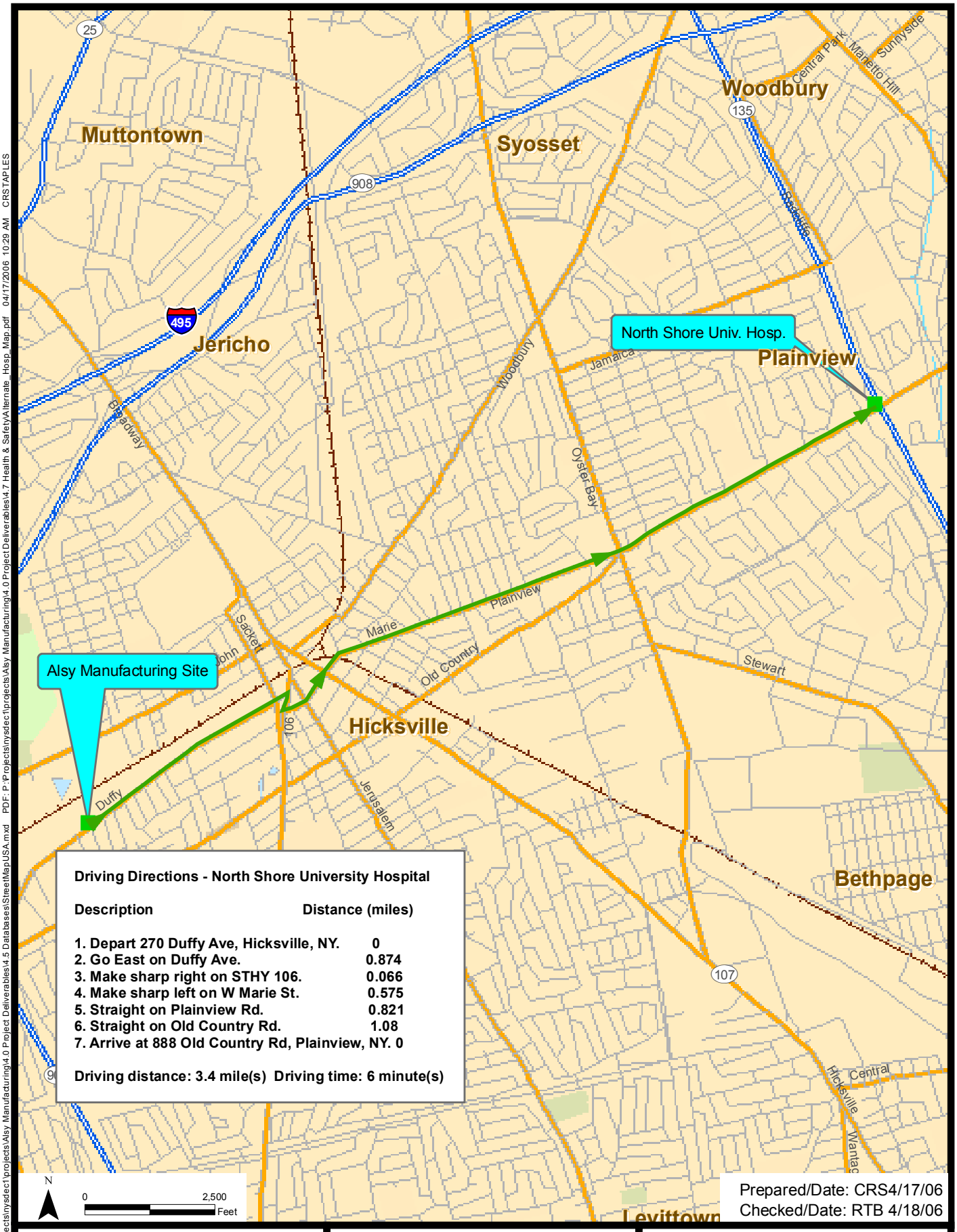
A. Pack SUMMA®-type canister in shipping container, note presence of brass plug installed in tank fitting.

B. Complete COC and place requisite copies in shipping container.

C. Close shipping container and affix custody seal to container closure.

Quality Assurance/Quality Control (QA/QC) samples:

The collection of QA/QC samples will include the submittal of blind sample duplicates to the analytical laboratory for analyses of target compounds. Duplicate samples will be collected "side-by-side" over the same time interval.



Driving Directions - North Shore University Hospital

Description	Distance (miles)
1. Depart 270 Duffy Ave, Hicksville, NY.	0
2. Go East on Duffy Ave.	0.874
3. Make sharp right on STHY 106.	0.066
4. Make sharp left on W Marie St.	0.575
5. Straight on Plainview Rd.	0.821
6. Straight on Old Country Rd.	1.08
7. Arrive at 888 Old Country Rd, Plainview, NY.	0

Driving distance: 3.4 mile(s) Driving time: 6 minute(s)

Prepared/Date: CRS4/17/06
Checked/Date: RTB 4/18/06

NYSDEC
ALSY Manufacturing
Hicksville, NY

MACTEC

Alternate Hospital Route
Project 3612-05-2043
Figure C.1

Document: P:\Projects\nysdec1\projects\Alsy Manufacturing\4.0 Project Deliverables\4.5 Databases\StreetMap\USA.mxd PDF: P:\Projects\nysdec1\projects\Alsy Manufacturing\4.0 Project Deliverables\4.7 Health & Safety\Alternate_Hosp_Map.pdf 04/17/2006 10:29 AM CRSTAPLES

MACTEC Engineering and Consulting, P.C.
Health and Safety Plan Addendum
(See Program Health and Safety Plan for more details)

Site: **Alsy Manufacturing** Contact: Mark Stelmack

Street Address: 270-280 Duffy Avenue

Proposed Date(s) of Investigation: 6/1/2006 Job Number: 3612062043 Task 01

Prepared by: C.Staples Date: 4/14/2006

Approved by: Cindy Sundquist Date:

Proposed Activity(s): Terra Probe-soil sampling, well drilling and groundwater sampling, soil gas and indoor air sampling, and excavation oversite (see field sampling plan).

Known or Suspected Chemicals (include permissible exposure limits [PELs]): Chlorinated solvents have been detected below the Site building, including PCE (TLV 25), TCE (TLV- 50 ppm), and 1,1,1-TCA (PEL-350). Various metals including lead, mercury, nickel and chromium have been detected in site soils and in proposed excavation areas.

HAZARD EVALUATION (Check all that apply):

Overall Hazard Estimation:		Serious		Moderate	X	Low		Unknown		None
Major Exposure Route(s):		Dermal	X	Inhalation		Ingestion		Puncture		
Contaminant Location(s):		Surface	X	Underground	X	Soil		Sediment	X	Water
		Tank	X	Other (list): Soil vapor						
Health Hazard(s):		Liquid	X	Solid		Sludge		Corrosive		Ignitable
	X	Volatile		Radioactive		Reactive		Unknown		
Safety Hazard(s):		Height	X	Equipment		Cold Stress	X	Noise		Eye
		Near Water		Confined Space	X	Heat Stress	X	Machinery		Burns
		Lifting	X	Slips/Falls		Other (list):				

EQUIPMENT (check all that apply): Initial Level of Personal Protection: Modified D

PPE Selected: ***	X	Cartridge Respirator-See Below	X	Coveralls		Gloves
		Escape Respirator	X	Safety Glasses	X	-inner - vinyl
	X	Safety Boots/Shoes		Face Shield	X	-outer - nitrile
		Chemical Resistant Boots	X	Hard Hat		Tyveks
	X	Disposable Boot Covers	X	Ear Protection		regular
	X	Other (list): cartridges - MSA, GMC, or equivalent				coated
Monitoring Equipment:		Combustible Gas/Oxygen Meter		Explosimeter		OVA
		Hydrogen Sulfide Meter	X	Draeger Tubes	X	PID
		Radiation Alert Meter		list: 1,1,1-TCA 50/d		
		Dosimeter Badge	X	Other (list): Dust meter		
Emergency Equipment:	X	First Aid Kit		Fire Extinguisher	X	Eye Wash
		Other (list):				

CONTAMINANT LEVELS FOR MODIFICATION OF PROTECTIVE EQUIPMENT:

*** Cartridge Respirator - GMC w/N95 prefiltered (or equivalent) (change twice daily).

Drilling/Direct Push and Excavation Oversite: Monitor breathing zone with a 10.6 eV Lamp (10.0 or 10.2 ok too) PID. If PID readings are detected in the breathing zone above background, monitor with a trichloroethane 50/d Drager tube. If 1,1,1-TCA readings are greater than 175 ppm or PID readings reach or exceed 9 ppm, upgrade to Level C PPE (cartridges changed daily). Upgrade to Level B PPE if PID readings in the breathing zone are greater than 100 ppm. VOCs will also be continuously monitored at the perimerter of the designated work zone for each location as a measure of protection for the downwind community. The continuous monitoring will be performed in acordance with NYSDOH gCAMP rev 1 06/00.

Drilling and direct push sampling are not anticipated to be performed in chlorinated solvent source areas, therefore particulate monitoring will not be performed on a continuous basis. Significant amounts of dust is not anticipated to be generated during drilling and direct push sampling, or excavation activities. Dust suppression measures will be used to minimize the generation of dust. In the event that dust conditions do arise, a respirable dust meter will be used to monitor particulates in the breathing one and in accordance with NYSDOH gCAMP rev 1 06/00. If particulates exceed 1.5 mg/m^3 in the breathing zone, work will be upgraded to level C PPE. If particulate levels exceed 100 ug/m^3 above background or greater than 150 ug/m^3 at the perimeter of the work site, work will be stopped and dust control measures and continuous particulate monitoring will be instituted.

Soil Vapor / Indoor Air Sampling: Monitor breathing zone with a 10.6 eV Lamp (10.0 or 10.2 ok too) PID. If PID readings are detected in the breathing zone above background, monitor with a trichloroethane 50/d Drager tube. If 1,1,1-TCA readings are greater than 175 ppm or PID readings reach or exceed 9 ppm, upgrade to Level C PPE (cartridges changed daily). Upgrade to Level B PPE if PID readings in the breathing zone are greater than 100 ppm.

GW Sampling and Survey: Monitor breathing zone with a 10.6 eV Lamp (10.0 or 10.2 ok too) PID. If PID readings are detected in the breathing zone above background, monitor with a trichloroethane 50/d Drager tube. If 1,1,1-TCA readings are greater than 175 ppm or PID readings reach or exceed 9 ppm, upgrade to Level C PPE (cartridges changed daily). Upgrade to Level B PPE if PID readings in the breathing zone are greater than 100 ppm.

DECONTAMINATION/DISPOSAL: All personnel and/or equipment leaving contaminated sites are subject to decontamination. Under no circumstances (except emergency evacuation) will personnel be allowed to leave the site prior to decontamination. The decontamination procedures to be used at the site are as follows:
Remove all protective clothing and place PPE in double lined garbage bags. If PID headspace within bag is less than 5ppm, the PPE will be disposed of as municipal waste. Drilling equipment in contact with subsurface soil and water will be cleaned with a pressure sprayer over the boring location. The boring will be backfilled with bentonite pellets.

EMERGENCY MEDICAL TREATMENT/FIRST AID: First aid will be rendered to any person injured on-site, as appropriate. The injured person will then be transported to a medical facility for further examination and/or treatment. An ambulance will be used to transport the injured person to the hospital unless one is not readily available or could result in excessive delay. In this case, other transport is authorized. Under no circumstances will injured persons transport themselves to a medical facility for emergency treatment.

EMERGENCY EVACUATION: In the event of an emergency requiring evacuation, the HSO assumes the role of on-site coordinator. Evacuation responses will occur at three levels: (1) withdraw from the immediate work area (100+ feet upwind); (2) site evacuation; and (3) evacuation of surrounding area. If the residences and commercial operations require evacuation, the local agencies will be notified and assistance requested. Designated on-site personnel will initiate evacuation of the immediate off-site area without delay.

EMERGENCY TELEPHONE NUMBERS:

Local Police Department	516-573-5275 or 911
Local Fire Department	516-931-5732 or 911
Local Rescue Service	911
Primary Hospital: New Island Hospital	516-932-4383
Secondary Hospital: North Shore University Hospital	516-719-3000
Health Resources	(800) 350-4511
National Poison Control Center	(800) 492-2414
Chemical Manufacturing Association-Chemical Referral Center	(800) 262-8200
Health and Safety Manager: Cindy Sundquist	(207) 775-5401 (w) (207) 650-7593 (cell)

AUTHORIZED PERSONNEL:

_____ _____

_____ _____

* Current First-aid Certification

+ Current CPR Certification

FIELD TEAM REVIEW: I have read and reviewed the health and safety information in the HASP. I understand the information and will comply with the requirements of the HASP.

Name:_____ Date:_____
Name:_____ Date:_____
Name:_____ Date:_____
Name:_____ Date:_____
Name:_____ Date:_____
Name:_____ Date:_____

ROUTES TO EMERGENCY MEDICAL FACILITIES

PRIMARY HOSPITAL:

Facility Name: New Island Hospital
Address: 4295 Hempstead Tpke, Bethpage, NY 11714

DIRECTIONS TO PRIMARY HOSPITAL (attach map):

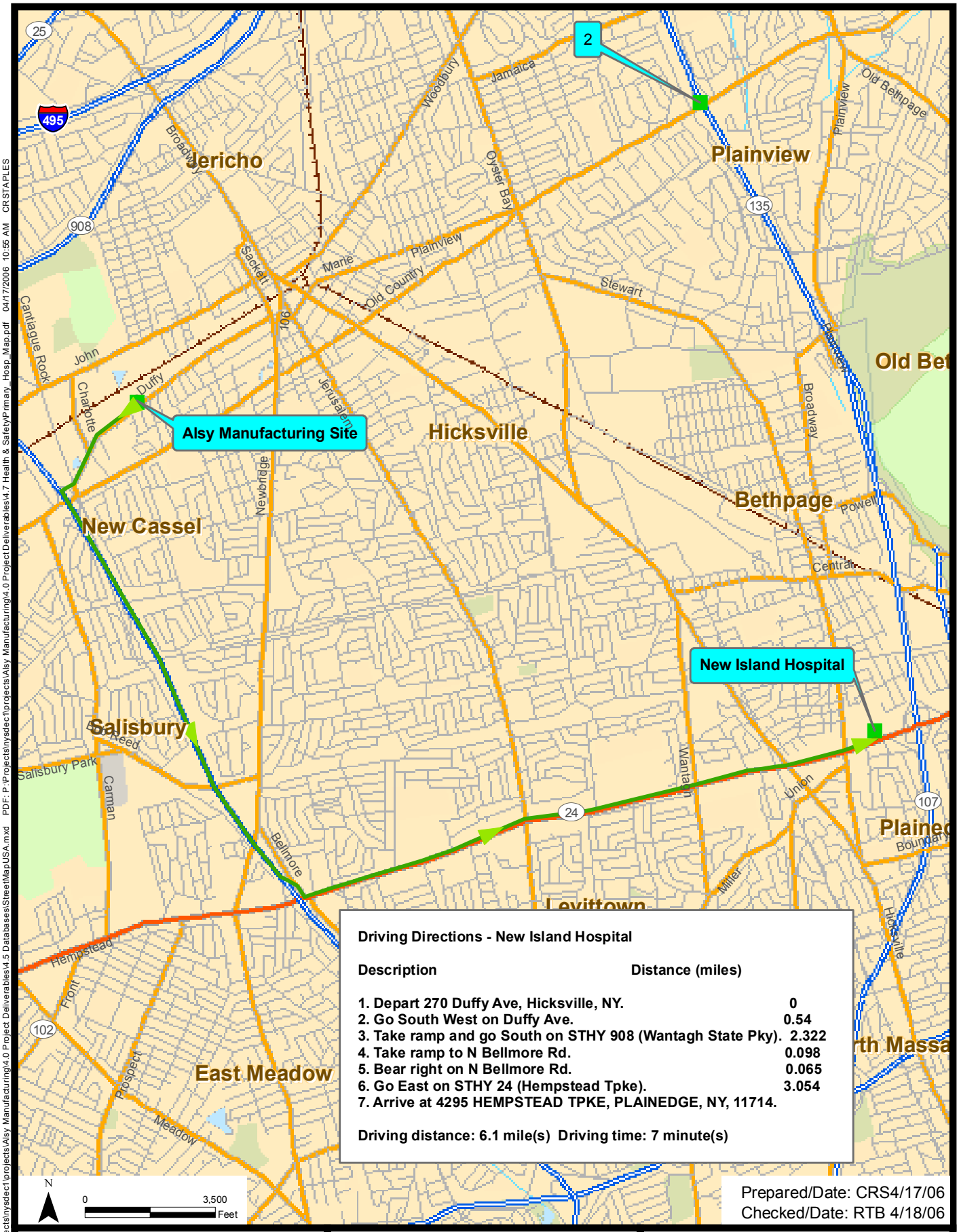
See attached map

ALTERNATE HOSPITAL:

Facility Name: North Shore University Hospital
Address: 888 Old Country Rd, Plainview, NY 11803

DIRECTIONS TO ALTERNATE HOSPITAL (attach map):

See attached map



Driving Directions - New Island Hospital

Description	Distance (miles)
1. Depart 270 Duffy Ave, Hicksville, NY.	0
2. Go South West on Duffy Ave.	0.54
3. Take ramp and go South on STHY 908 (Wantagh State Pky).	2.322
4. Take ramp to N Bellmore Rd.	0.098
5. Bear right on N Bellmore Rd.	0.065
6. Go East on STHY 24 (Hempstead Tpke).	3.054
7. Arrive at 4295 HEMPSTEAD TPKE, PLAINEDGE, NY, 11714.	

Driving distance: 6.1 mile(s) Driving time: 7 minute(s)

Prepared/Date: CRS4/17/06
Checked/Date: RTB 4/18/06

NYSDEC
ALSY Manufacturing
Hicksville, NY

MACTEC

Primary Hospital Route
Project 3612-05-2043
Figure C.1

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