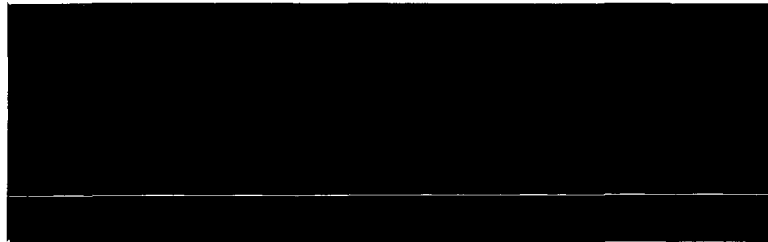


WorkPlan. hw819014. 1998-03-01

RD WorkPlan



INTERNATIONAL
TECHNOLOGY
CORPORATION



RESPONSIVE TO THE NEEDS OF ENVIRONMENTAL MANAGEMENT



REMEDIAL DESIGN WORK PLAN

**Lehigh Valley Railroad Derailment
Work Assignment #D003666-6**

Prepared for:

New York State Department of Environmental Conservation

Prepared by:

**IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873**

March 1998

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**IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873**

March 1998



**IT
ENGINEERING
OF NEW YORK P.C.**

2200 Cottontail Lane
Somerset, New Jersey
08873-1248
908-469-5599
FAX: 908-469-7275

March 27, 1998

Mr. Raymond E. Lupe, P.E.
Chief, Contract Development Section
Bureau of Program Management
Division of Environmental Remediation
New York State Dept. of Environmental Conservation
50 Wolf Road
Albany, New York 12233

**RE: Remedial Work Plan
Lehigh Valley Railroad Derailment
Work Assignment # D-003666-6**

Dear Mr. Lupe:

IT Corporation(IT)/IT Engineering of New York has received your Ms. Carol Perry's March 24, 1998 comment letter to IT's original March 1998 submission of the above referenced Work Plan. In response to Ms. Perry's letter, enclosed please find seven revised copies of the above referenced document. Enclosed with the document is a complete cost breakdown with backup for the proposed scope of work

IT looks forward to working with NYSDEC on this contract and developing a strong partnership as we go forward with its implementation. Should you have any questions regarding the document, please contact me at (732) 469-5599.

Sincerely,

A handwritten signature in cursive script that reads 'Dana M. Boyadjian'.

Dana M. Boyadjian, P.E.
Program Manager
IT Corporation

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Section 1.0 Introduction

IT and Stearns & Wheeler will prepare detailed plans and specifications, to use in competitive bidding for the remedial construction of the selected remedial alternative, in conformance with New York State laws, rules, regulations, and guidelines. Spill site soils and bedrock will be remediated using soil and bedrock vapor extraction (SVE/BVE). Detailed pilot studies will be performed to determine appropriate system parameters.

Additionally, a public water supply will be installed to connect all users with contaminated or threatened wells to the system. This preliminarily includes:

- Spring Street between George Street and the existing Village of Caledonia water main;
- Route 5 from Church Road east to the existing Village of Caledonia water main;
- Church Road between Gulf Road and Route 5;
- Gulf Road from Limerock Road to immediately east of the spill site;
- Flint Hill and Limerock Roads between Gulf Road and Route 5;
- Flint Hill Road between Limerock Road and the existing Monroe County Water Authority (MCWA) main on George Street;
- Provision for the connection to Town of LeRoy; and
- Pipe-in MCWA System (Town of Wheatland)

The following is a summary of what shall be incorporated / addressed as part of the Remedial Design:

Pre-Remedial Design Field Work and Pilot Studies (more complete details follow in Task 2)

- A soil and foundation study will be necessary at the location (not yet determined) of a new water tower.

- For the soil remediation, an ex-situ pilot test will be conducted on approximately 50 cubic yards of contaminated soil. Data will be collected on pneumatic permeability, radius of influence, emission estimates, etc.
- Approximately 12 additional soil borings will be performed in the spill area to analyze soils for TCE. Borings will also be used to determine depth to bedrock.
- For the bedrock pilot studies in the spill area, a total of eleven, 60-foot deep vapor extraction wells will be installed with 18 similarly constructed bedrock observation wells situated around three extraction wells. These three vapor extraction wells will be pilot tested at three different intervals with the use of inflatable straddle packer systems and vacuum transducers in the extraction and observation wells. The other eight vapor extraction wells will be pilot tested without packer systems. Data similar to the soil pilot study will be collected to ensure proper design parameters, with the knowledge that groundwater levels fluctuate as much as 30 feet seasonally.
- Two boreholes in the spill area will be continuously cored to a depth of approximately 100 feet. The rock core will be analyzed to determine TCE content to augment the bedrock pilot studies.
- An analysis of methods to properly remediate the soil-bedrock interface will be conducted. High concentrations of TCE have been observed in surface fractures of the bedrock. An appropriate method of cleaning these fractures is critical to the proper remediation of the spill site.

Major Elements of Remedial Design

- Source area soils will be excavated to the top of bedrock, based on soil sampling results. All excavated soils will be placed in on-site ex-situ vapor extraction piles. During excavation of soils, Gulf Road will be closed through coordination with local authorities.
- An ex-situ SVE system will be installed in the soil piles. Appropriate emission treatment will be conducted.

- The top-of-rock surface and any visible fractures will be cleaned of residual soil or NAPL, if observed. Soil collected from the fractures will be added to the soil vapor piles.
- Construction of a bedrock vapor extraction system in the 10-acre spill area. Vertical wells will be installed to an appropriate depth throughout the area.
- An on-site treatment facility will be constructed to process all vapor exhausts. The specific treatment method will be determined during the design phase of this project.
- The effectiveness of the bedrock vapor extraction system will be monitored to determine if any enhancements will be necessary to increase TCE recovery.
- Installation of a public water supply along the route prescribed in the ROD.
- All necessary connections to, and upgrades of, existing water mains.
- Connection of 50 + users to new water supply.
- Connect any non-contaminated/threatened residence which agrees to pay for its connection.
- Coordination with any existing public water supply to ensure compatibility with existing systems.
- Determination, sizing, and installation of necessary piping, pumping stations, water towers, etc., required to meet current fire flow demands.
- Development of construction QA/QC and Health and Safety requirements.
- Some communities may wish to finance an upgraded system beyond the required remedy. In this case, design will incorporate all third-party-funded system upgrades upon Department approval.

Section 2.0 Work Plan Tasks

Task 1: Background Review and Work Plans

This task will be completed based upon approval of the enclosed submission.

The work plan prepared for Lehigh Valley includes: 1) a summary of the scope of the project; 2) a complete estimated budget package for the entire work assignment including all schedules, details of the consultant's costs for the work assignment, and estimates for all subcontracted services; 3) a work assignment progress schedule with milestones and deliverables; 4) a staffing plan identifying management and technical staff for the work assignment, with their areas of responsibility and NSPE grade levels; and 5) an identification of areas of subcontractor work and a list of proposed subcontractors, including a Minority and Women Owned Business Enterprise (M/WOBE) and Equal Employment Opportunity (EEO) Utilization Plan.

In addition to the above, the following subtasks were performed outside the defined scope of Task 1:

IT Activities

1. Prepare preliminary cost estimate based on initial scope of work (IT and Stearns & Wheler).
2. Reevaluate BVE pilot studies as per outcome of scoping meeting, prepare bidder scope of work and evaluate bids (IT).
3. Reevaluate drilling program as per revised BVE pilot study, prepare bidder scope of work and evaluate bids (IT).
4. Evaluate aerial photography needs, identify surveyor, solicit and evaluate bid (IT).
5. Provide field locations for soil borings along proposed pipeline route (Stearns & Wheler).
6. Meet with Monroe County Water Authority (MCWA) relative to their system's service capabilities (Stearns & Wheler).

Task 2: Additional Studies

As stated in Section II - Scope of Work, additional site characterization is required during the pre-remedial design field work. The additional field work and studies will include the following:

Subtask 2.1: Water Supply Studies

This task will develop the basis for design, schedule, and cost for the public water system serving the area affected by the Lehigh Valley railroad. The evaluation will focus on the Monroe County Water Authority as a primary water source for this area.

MAN-WEEKS

144 **Definition of Service Area and Current Status of Existing Water Systems.** Stearns & Wheler will conduct meetings with the MCWA, Village of Caledonia, and Town of LeRoy relative to their current water system capabilities, including supply, treatment, distribution, and storage facilities. One meeting will be held with each entity.

3.6

Stearns & Wheler will assist the NYSDEC in obtaining planning and approval data from the various towns, villages, and counties impacted by the project. This will consist of two presentation meetings to interested parties.

108 **Topographic and Soils Information.** Stearns & Wheler will evaluate existing aerial and topographic mapping and the soils data performed by others (separate tasks of this project). This data will be reviewed to develop the conceptual design and price the alternatives for the proposed water system. During this phase Stearns & Wheler will identify additional geotechnical and survey requirements (especially related to the pumping station(s) and tank sites) for Task 3, Design.

2.7

32 **Water Demand Projections.** Stearns & Wheler will calculate the current water demands for the remedial water supply system. However, future demands and the need for additional municipal connections will require the municipalities to furnish projections of those demands. Each entity that will potentially be served (Towns of Wheatland, LeRoy, and Caledonia, and the Village of Caledonia) will be required to estimate their growth potential and current and future water needs. Based upon planning and population projections for the areas served, Stearns & Wheler will confirm the average daily, maximum daily, and peak flow demands that are realistic for the proposed system. This will be presented for both current conditions (1998) and for the year 2020.

96 **Development Alternative Water Facilities.** This task includes developing combinations of

96

pipelines, tanks, pump stations, meters, and pressure regulating vaults to develop three alternative water systems as follows:

1. Impacted area only;
2. Impacted area plus the Town of Le Roy; and
3. Impacted area plus Town of Le Roy and Village of Caledonia.

As part of the evaluation, Stearns & Wheeler will develop the size and nature of the water system facilities and develop capital and operation and maintenance costs associated with each alternative.

51

Preliminary Cost Estimates. Estimates of total project cost will be prepared for each alternative. Costs will be prepared for pipeline work, including rock excavation, pumping stations, storage tank, and pressure control and metering facilities.

48

Administrative Options. This will include an overview of the administrative and legal options required for the ownership and operation of the facilities in the various towns, villages, and counties. The primary focus will be the ability of the Monroe County Water Authority (MCWA) to serve (either wholesale or retail) water in Genesee and Livingston Counties. Alternate options could include town or county districts or intermunicipal agreements, with wholesale coverage provided by MCWA.

35

Permits and Approvals. Stearns & Wheeler will identify the required permits and approvals for the project, including:

1. NYSDEC water supply application and stream disturbance;
2. FAA;
3. Railroad right-of-way;
4. NYSDOT; and
5. Town and county highway departments.

84

Summary. Stearns & Wheeler will prepare a brief Technical Memorandum that summarizes the above evaluations and conclusions. The focus of the memorandum will be the cost and design basis for the three alternatives for ultimate selection of an alternative by the NYSDEC.

Subtask 2.2: Spill Site Studies

- 292 . For the soil remediation, an ex-situ pilot test will be conducted on approximately 50 cubic yards of contaminated soil. The test pile will be constructed utilizing soil from the vicinity of Test Pit 13. Data will be collected on pneumatic permeability, radius of influence, emission estimates, etc. For details, see Appendix A.

Approximately ~~12 additional soil borings~~ will be performed in the spill area to analyze soils for TCE content. Borings will be used to determine depth to bedrock.

340
drilling
oversight

- For the bedrock pilot studies in the spill area, a total of eleven 60-foot deep vapor extraction wells will be installed with 18 similarly constructed bedrock observation wells situated around three extraction wells. These three vapor extraction wells will be pilot tested at three different intervals with the use of inflatable straddle packer systems and vacuum transducers in the extraction and observation wells. The other eight vapor extraction wells will be pilot tested without packer systems. Data similar to the soil pilot study will be collected to ensure proper design parameters, with the knowledge that groundwater levels fluctuate as much as 30 feet seasonally. For details, see Appendices B and C.
- Two boreholes in the spill area will be continuously cored to a depth of approximately 100 feet. The rock cores will be analyzed to determine TCE concentrations to augment the bedrock pilot studies.

BR Pilot
Test
244 Field
Hours

348 Office
Hours - Data
Reduction
224 Report
Hours

816 Hours
BVE
Test

- The following table provides a summary of the proposed types and number of samples to be analyzed and the respective analytical methodology.

Matrix	No. of Samples	MS/MSD	Field Blank	Travel Blank	Analysis/Method
Soils	22	2	2	0	TCL Volatiles/95-1
Rock Cores	13	1	3	0	TCL Volatiles/95-1
Air	65	0	0	0	Volatile Organics T014

- An analysis of the seasonal water table fluctuation at the site has been conducted by NYSDEC staff in the spill area. At this time no further analysis is proposed. This data will be very useful in determining the appropriate depths of the vapor extraction wells.
- An analysis of methods to properly remediate the soil-bedrock interface is necessary. High concentrations of TCE have been observed in surface fractures of the bedrock. An appropriate method of cleaning these fractures is critical to the proper remediation of the spill site.
- A variety of vapor treatment technologies will be tested during the pilot studies. Removal/destruction efficiencies for each technology will be calculated and compared with their relative costs. Expected technologies include, but are not limited to: carbon adsorption, catalytic oxidation, and photo(UV)-degradation. Preference should be given to technologies that destroy TCE vapors instead of collecting them.

Task 3: *Plans and Specifications*

IT and Stearns & Wheler will prepare complete plans and specifications to be used in competitively bidding the construction, operation, and maintenance of the selected remedy in conformance with New York State and applicable federal laws, rules, regulations, and guidelines. IT and Stearns & Wheler will utilize the Department's standard construction contract clauses and format to prepare contract documents. This task will include the development of minimum requirements for the construction quality assurance/health and safety plans (the plans themselves will be prepared by the construction contractor) for the water supply and for the source area remediation.

Water Supply System: This task will consist of preparation of the contract drawings and specifications to allow municipal bidding for construction of the recommended facilities. The estimated fees for design are based on the following system:

1. One 200,000 gallon elevated storage tank. ³⁴⁰
2. Two (less than 500,000 gallons per day) pumping stations, including chlorination and metering facilities. Storage and pumping facilities will be interconnected by a telemetry system that will control the operation of the pumps and control the water level in the storage tank. ¹¹⁵⁰

- 1596
3. Approximately 68,000 linear feet of 8-inch pipeline incorporating the impacted area and portions of the Town of Le Roy and the piping improvements within the MCWA system are required to serve this area. The table below summarizes the estimated pipe footage necessary to serve this area. Depending on the alternative selected, Stearns & Wheler estimates that the length of pipeline required will range between 58,000 and 68,000 linear feet. Engineering fees have been developed based on a total of approximately 68,000 linear feet of pipe. This length of pipe includes 10,000 linear feet of pipe in the MCWA system; Stearns & Wheler understands that the design of this portion of the upgrade will depend on the need for such an improvement and on the agreements reached between the Department and the municipalities and MCWA.

Verify Survey 320

LOCATION	ESTIMATED PIPE LENGTH (FT.)
George Street in Mumford	1,500
Spring Street	7,500
Flint Hill Road (between Spring Street and Limerock Road)	7,100
Flint Hill Road (between Limerock Road and Church Road)	8,700
Gulf Road	2,500
Church Road	4,900
Limerock Road	8,000
Route 5 (between Church and Limerock)	3,700
Route 5 (between Limerock Road and Spring Street)	13,800
Subtotal Amended Alternative 5	57,700
Connection to Town of Le Roy	By Town of LeRoy
Pipe in MCWA System (Town of Wheatland)	10,000
Estimated Total Length	67,700

4. Two pressure regulating vaults and metering vaults, including electrical service, if appropriate.

The following preliminary list of contract drawings will be developed as part of the water supply system design package:

NO. OF SHEETS	CONTRACT DRAWING DESCRIPTION
PUMPING STATION (Two Similar Stations)	
	<u>1150 hrs</u>
1	Cover
4	General (2 Site Plans, Legend, Abbreviations, and Details)
2	Structural/Architectural (Plan and Sections; Details)
2	Mechanical (Pumps, Chlorination and Instrumentation)
4	Electrical (Site Plans/Service [2]; One Lines/Control Plan and Miscellaneous [2])
1	HVAC
14	Total for Pump Stations
WATER STORAGE TANK	
	<u>340 hrs</u>
1	Cover
1	Site Plan/Access
1	Tank (Plan, Sections and Telemetry)
1	Heat Circulation and Details
1	Electrical
5	Total for Storage Tank
DISTRIBUTION PIPING, METERING, AND CONTROL	
	<u>1590 hrs</u>
1	Cover
28	Pipeline Plan Sheets <u>50 hrs/sheet</u>
3	Metering and Control Vaults and Miscellaneous Details
32	Total for Pipeline

80 hrs/sheet

68 hrs/sheet

50 hrs/sheet

Spill Site: This task will entail the preparation of performance specifications for the ex-situ soil vapor extraction (SVE) system, and contract drawings and specifications to allow bidding for construction of the bedrock vapor extraction (BVE) system. For the purpose of this estimate, the following preliminary list of contract drawings will be developed as part of the ex-situ SVE performance specifications and the BVE design package:

2052 hss

NO. OF SHEETS	CONTRACT DRAWING DESCRIPTION
Ex-situ Soil Vapor Extraction (SVE) Performance Specifications	
1	Cover
1	Site Plan
1	Construction/Excavation Plan
1	Excavation Sections
4	Total for Performance Specifications
Bedrock Vapor Extraction System (BVE)	
1	Cover
1	Site Plan
1	Topographical
1	Extraction Piping Layout and Treatment System Location
3	Extraction Piping Details (Trenching, Supports, Manifolding)
1	Extraction Well and Well Header Details
1	Process Flow Diagram
1	Process and Instrumentation Diagram
1	Treatment System Equipment Layout
1	Treatment System Piping
1	Pre-fabricated Building Foundation (Structural)
6	Pre-fabricated Building Details
14	Electrical Drawings (Pre-fabricated Building, Treatment System, Miscellaneous) 11x17's 8 1/2 x 11's
1	Electrical/Conduit Plan
6	Control Panel Drawings
40	Total for BVE System

~ 200 hrs
50 hrs/sheet

~ 1800 hrs
90 hrs/sheet

The performance specification package for the ex-situ SVE system and the design package for the BVE system will not be submitted concurrently. The performance specification package for the ex-situ SVE system will be submitted prior to submittal of the BVE design package. Design submittals will be provided to the NYSDEC for review and approval at the following points:

Subtask 3.1 Preliminary Design

IT and Stearns & Wheler will submit to the NYSDEC three copies of preliminary construction plans and specifications when the design is 30 percent complete, and the existing field conditions have been verified. Supporting data, documentation, and design calculations will be provided with the design documents defining the functional aspects of the project.

Water Supply System: Supporting data, documentation, and design calculations for fire flows, pump hydraulics and tank site plans for various facilities will be included in the preliminary design. At this stage, a table of contents outlining the technical specifications sections to be used will be submitted. In addition, the topographic survey will be field edited, and physical features located on the aerial survey will be verified and electronically labeled on AutoCAD.

Spill Site: IT will prepare the performance specifications to cover the major components of the ex-situ SVE project, including the contractor requirements for quality control, health and safety, mobilization and demobilization, excavation, stormwater management, restoration, remediation system, and target cleanup levels. IT will also submit preliminary drawings required as part of the performance specification package.

For the bedrock vapor extraction system, IT will provide supporting data, documentation, design calculations, preliminary drawings and a preliminary outline of the specifications that will be used as part of the design package.

Subtask 3.2 Intermediate Design

At the option of the Department, IT and Stearns & Wheler will submit to the NYSDEC three copies of intermediate construction plans and specifications when the design is 60 percent complete. Supporting data, documentation, and design calculations will be provided in a design report format. Documentation similar to the final design stage will be required. The work assignment budget will reflect the difference in the overall project cost if this submittal is not required.

Water Supply System: Intermediate design will include the final layout for all distribution piping and preliminary plans for water storage, pumping, and pressure control and metering vaults. Draft specifications will be furnished at 60 percent completion.

Spill Site: As part of the intermediate design, the layout of all manifold piping, the location of the

treatment system and the equipment sizing will be finalized. The intermediate design will incorporate preliminary comments and/or technical input from the NYSDEC. Draft specifications similar to the final design format will also be furnished.

Subtask 3.3 Final Design

Upon completion of the design documents for the water supply system and the spill site, IT and Stearns & Wheler shall submit to the NYSDEC for review three copies of the final plans, specifications, supporting data/documentation, and design calculations as a design report. Prior to this submittal, IT and Stearns & Wheler will thoroughly coordinate and cross-check the bid form, specifications, and drawings to ensure consistency with the contract documents. Written documents will be provided by the NYSDEC describing the changes required to consider the plans and specifications acceptable for bidding. The Final Design will bear the seal and signature of a professional engineer registered to practice in New York State.

After approval of the final design by the NYSDEC, IT and Stearns & Wheler will submit seventy-five (75) copies of the plans and specifications for bidding.

Permits and Approvals

SW - 256
IT - N/A

IT and Stearns & Wheler will provide the technical information required for the NYSDEC to apply for an obtain the anticipated permits and approvals for this project. Anticipated permits include highway permits (state, county, and town), Federation Aviation Administration (FAA), railroad crossings, stream disturbance, and water supply application.

Subtask 3.4 Project Cost Estimate

IT 196
SW - Included

At the final design stage IT and Stearns & Wheler will prepare a pre-bid construction, operation, and maintenance cost estimate for the project. 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.

Task 4: Pre-award Services

~~IT~~
~~SW~~

If requested by the Department, IT and Stearns & Wheler will provide support services to the NYSDEC for competitively bidding the site remediation contract.

Subtask 4.1: Pre-Bid Conference and Public Meetings

IT 440
one SW 372 hrs Total

one IT and Stearns & Wheler will assist the NYSDEC in competitively bidding the water system and spill site projects. Stearns & Wheler will conduct three separate pre-bid conferences with prospective bidders, one each for the pumping station, the water storage tank, and distribution piping. IT will conduct two separate pre-bid conferences, one for the ex-situ SVE project and one for the BVE project. The pre-bid conferences will be held during daytime hours. At the pre-bid conferences, IT and Stearns & Wheler will emphasize important items of the project to the prospective bidders, tour the project site, answer any questions and prepare minutes to the meeting. One Three public meetings will be held, one for the water system project, one for the ex-situ SVE project and the other for the BVE project. These public meetings will be held during the evening hours. At the public meetings, IT and Stearns & Wheler will answer any questions raised concerning the project design, construction techniques, and project scheduling, and will prepare meeting minutes. A stenographer will be provided to prepare the meeting minutes for both the pre-bid and public meetings.

IT and Stearns & Wheler will prepare any necessary addenda to the plans and specifications for the timely transmittal to prospective bidders. IT and Stearns & Wheler will respond to all questions from prospective bidders.

Subtask 4.2: Bid Review

IT 56
SW

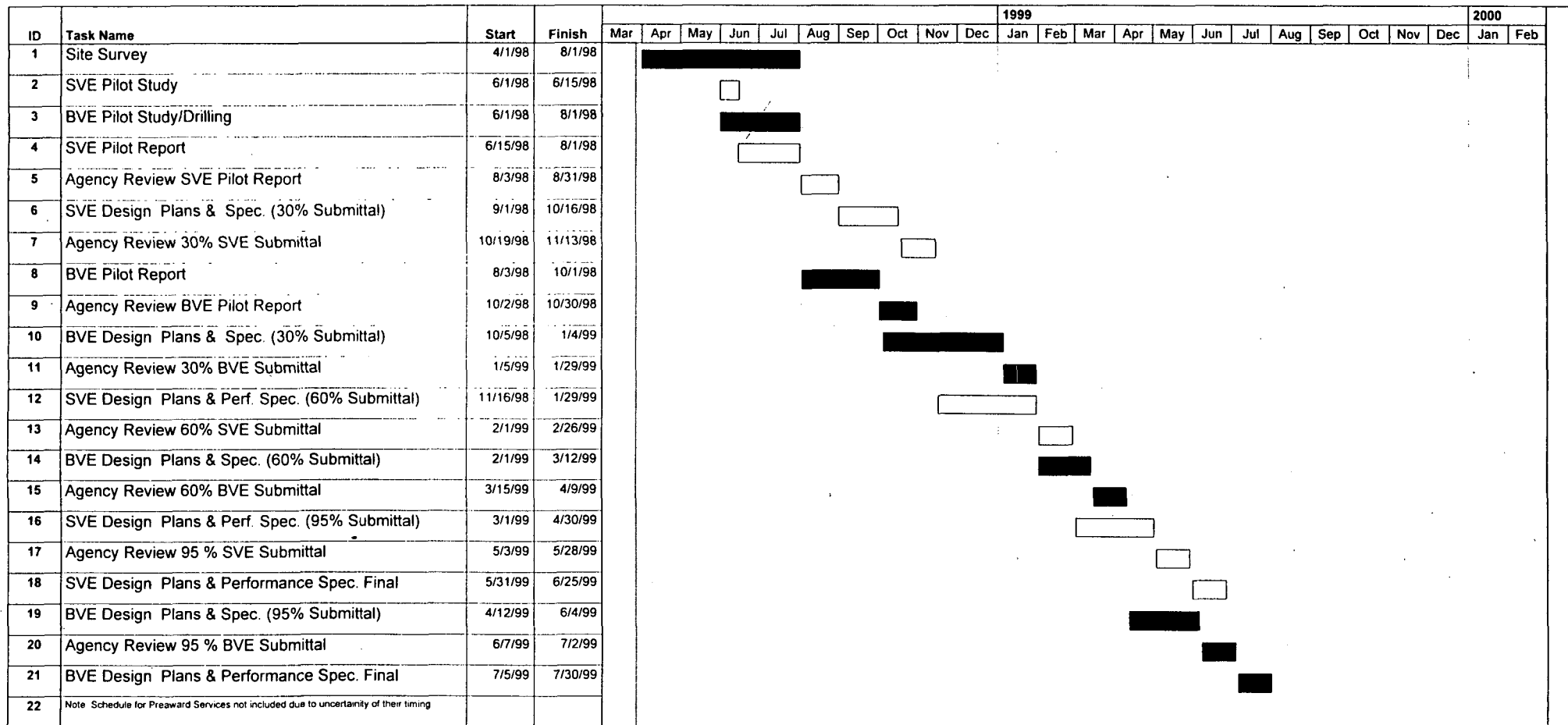
IT and Stearns & Wheler shall review all plans required by the contract documents and submitted by the contractor with the bid, including, but not limited to, the health and safety plan.

Section 3.0 *Estimate of Work Assignment Budget*_____

See Appendix D "Cost Proposal."

Section 4.0 *Period of Performance*

The Remedial Design will be completed within 630 days of receipt of the work assignment (November 1, 1997). Water supply design will be completed in 450 days.



Lehigh Valley RR
Spill Site
WA # D003666-6

Task
Progress



Milestone
Summary

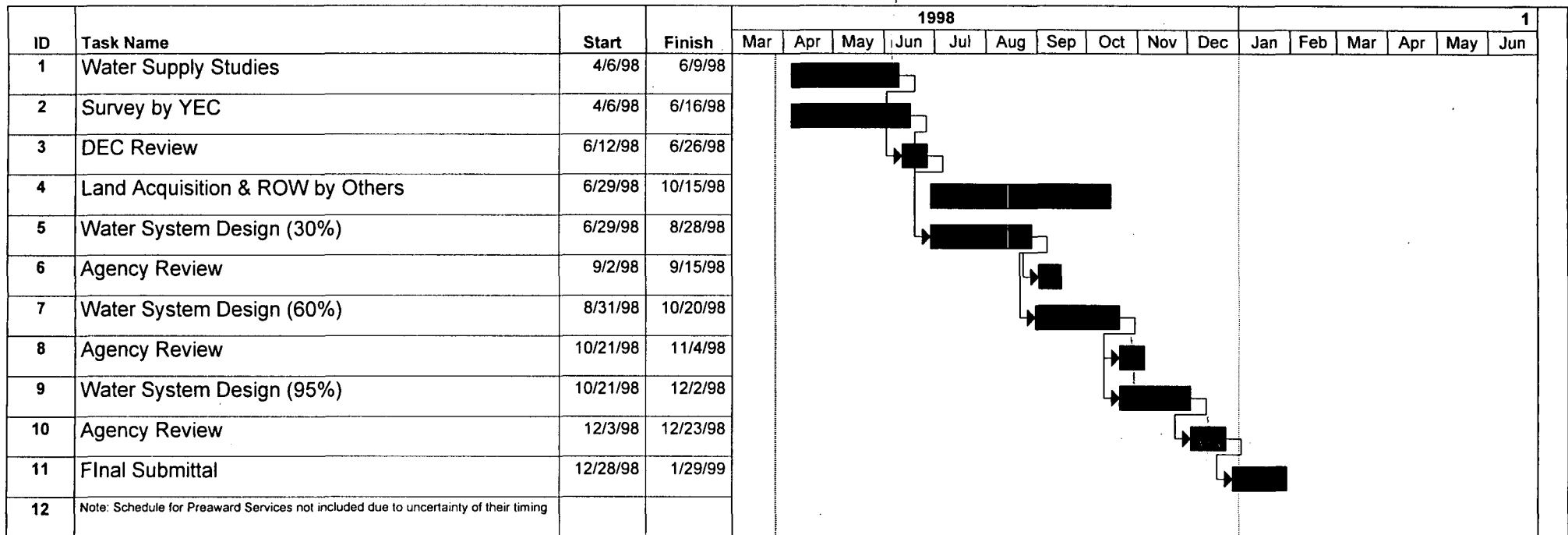


Rolled Up Task
Rolled Up Milestone



Rolled Up Progress





Lehigh Valley RR
Water Supply System
WA # D003666-6

Task
Progress
Milestone



Summary

Rolled Up Task

Rolled Up Milestone



Rolled Up Progress



Section 5.0 Project Schedule with Milestones

The following identifies the milestones associated with the water supply and spill site projects and respective days for completion from the issuance of the work assignment:

<u>Completion of Task</u>	<u>Days (From Issuance of Work Assignment)</u>
1.0 - Work Plan	150
2.1 - Water Supply Studies	219
- Land Acquisition and ROW by Others	345
2.2 - Site Survey	270
- SVE Pilot Study	225
- BVE Pilot Study/Drilling	270
- SVE Pilot Study Report	270
- BVE Pilot Study Report	330
3.1 - 30% Design - Water Supply	300
3.1 - 30% Design - SVE	345
- 30% Design - BVE	420
3.2 - 60% Design - Water Supply	380
3.2 - 60% Design - SVE	450
- 60% Design - BVE	495
3.3 - Draft Final Design - Water Supply	390
3.3 - Draft Final Design - SVE	540
- Draft Final Design - BVE	570
3.3 - Final Design - Water Supply	450
3.3 - Final Design - SVE	600
- Final Design - BVE	630
4.0 - Preaward Services - Water Supply	to be determined
4.0 - Preaward Services - Spill Site	to be determined

Section 6.0 Staffing Plan

The following management and technical personnel will execute the scope of work for Lehigh Valley:

Name	Title	NSPE Grade	Responsibility
Dana Boyadjian, P.E.	Project Manager	VIII	Overall project planning, organization, and assignment of resources; issue resolution, peer review, preparation of monthly progress and cost control reports.
Edward Rashak	Senior Geologist	VI	Provide senior level technical input for soil and bedrock geological investigation/design; evaluate progress of field geologist's work.
Larry Nesbitt, P.E.	Senior Project Engineer	VI	Provide senior level technical input for soil and bedrock vapor extraction system pilot testing and design; evaluate progress of engineers' work.
David Ramineh	Chemical Engineer	V	Pilot testing and design for soil and bedrock vapor extraction systems.
Prabal Amin, P.E.	Mechanical Engineer	IV	Pilot testing and design for soil and bedrock vapor extraction systems.
Tracy Estes, CSP	Health & Safety Specialist	V	Development of site Health & Safety Plan.
Paul Angellilio	Project Geologist	III	Oversight of soil and bedrock drilling.
Jim Danza	CAD Operator	IV	Development of design drawings.

Section 7.0 *Proposed Subcontractors*

The following subcontractors are proposed to perform the scope of work for Lehigh Valley:

1. Stearns & Wheler, LLC - Public drinking water supply system evaluation and design;
2. YEC Inc./YEC Engineering - Site surveying, site mapping, and aerial photography;
3. Nothnagle Drilling - Soil and bedrock well drilling;
4. Ground/Water Treatment and Technology - Bedrock vapor extraction (BVE) pilot testing;
5. AAA Environmental, Inc. - Construction of soil mound for ex-situ SVE pilot test and associated earthwork;
6. RECRA LabNet - Air, soil and rock core analysis;
7. COPIES NOW - Printing/Reproduction;
8. EDV, Inc. - Data Validation

Of the above, YEC Inc. and EDV, Inc. are both minority business enterprises (MBE).

REQUEST FOR QUOTATION

Date: January 23, 1998

OFFER MUST BE RECEIVED BY 01/30/98, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Prabal N. Amin, P.E.

IT Corporation

2200 Cottontail Lane

Somerset, New Jersey 08873

Telephone No. (732) 469-5599

Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by:

Signature:

Title:

Date: Telephone:

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Excavation/Pilot test soil pile construction/Disassembly and disposal	1	L.S.	-	
2	Carbon skid w/associated fixtures	1	L.S.	-	
Ship To: N/A		Subtotal			
		Tax			
		Freight			
		Grand Total			
Method of Shipment:		F.O.B. Point/Ship Terms:	Terms of Payment:	Shipment can be made in days from receipt of order	

1. Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
2. Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
3. Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

IT CORPORATION
REQUEST FOR QUOTATION

ENVIRONMENTAL REMEDIATION PILOT TEST

NEW YORK DEC
LEHIGH VALLEY RAILROAD SITE
LEROY NEW YORK
January 1998

IT Corporation (IT) is soliciting quotations from earthwork contractors experienced in excavating and handling soils contaminated with volatile chlorinated solvents. Contractors must meet the qualifications required by IT and execute mutually agreeable terms and conditions. Field personnel must be "40 Hour" trained for work with hazardous materials.

The project involves the preparations for an "ex-situ" soil vapor extraction (SVE) pilot test and related items of work. The contractor shall assume that work will be performed in "Level C" PPE. The anticipated start date for the project is June 1998. The scope of work is as follows:

SCOPE OF WORK

1. Furnish all labor, equipment and materials necessary to excavate approximately 50 cubic yards of solvent contaminated soil and construct an ex-situ SVE extraction test mound from the excavated soil as depicted on Figure 1. The excavation area is located just south of Gulf Road and North of Test Pit TP13 as shown on Figure 2. The mound will resemble a three dimensional trapezoid, the dimensions of which will be approximately 25 feet long by 15 feet wide by 6 feet tall.

The excavation is to proceed to bedrock, reportedly no greater than 9 feet deep at the excavation site.

The SVE mound will be constructed upon an existing bermed drum storage area consisting of a gravel bed with a liner. The existing berm is approximately 1-foot in height. The location of the existing gravel bed is shown on Figure 2, and is approximately 200 feet from the excavation area. Removal of a portion of the berm may be required in order for equipment to access the bed. Contractor shall assume that access to work areas is available.

Minimum 10 mil polyethylene sheeting shall be laid out on the existing gravel bed liner, and a 3-inch sand layer placed upon the sheeting in preparation for the placement of excavated soils.

A 3-foot lift of excavated soil shall then be placed on the sand layer.

As per Figure 1, a 4-inch diameter PVC well screen (.020-inch slots) with a 5-foot screen interval shall be centered and placed horizontally, with sufficient solid riser pipe to extend

out of the soil mound. Additionally, eight 1-inch diameter PVC well screens (.010-inch slots) with a one-foot long screen interval, will be placed horizontally, also with solid riser pipe to extend out of the mound. Each well screen shall be wrapped with filter fabric so that clogging of the screen slots by fines is prevented. 1-inch well screen ends shall be plugged with appropriate PVC fittings. The center 4-inch pipe shall extend out of the mound and be fitted with a temporary plug. All nine pipes shall be fitted with vacuum gauges. The 1-inch pipes will be fitted with vacuum gauges with a dial range of 0 to 15 inches water vacuum. The 4-inch pipe will be fitted with a vacuum gauge having a dial range of 0 to 100 inches water vacuum.

An additional 3-foot lift of soil will then be placed on the piping.

10 mil polyethylene sheeting will be placed to temporarily cover the entire mound in the event of precipitation and to minimize wind dispersion. The sheeting shall be ballasted in place for wind protection using an ample number of haybales.

Contractor shall protect the excavation during the pilot test by installing adequate fencing and warnings.

2. Contractor shall furnish two skid-mounted 200-pound vapor phase granular activated carbon (GAC) canisters. Header piping shall be fitted to the canisters so that a single discharge line from a separate blower skid (**blower skid not to be furnished by contractor**) may be connected to the canisters. Filters shall be set-up to operate in series, and discharge through a vertical section of pipe. Brass sample cocks shall be provided before, between, and after the canisters.
3. Once the pilot test is completed, approximately one week after SVE mound construction, the Contractor shall disassemble the mound, piping, and carbon canister skid, unless otherwise directed by IT. Care shall be taken not to damage the original liner, and the berm shall be replaced. Piping and sheeting shall be disposed of as solid waste. Carbon shall be properly disposed of or regenerated and recycled, assuming it is contaminated with chlorinated solvents. Sand and soils used in the mound shall be backfilled into the excavation, compacted and graded level, and the excavated area seeded and mulched.
4. Documentation of proper disposal of the carbon shall be provided.

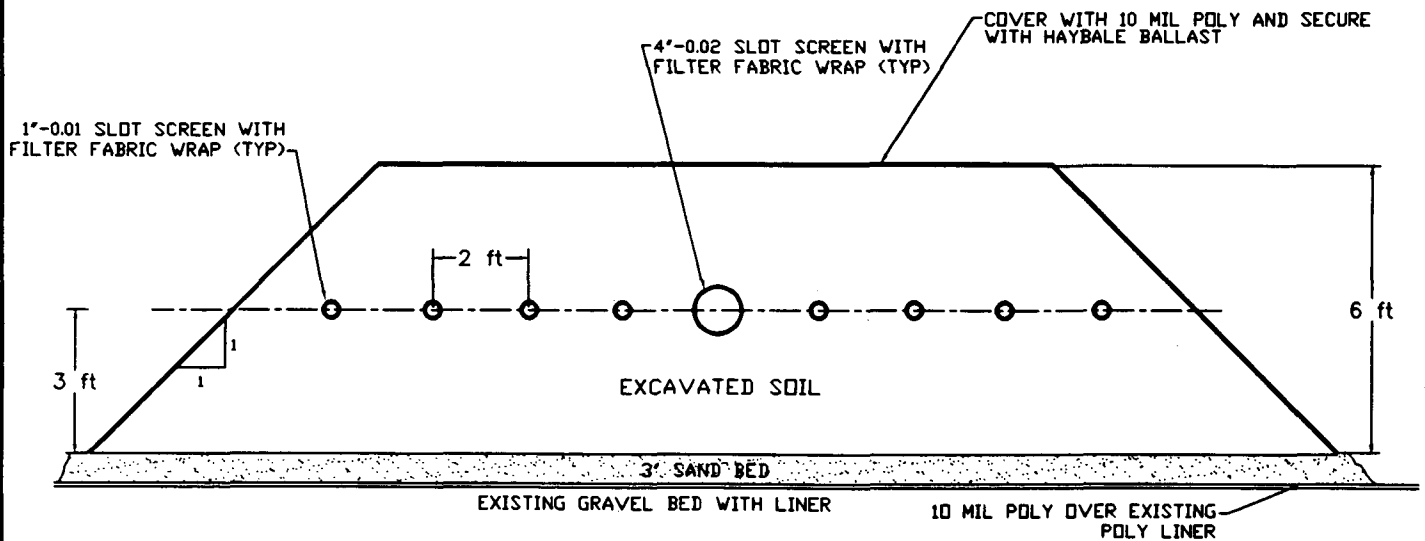
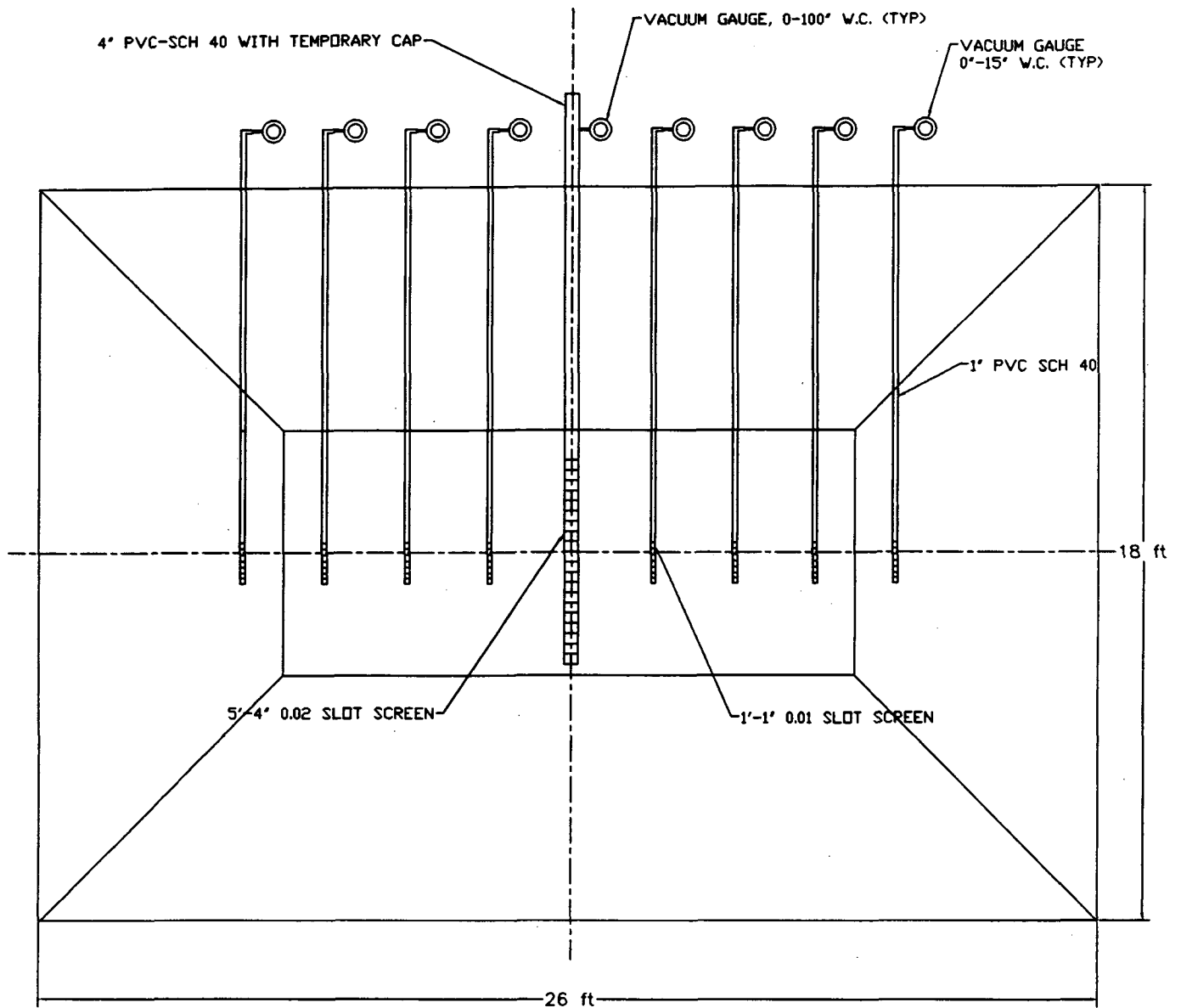
IT CORPORATION
NOTICE TO ALL BIDDERS
REQUEST FOR QUOTATION

ENVIRONMENTAL REMEDIATION PILOT TEST

NEW YORK DEC
LEHIGH VALLEY RAILROAD SITE
LEROY, NEW YORK
January 1998

The following additional items regarding the January 23, 1998 request for quotation shall be noted by all bidders:

- 1) All bids are expected to follow the prevailing wage for Genesee County, New York.
- 2) A retainage of 5% of the invoice submitted to IT Corporation will be released upon payment to IT by the NYDEC.
- 3) The price for the vapor phase carbon system shall include three (3) 200-pound carbon canisters instead of the two (2) canisters originally specified.
- 4) The use of a skid mount for the vapor phase carbon system is **NOT** mandatory.
- 5) The attached "Representations & Certifications" form shall be completed by all bidders and submitted with the quotation.
- 6) The offer must be received by January 30, 1998, 12 noon.



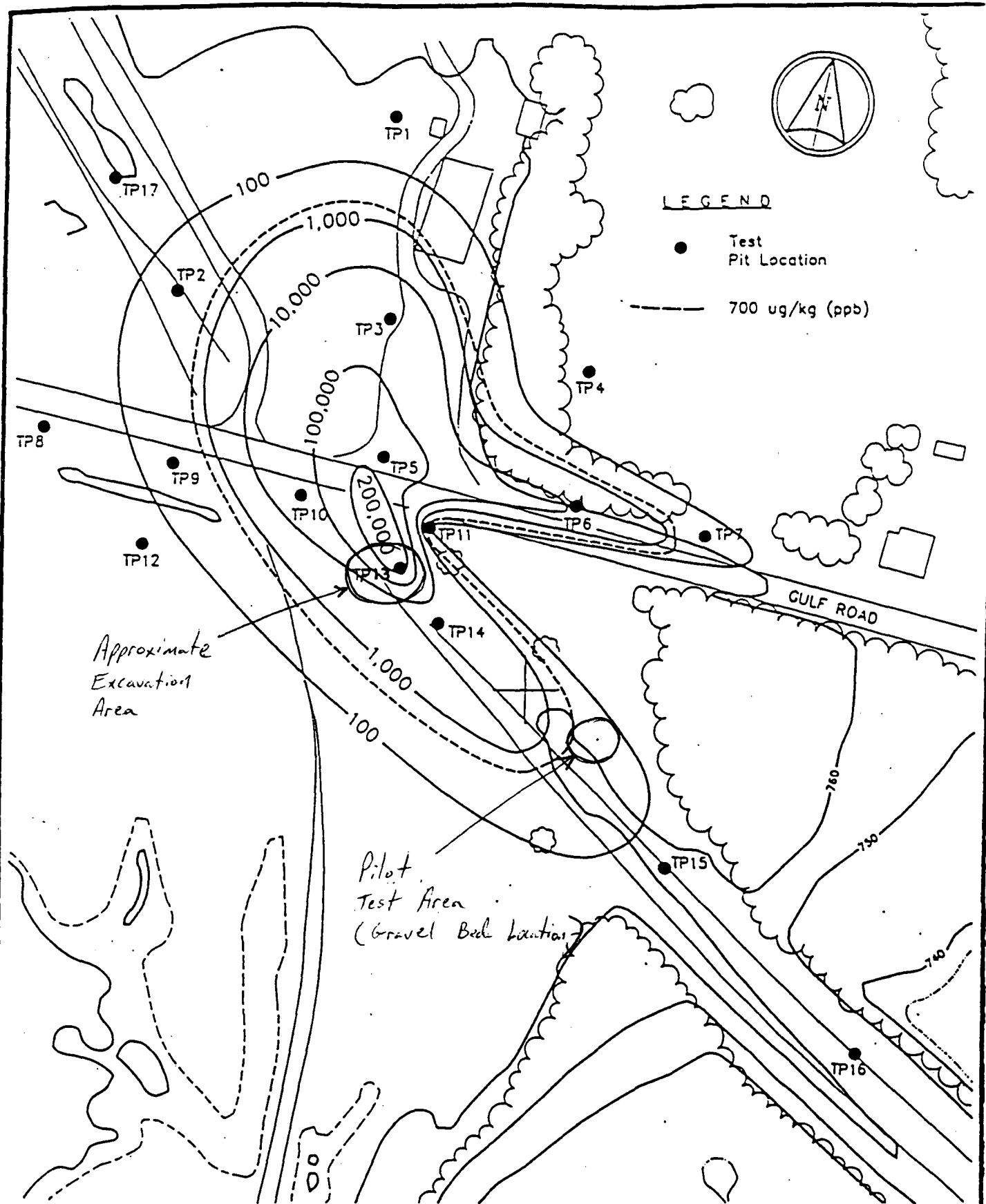
**INTERNATIONAL
TECHNOLOGY
CORPORATION**

**FIGURE 1
SOIL PILE CONFIGURATION
SVE PILOT TEST**

LEHIGH VALLEY RAILROAD SITE
LEROY, NEW YORK
NYDEC

REV	DESCRIPTION	DATE	BY
-	-	-	-

DRAWN BY:	-	DATE:	-
CHECKED BY:	-	DATE:	-
ENGINEER:	-	DATE:	-
APPROVED BY:	-	DATE:	-
SCALE:	NONE	PROJECT No.	EB1893
DRAWING No.	EB1893-A1	REV	-



 DUNN GEOSCIENCE ENGINEERING Co., P.C. 12 Metro Park Road Albany, NY 12205		TCE CONCENTRATION CONTOURS (TEST PIT SOILS) Le Roy, NY LEHIGH VALLEY RR DERAILMENT SITE	
PROJECT NO. 00296-02379	DATE 11/92	DWG. NO. A9181_3	SCALE 1"=100'
		FIGURE NO. 2	

REQUEST FOR QUOTATION

Date: January 14, 1999

OFFER MUST BE RECEIVED BY 01/26/97, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No. (732) 469-5599
Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by:

Signature:

Title:

Date: Telephone:

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each		
2	Air Hammer/Air Rotary Drilling - 10-inch Borehole	290	foot		
3	Install 8-inch Diameter Locking Well Casing to 10 foot Depth	29	each		
4	Air Hammer Drilling - 6-inch Borehole	1750	foot		
5	Develop 29 Monitoring Wells for One Hour	29	each		
6	NX Coring	200	foot		
7	Cement Grout Cored Boreholes	200	foot		
8	55-gallon Open Top Drums for Drill Cuttings	150	each		
9	Continuous Split-spoon Sampling	50	foot		
10	Cement Grout Split-spoon Boreholes	12	each		
11	Multiplier for Level C	0	hour		
Ship To: Somerset, New Jersey		Subtotal			
		Tax			
		Freight			
		Grand Total			
Method of Shipment:		F.O.B. Point/Ship Terms:		Terms of Payment:	
				Shipment can be made in days from receipt of order	

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

STATEMENT OF WORK

IT Corporation (IT) under contract to New York State Department of Conservation (NYSDEC) is seeking drilling services to install 29 open rock borehole monitoring wells, two continuous core rock borings and 12 soil borings at the Lehigh Valley Railroad Derailment site. The project tasks will be performed sequentially using one drilling rig per task. IT will supply an on-site geologist to direct all drilling operations. Specifics of the project are as follows:

1. Site Location - Vicinity of the town of LeRoy, Genesee County (see map)
2. Start Date - June 1 (estimated)
3. Completion - June 30 (estimated)
4. Project Scope - See attached sheet. It is expected that all borings will encounter bedrock at a depth of eight feet or less. It is assumed that all boreholes will be readily accessible.
5. Sampling Device - Both split-spoon and rock coring sampling devices will be utilized.
6. Decontamination - Decontamination will be required between boreholes.
7. Hole Abandonment - The borehole will be sealed to the surface with a cement/bentonite mixture. Rock cores will be saved in marked boxes supplied by the drilling contractor and will be delivered to the nearby NYSDEC office at project completion.
8. Personal Protection Level - Level D is assumed. The ability to switch to Level C is required.
9. Cost Proposal - Costs should be provided on a per foot basis for a two man crew and all needed equipment. Costs should also include mobilization/demobilization and any travel related items. A separate additional daily cost to provide Level C safety equipment should also be provided.
10. Terms and Conditions - Terms and Conditions will be in accordance with NYSDEC contract and IT Work Agreement.
11. Submissions Date - Costs should be submitted by noon on Monday, January 26, 1998 by facsimile to (732) 469-7275.

SCOPE OF WORK

Task 1 Monitoring Wells (total of 29 wells)

- Install 26 6-inch diameter open rock hole monitoring wells at chosen locations by the air hammer method to a total depth of 60 feet in limestone bedrock. Each well will require the installation of an 8-inch diameter steel casing inside a 10-inch diameter borehole to a depth of 10 feet. Air hammer or air rotary drilling shall be employed for the 10-inch diameter borehole. The 8-inch diameter steel casing is to be set in a cement/bentonite grout and finished two feet above grade with a master keyed locking cap.
- Modify three existing 5-inch diameter open rock hole monitoring wells which are 60 to 65 feet deep. Remove existing 6-inch diameter by 10-foot length steel casing and install 8-inch diameter steel casing two feet into bedrock inside a 10-inch diameter borehole to a depth of 10 feet. The 8-inch diameter steel casing is to be set in a cement/bentonite grout and finished two feet above grade with a master keyed locking cap. Ream out open rock hole to 6-inch diameter using the air hammer method or other suitable drilling method.
- The driller will supply sufficient open-top 55-gallon drums to collect all drill spoils. The driller will transport all filled drums to a central collection area near the monitoring wells.
- Decontamination of the drilling rig and equipment using a steam cleaner will be required between each borehole. Potable water for decontamination purposes will not be available at the drilling site.
- Develop all monitoring wells for a minimum of 1-hour using the pump and surge method. Groundwater discharge will be to the ground surface. No treatment will be required prior to discharge.

Task 2 Rock Coring (2 Locations)

- Perform two continuous corings at chosen locations to a depth of 100 feet. NX type coring will be required at each location.
- Place rock cores in core boxes supplied by the drilling contractor.
- Decontamination of the drilling rig and equipment using a steam cleaner will be required between each borehole. Potable water for coring or decontamination purposes will not be available at the drilling site.
- Fill boreholes with cement/bentonite grout upon completion.
-  At end of project transport all rock cores to the local NYSDEC office which is approximately 15 minutes travel time from site.

Task 3 Soil Borings (12 Locations)

- Advance 12 borings in soil (glacial fill) to top at bedrock at a maximum depth of approximately 8-feet using the hollow stem auger method. Assume an average depth of 4 feet to bedrock.
- Continuous 2-inch diameters split-spoon sampling will be performed in each boring.
- Split-spoons and hollow stem augers are to be decontaminated between boreholes using a steam cleaner.
- Return unused soil to borehole at boring completion.
- Fill borehole with cement/bentonite grout upon completion.

Additional Responsibilities

- The drilling contractor will collect, remove and dispose off-site any excess materials, trash, etc., related to their work and leave the drilling sites with a neat appearance.
- Drilling log sheets are to be filled out on a daily basis and signed by both the driller and IT geologist.

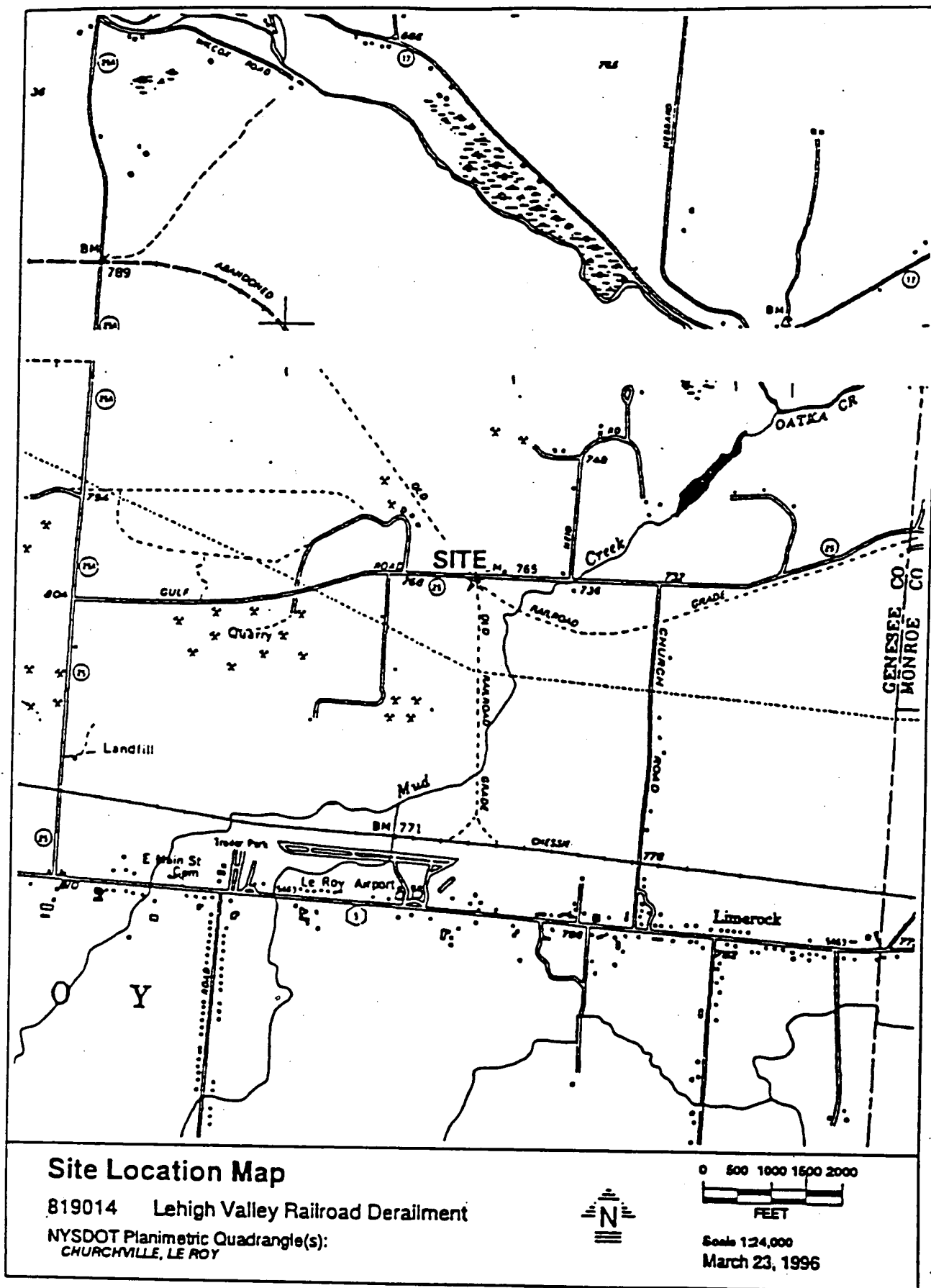


Figure 1

REQUEST FOR QUOTATION

Date: January 30, 1998

OFFER MUST BE RECEIVED BY 02/10/98, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No. (732) 469-5599
Fax No. (732) 469-7275

Quotation Valid for: 210 Days

Quotation Prepared by:

Signature:

Title:

Date: Telephone:

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each		
2	Setup for Packer Testing	3	each		
3	Packer Testing	45	hours		
4	Delivery/Removal of Carbon Drums	8	each		
		Subtotal			
		Tax			
		Freight			
		Grand Total			
Method of Shipment:		F.O.B. Point/Ship Terms:	Terms of Payment:	Shipment can be made in days from receipt of order	

1. Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
2. Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
3. Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

STATEMENT OF WORK

IT Corporation (IT) under contract to the New York State Department of Conservation (NYSDEC), is seeking professional Contractor services to perform *in situ* bedrock vapor extraction pilot tests to evaluate the feasibility of removing trichloroethene and related biodegradation products from the fractured limestone bedrock at the Lehigh Valley Railroad Derailment site. The pilot tests will be performed sequentially using a regenerative blower or a positive displacement vacuum pump in conjunction with inflatable straddle packers in both open borehole bedrock extraction and monitoring wells. IT will supply an on-site engineer to oversee all field operations. Project specifics are as follows:

1. Site Location - Vicinity of the town of LeRoy, Genesee County (see map)
2. Start Date - July 13, 1998 (estimated)
3. Completion - July 24, 1998 (estimated)
4. Project Scope - See attached sheet Scope of Work. It is assumed that all bedrock extraction and monitoring wells will be readily accessible.
5. Personal Protection Level - Level D is assumed. The ability to switch to Level C is required.
6. Cost Proposal - Costs should include all equipment needed to perform tasks. Costs should also include mobilization/demobilization and any travel related items.
7. Terms and Conditions - Terms and Conditions will be in accordance with the NYSDEC contract and IT Work Agreement.
8. Submission Date - Costs should be submitted by noon on Tuesday, February 10, 1998 by facsimile to (732) 469-7275.

SCOPE OF WORK

Three open borehole vapor extraction wells will each be pilot tested at three different intervals, with six dedicated open borehole bedrock observation wells monitored during each extraction well test, for a total of 18 observation wells monitored during nine separate vapor extraction tests. Each vapor extraction and observation well will be fitted with an inflatable straddle packer system during a pilot test. Extraction wells will be 6-inches nominal diameter to a depth of about 60 feet, with 10 feet of 8-inch diameter steel casing installed into bedrock. Observation wells will be constructed similarly.

Each extraction well will be packed off at three identical depth intervals, with each of six surrounding observation wells packed off at three depth intervals identical to the test well to facilitate testing and monitoring three layers of the bedrock vadose zone. One packed zone in an extraction well will be tested at a time by withdrawing vapor at a steady sustained rate until the test interval and any responding observation wells reasonably equilibrate to the induced pressure loss. Time-series vapor quality samples will be collected at the start, mid-point and end of a withdrawal test, and for offsite laboratory analysis for trichloroethene and other target parameters.

Test Equipment

One extraction test well and six observation wells will be equipped with the packer configuration or string shown in Figure 1. Seven individual packer strings will be required for test execution and observation. One packer string will consist of two inflatable packers connected in series with 2-inch inside diameter (I.D.) galvanized steel lift pipe to create three test intervals after inflation. Vapor will be drawn out of particular test interval through a length (minimum 5-feet) of slotted pipe in the lift pipe string. The extraction well will be temporarily sealed airtight at the top of the well during an extraction test. This will be accomplished using an expanding well seal modified to accommodate the packer lift pipe and transducer cables or a third packer inflated in the shallow casing below ground surface. Observation wells will be sealed airtight with a modified well cover. An electronic digital data logger, capable of storing and creating diskette data deliverables, will be used to monitor and record pressure changes from vapor pressure transducers installed in each interval in the extraction well and observation wells. A transducer, attached to the lift pipe, will be located in each packer interval, as shown, with three transducers in each test and observation well, for a total of 21 transducers.

Vapor will be withdrawn from a test interval using a high volume, regenerative blower or a positive displacement vacuum pump, to assure sustainable 1-100 cfm vapor flow rates at zero (0-inches mercury, Hg) to approximately 14 inches Hg vacuum, although 10 to 20 cfm at 3 to 9 inches Hg is optimum. An in-line moisture filter will be required to separate out moisture, especially from the lowest test interval in the vapor extraction well, which is likely to intersect the water table.

All offgas generated during the pilot test will be treated using 55-gallon drums containing activated carbon. The orientation of the canisters, either in series or parallel, will be dependent on

offgas concentrations and the amount of the backpressure generated, but a minimum of two carbon canisters are anticipated to be used during each test. The Contractor will have the responsibility of supplying carbon canisters from a vendor who will deliver and then remove the carbon canisters for regeneration after pilot testing is completed. IT Corporation will sign all manifests related to removal of activated carbon canisters from the site.

A flow monitoring and control panel at ground surface will be used at the extraction well and will consist of the following components in series within a 3-inch I.D. vacuum flow line in progressive order from the well head to the pump (see Figure 2): real-time vapor meter (PID/FID) port, vapor sampling, vacuum gauge, flow valve, flow meter and flow dilution valve. Note that no electrical power will be available at the site, and the contractor will be responsible for providing electrical generators to power the vacuum pumps and other equipment.

Listed below are equipment specifications:

- 1) 5.4-inch outside diameter (O.D.) x 4.5-foot long, thick wall, rubber bladder, hollow core packer (quantity @ 14 w/2 reserve)
- 2) 2-inch inside diameter (I.D.), outside coupled, galvanized steel lift pipe @ variable lengths to accommodate 10-15 foot spreads and 60 foot total well depths (estimated 370 feet per test)
- 3) Slotted 2-inch I.D. x 5-foot and 2-inch I.D. x 10-foot lift pipes (quantity @ 1 each)
- 4) Compressed nitrogen for packer inflation
- 5) 4-channel analog/digital data logger (quantity @ 7 plus 2 reserve)
- 6) IBM compatible laptop portable computer (486 or better processor)
- 7) 0-5 & 0-15 psig vacuum transducers w/0.25% FSO BFSL or better accuracy (quantity @ 4x0-15 psig & 19 x 0- 5 psig)
- 8) Transducer adapter cable (quantity @ 2,400 feet)
- 9) Moisture filter, 25+ gal. capacity w/drain port (quantity @ 1)
- 10) Vacuum pumps:
 - Regenerative Blower type: single phase, 230V, 5 HP, 25 cfm @ 7.5 inches Hg, 100 cfm @ 6.0 inches Hg
 - Positive Displacement type: 110V, 3 HP, 55 cfm @ 14 inches Hg
- 11) Generator to power vacuum pumps and equipment (quantity @ 2)
- 12) Five (5) ton mobile hoist for packer insertion and removal (quantity @ 1)
- 13) Activated carbon canisters, 55-gallon size (quantity @ 8 each w/225 lbs carbon)

Flow Monitoring and Control Panel

- 1) Pressure fitting field meter port (quantity @ 1)
- 2) Pressure fitting lab samples port (quantity @ 1)
- 3) Vacuum canister type sampler port (quantity @ 30)
- 4) Vacuum gage, 0-200 inches H₂O (quantity @ 1)
- 5) Ball type flow valve (quantity @ 1)
- 6) Air flow meter, 0-25 & 0-100 cfm (quantity @ 1 H₂O each)
- 7) Flow dilution valve (quantity @ 1)

Test Methods

One extraction well will be tested at a time and monitored by six dedicated observation wells in close proximity to the extraction well. Predetermined test intervals will be selected for the three extraction test wells. Straddle packer spreads will be constructed in the field as individual components are lowered into the wells via hoist truck. Observation well straddle packer spreads will be identical to the extraction test well packer string. Once the packers are in place and inflated in the observation wells, the wells will be sealed at the top of casing. Observation wells will remain sealed until all tests in the three intervals in an extraction well are complete. Two assembly crews will economically facilitate packer installations. One data logger and three low vacuum pressure transducers, for maximum sensitivity, per observation well will be programmed to log at a time interval sufficient to record any pressure changes over time. Observation well logger start times will coordinate with the test well start time, with the extraction well monitored via a data logger and three higher range vacuum pressure transducers.

Following installation of the extraction well packer string, the well will be sealed to complete three individual test zones. One interval in one extraction well will be tested at a time, with the intervals above and below and in surrounding observation wells monitored simultaneously. After the first interval test by the Contractor, the packer string will be removed to relocate the slotted pipe to a new interval, with a solid section added to the old interval. The packer string will be replaced and the well will be resealed for the next test. The packer string will be removed a second time to complete the third test.

At each test well an in-line flow control and sampling system panel, located at ground surface before the above ground pump (see Figure 2), will be used to regulate, monitor and sample a particular test interval. Each interval test is intended to determine: 1) the sustainable vapor withdrawal rate within the optimum range of VOC vapor phase contaminant recovery 2) the vertical and lateral extent of test pressure drop, 3) the types and concentrations of vapor phase contaminants in the withdrawal stream over time.

A withdrawal test will consist of starting a vacuum pump at a time coordinated with the automatic start of all data loggers. The lowest rated flow-per-vacuum pump (regenerative blower type) will be used first to withdraw vapor at the ambient rate and vacuum that the permeability of a packed interval will allow. If a zone has a low permeability ($<10^{-9}$ cm₂) and a regenerative pump is under capacity to sustain an optimum flow at a higher vacuum, a second, positive displacement pump will be used to test the interval. Test durations will be determined in the field based on: 1) time to achieve stable vapor flow, if sustainable, out of a test interval, 2) stable, or steady slow pressure drops at affected observation intervals, and 3) real-time monitored vapor quality changes, or "tailing-off". Test durations are estimated at several hours.

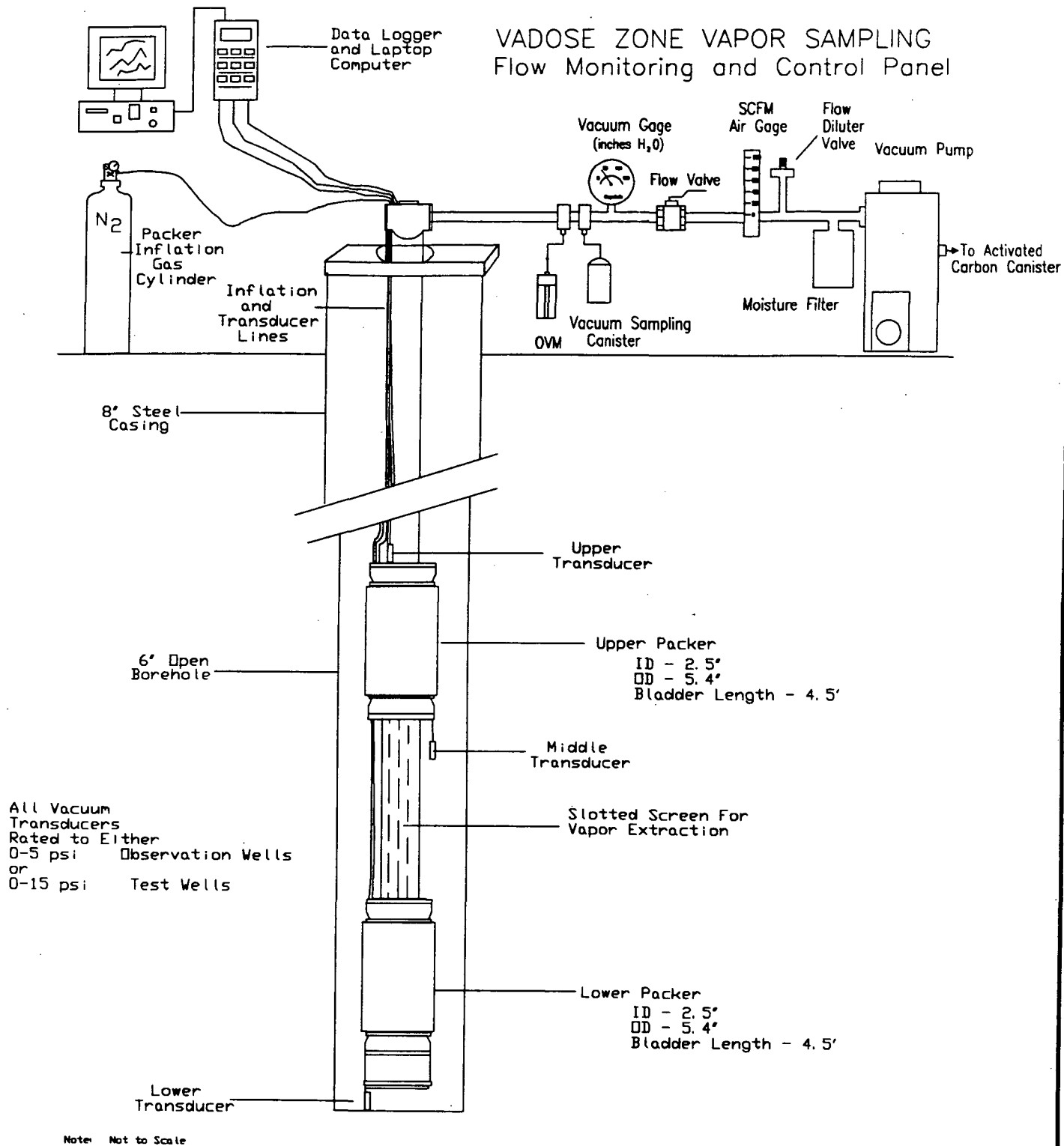
Flow stream vapor quality will be monitored by a field vapor meter (PID detector preferred; FID detector if moisture problem) inserted into the flowstream via the in-line meter port. Field screening will aid in determining test duration and sampling intervals. Three bedrock vapor samples will be collected during each pilot test by the Contractor, as follows: 1) following a test start (after one interval volume removed), 2) at the peak flowstream concentration, as determined by the field detector, and 3) near test end to document any concentration tailing. All vapor

samples will be collected in Tedlar™ bags by the Contractor. IT Corporation will be responsible for shipping all Tedlar™ bag samples to a certified laboratory for analysis. Note that a total of 27 vapor samples will be collected by the Contractor during pilot testing of the three bedrock wells.

Test flow rates and vacuums will be manually measured via the field meters for manual recording at suitable intervals to document any changes during the test.

Following an interval test, the packer string will be removed for relocation of the slotted inlet pipe as previously indicated. When all three intervals at a test well are complete, packer strings from both the test well and observation well will be relocated to the next test cluster.

The Contractor will provide the results of all pilot testing in a usable format, with both data diskettes and written text describing the results of each field test. All equipment specifications and modifications relating to each pilot test shall also be provided.



PACKER TESTING SCHEMATIC
VADOSE ZONE VAPOR SAMPLING

VADOSE ZONE VAPOR SAMPLING

Flow Monitoring and Control Panel

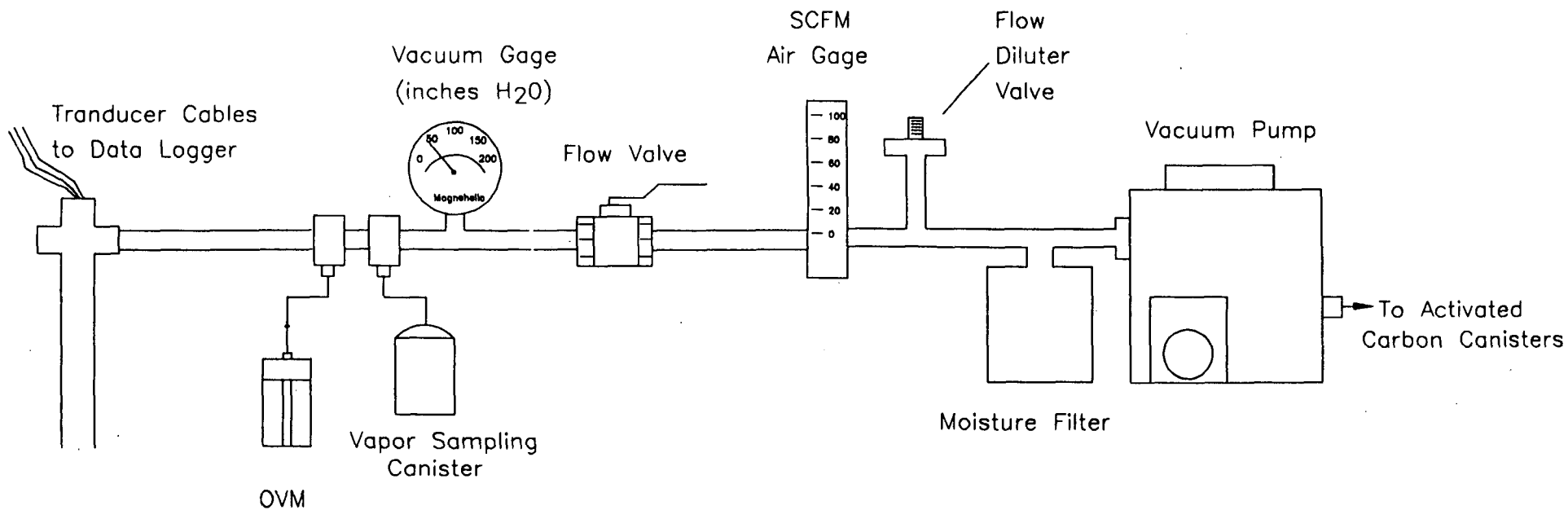
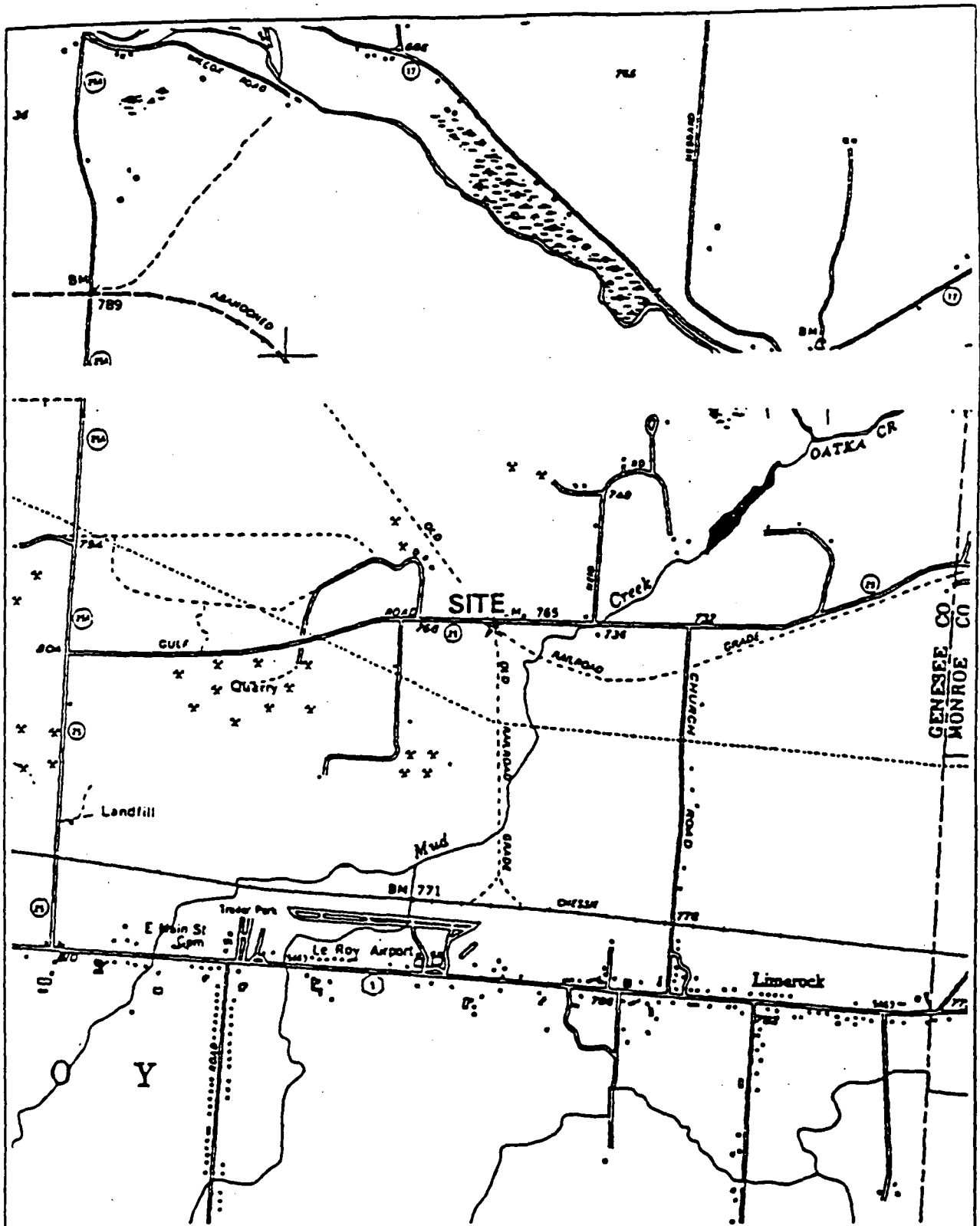


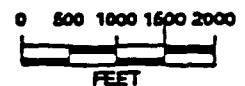
Figure 2



Site Location Map

819014 Lehigh Valley Railroad Derailment

NYSDOT Planimetric Quadrangle(s):
CHURCHVILLE, LE ROY



Scale 1:24,000
March 23, 1996



SCHEDULE 2.11(a)
SUMMARY OF WORK ASSIGNMENT PRICE
LEHIGH VALLEY DERAILMENT SITE
WORK ASSIGNMENT #D003666- 6

1	Direct Salary Costs (Schedules 2.10(a) and 2.11(b))		\$130,229	+ 10000
2	Indirect Costs (Schedule 2.10(a)) [1.63 x (1)]		\$212,273	+ 15000
3	Direct Non-Salary Costs (Schedules 2.11(c) and (d))		\$26,095	+ 200
4	Cost-Plus-Fixed-Fee Subcontracts (Schedule 2.11(e))			
	<u>Name of Subcontractor</u>	<u>Services to be Performed</u>		
	a.) Stearns & Wheler	Water Line Design	\$324,139	+ 3000
	b.) Yec, Inc.	Survey boring alignment	\$70,748	- 10000
	Total Cost-Plus-Fixed Fee Subcontracts	\$6.58/Ft.	\$394,887	- 8000
5	Unit Price Subcontracts (Schedule 2.11(f))			
	<u>Name of Subcontractor</u>	<u>Services to be Performed</u>		
	a.) Groundwater Treatment & Technology	BVE Pilot Test	\$99,800	- 500
	b.) Nothnagle Drilling	Soil & Rock Well Drilling	\$43,200	—
	c.) Electrical Consultant Professional (To Be Determined)	Electrical Engineering	\$35,000	—
	d.) RECRA LabNet	Analytical	\$26,725	—
	e.) AAA Environmental	Construction of SVE	\$8,500	—
	f.) COPIES NOW	Printing/Reproduction	\$6,631	- 3500
	g.) Alliance Shorthand Reporting	Steno Minutes Preparation	\$3,100	—
	h.) EDV, Inc.	Laboratory Data Validation	\$1,208	- 1600
	Total Unit Price Subcontracts		\$224,164	- 5000
6	Subcontract Management Fee (5% of Tasks in (5) over \$10,000)		\$8,486	- 600
7	Total Subcontract Costs (4+5+6)		\$627,537	- 13500
8	Fixed Fee (Schedule 2.10(h)) (6.4% of (1+2))		\$21,920	+ 1500
9	Total Work Assignment Prices (1+2+3+7+8)		\$1,018,054	

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

IT COST PROPOSAL SUMMARY
 INCLUDES SCHEDULES 2.11(b) & 2.11(b)1

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997	27		36	87	5			13	168
Task 1 - 1998	28		16	80				28	152
Task 1 - 1999									
	55		52	167	5			41	320
Task 2 - 1997									
Task 2 - 1998	156		436	320	208	276	50	164	1610
Task 2 - 1999									
	156		436	320	208	276	50	164	1610
Task 3 - 1997									
Task 3 - 1998	108	56	144	200	420		40	115	1083
Task 3 - 1999	88	48	172	240	440		50	150	1188
	196	104	316	440	860		90	265	2271
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999	104		152	120	120		30	45	571
	104		152	120	120		30	45	571
SUBTOTAL 1997 HOURS	27		36	87	5			13	168
SUBTOTAL 1998 HOURS	292	56	596	600	628	276	90	307	2845
SUBTOTAL 1999 HOURS	192	48	324	360	560		80	195	1759
TOTAL HOURS	511	104	956	1047	1193	276	170	515	4772
Task 1 - 1997 Direct labor Costs	\$1,197.99		\$1,127.16	\$2,328.99	\$110.75			\$167.57	\$4,932.46
Task 2 - 1997 Direct labor Costs									
Task 3 - 1997 Direct labor Costs									
Task 4 - 1997 Direct labor Costs									
SUBTOTAL 1997 DIRECT LABOR COSTS	\$1,197.99		\$1,127.16	\$2,328.99	\$110.75			\$167.57	\$4,932.46
Task 1 - 1998 Direct labor Costs	\$1,279.60		\$515.84	\$2,205.60				\$371.84	\$4,372.88
Task 2 - 1998 Direct labor Costs	\$7,129.20		\$14,056.64	\$8,822.40	\$4,746.56	\$5,114.28	\$820.50	\$2,177.92	\$42,867.50
Task 3 - 1998 Direct labor Costs	\$4,935.60	\$2,121.28	\$4,642.56	\$5,514.00	\$9,584.40		\$656.40	\$1,527.20	\$28,981.44
Task 4 - 1998 Direct labor Costs									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$13,344.40	\$2,121.28	\$19,215.04	\$16,542.00	\$14,330.96	\$5,114.28	\$1,476.90	\$4,076.96	\$76,221.82
Task 1 - 1999 Direct labor Costs									
Task 2 - 1999 Direct labor Costs									
Task 3 - 1999 Direct labor Costs	\$4,142.16	\$1,872.96	\$5,712.12	\$6,816.00	\$10,340.00		\$845.50	\$2,052.00	\$31,780.74
Task 4 - 1999 Direct labor Costs	\$4,895.28		\$5,047.92	\$3,408.00	\$2,820.00		\$507.30	\$615.60	\$17,294.10
SUBTOTAL 1999 DIRECT LABOR COSTS	\$9,037.44	\$1,872.96	\$10,760.04	\$10,224.00	\$13,160.00		\$1,352.80	\$2,667.60	\$49,074.84
TOTAL DIRECT LABOR COSTS	\$23,579.83	\$3,994.24	\$31,102.24	\$29,094.99	\$27,601.71	\$5,114.28	\$2,829.70	\$6,912.13	\$130,229.12

456

wp develop.
 over budget

1640

2195

387

4542

1448

984

1068

2052

496

0

2432

1564

3996

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
TASK 1 - SUMMARY

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997	27		36	87	5			13	168
Task 1 - 1998	28		16	80				28	152
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998									
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS	27		36	87	5			13	168
SUBTOTAL 1998 HOURS	28		16	80				28	152
SUBTOTAL 1999 HOURS									
TOTAL HOURS	55		52	167	5			41	320
SUBTOTAL 1997 DIRECT LABOR COSTS	\$1,197.99		\$1,127.16	\$2,328.99	\$110.75			\$167.57	\$4,932.46
SUBTOTAL 1998 DIRECT LABOR COSTS	\$1,279.60		\$515.84	\$2,205.60				\$371.84	\$4,372.88
SUBTOTAL 1999 DIRECT LABOR COSTS									
TOTAL DIRECT LABOR COSTS	\$2,477.59		\$1,643.00	\$4,534.59	\$110.75			\$539.41	\$9,305.34

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
TASK 2 - SUMMARY

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998	116		436	296	208	276		116	1448
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	116		436	296	208	276		116	1448
SUBTOTAL 1999 HOURS									
TOTAL HOURS	116		436	296	208	276		116	1448
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$5,301.20		\$14,056.64	\$8,160.72	\$4,746.56	\$5,114.28		\$1,540.48	\$38,919.88
SUBTOTAL 1999 DIRECT LABOR COSTS									
TOTAL DIRECT LABOR COSTS	\$5,301.20		\$14,056.64	\$8,160.72	\$4,746.56	\$5,114.28		\$1,540.48	\$38,919.88

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
 SUBTASK 2.2A - EX-SITU PILOT TEST

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998	24		60	80	96			32	292
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	24		60	80	96			32	292
SUBTOTAL 1999 HOURS									
TOTAL HOURS	24		60	80	96			32	292
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$1,096.80		\$1,934.40	\$2,205.60	\$2,190.72			\$424.96	\$7,852.48
SUBTOTAL 1999 DIRECT LABOR COSTS									
TOTAL DIRECT LABOR COSTS	\$1,096.80		\$1,934.40	\$2,205.60	\$2,190.72			\$424.96	\$7,852.48

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
 SUBTASK 2.2B - DRILL/INSTALL 29 WELLS, DRILL/SAMPLE 12 SOIL BORINGS & 2 COREHOLES

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998	24		60			256			340
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	24		60			256			340
SUBTOTAL 1999 HOURS									
TOTAL HOURS	24		60			256			340
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$1,096.80		\$1,934.40			\$4,743.68			\$7,774.88
SUBTOTAL 1999 DIRECT LABOR COSTS									
TOTAL DIRECT LABOR COSTS	\$1,096.80		\$1,934.40			\$4,743.68			\$7,774.88

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
 SUBTASK 2.2C - CONDUCT IN-SITU PILOT TEST (BEDROCK)

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998	24		160		40			20	244
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	24		160		40			20	244
SUBTOTAL 1999 HOURS									
TOTAL HOURS	24		160		40			20	244
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$1,096.80		\$5,158.40		\$912.80			\$265.60	\$7,433.60
SUBTOTAL 1999 DIRECT LABOR COSTS									
TOTAL DIRECT LABOR COSTS	\$1,096.80		\$5,158.40		\$912.80			\$265.60	\$7,433.60

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
 SUBTASK 2.2D - REDUCE DATA FROM IN-SITU PILOT TEST (BEDROCK)

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998	32		60	176	40			40	348
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	32		60	176	40			40	348
SUBTOTAL 1999 HOURS									
TOTAL HOURS	32		60	176	40			40	348
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$1,462.40		\$1,934.40	\$4,852.32	\$912.80			\$531.20	\$9,693.12
SUBTOTAL 1999 DIRECT LABOR COSTS									
TOTAL DIRECT LABOR COSTS	\$1,462.40		\$1,934.40	\$4,852.32	\$912.80			\$531.20	\$9,693.12

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SUBTASK 2.2E - SCHEDULE 2.11(b)
 PILOT STUDIES REPORT

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998	12		96	40	32	20		24	224
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	12		96	40	32	20		24	224
SUBTOTAL 1999 HOURS									
TOTAL HOURS	12		96	40	32	20		24	224
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$548.40		\$3,095.04	\$1,102.80	\$730.24	\$370.60		\$318.72	\$6,165.80
SUBTOTAL 1999 DIRECT LABOR COSTS									
TOTAL DIRECT LABOR COSTS	\$548.40		\$3,095.04	\$1,102.80	\$730.24	\$370.60		\$318.72	\$6,165.80

ENGINEERING CONTRACT#: D003666
PROJECT NAME: Lehigh Valley Railroad Derailment
WORK ASSIGNMENT #: D003666-6

**SCHEDULE 2.11(b)
TASK 3 - SUMMARY**

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998									
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998	76	56	144	200	420			88	984
Task 3 - 1999	48	48	172	240	440			120	1068
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	76	56	144	200	420			88	984
SUBTOTAL 1999 HOURS	48	48	172	240	440			120	1068
TOTAL HOURS	124	104	316	440	860			208	2052
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$3,473.20	\$2,121.28	\$4,642.56	\$5,514.00	\$9,584.40			\$1,168.64	\$26,504.08
SUBTOTAL 1999 DIRECT LABOR COSTS	\$2,259.36	\$1,872.96	\$5,712.12	\$6,816.00	\$10,340.00			\$1,641.60	\$28,642.04
TOTAL DIRECT LABOR COSTS	\$5,732.56	\$3,994.24	\$10,354.68	\$12,330.00	\$19,924.40			\$2,810.24	\$55,146.12

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

**SCHEDULE 2.11(b)
 SUBTASK 3.1 - PRELIMINARY**

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998									
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998	60	40	96	120	260			40	616
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	60	40	96	120	260			40	616
SUBTOTAL 1999 HOURS									
TOTAL HOURS	60	40	96	120	260			40	616
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$2,742.00	\$1,515.20	\$3,095.04	\$3,308.40	\$5,933.20			\$531.20	\$17,125.04
SUBTOTAL 1999 DIRECT LABOR COSTS									
TOTAL DIRECT LABOR COSTS	\$2,742.00	\$1,515.20	\$3,095.04	\$3,308.40	\$5,933.20			\$531.20	\$17,125.04

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
 SUBTASK 3.2 - INTERMEDIATE

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998									
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998	16	16	48	80	160			48	368
Task 3 - 1999	24	24	72	120	240			72	552
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	16	16	48	80	160			48	368
SUBTOTAL 1999 HOURS	24	24	72	120	240			72	552
TOTAL HOURS	40	40	120	200	400			120	920
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS	\$731.20	\$606.08	\$1,547.52	\$2,205.60	\$3,651.20			\$637.44	\$9,379.04
SUBTOTAL 1999 DIRECT LABOR COSTS	\$1,129.68	\$936.48	\$2,391.12	\$3,408.00	\$5,640.00			\$984.96	\$14,490.24
TOTAL DIRECT LABOR COSTS	\$1,860.88	\$1,542.56	\$3,938.64	\$5,613.60	\$9,291.20			\$1,622.40	\$23,869.28

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

**SCHEDULE 2.11(b)
 SUBTASK 3.3 - 95% AND FINAL**

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998									
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999	16	24	40	80	120			40	320
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS									
SUBTOTAL 1999 HOURS	16	24	40	80	120			40	320
TOTAL HOURS	16	24	40	80	120			40	320
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS									
SUBTOTAL 1999 DIRECT LABOR COSTS	\$753.12	\$936.48	\$1,328.40	\$2,272.00	\$2,820.00			\$547.20	\$8,657.20
TOTAL DIRECT LABOR COSTS	\$753.12	\$936.48	\$1,328.40	\$2,272.00	\$2,820.00			\$547.20	\$8,657.20

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

**SCHEDULE 2.11(b)
 TASK 3.4 - CONSTRUCTION COST ESTIMATE**

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998									
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999	8		60	40	80			8	196
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999									
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS									
SUBTOTAL 1999 HOURS	8		60	40	80			8	196
TOTAL HOURS	8		60	40	80			8	196
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS									
SUBTOTAL 1999 DIRECT LABOR COSTS	\$376.56		\$1,992.60	\$1,136.00	\$1,880.00			\$109.44	\$5,494.60
TOTAL DIRECT LABOR COSTS	\$376.56		\$1,992.60	\$1,136.00	\$1,880.00			\$109.44	\$5,494.60

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
TASK 4 - SUMMARY

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998									
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999	80		152	120	120			24	496
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS									
SUBTOTAL 1999 HOURS	80		152	120	120			24	496
TOTAL HOURS	80		152	120	120			24	496
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS									
SUBTOTAL 1999 DIRECT LABOR COSTS	\$3,765.60		\$5,047.92	\$3,408.00	\$2,820.00			\$328.32	\$15,369.84
TOTAL DIRECT LABOR COSTS	\$3,765.60		\$5,047.92	\$3,408.00	\$2,820.00			\$328.32	\$15,369.84

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
 SUBTASK 4.1 - PRE-BID CONFERENCES AND PUBLIC MEETINGS

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998									
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999	72		112	120	120			16	440
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS									
SUBTOTAL 1999 HOURS	72		112	120	120			16	440
TOTAL HOURS	72		112	120	120			16	440
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS									
SUBTOTAL 1999 DIRECT LABOR COSTS	\$3,389.04		\$3,719.52	\$3,408.00	\$2,820.00			\$218.88	\$13,555.44
TOTAL DIRECT LABOR COSTS	\$3,389.04		\$3,719.52	\$3,408.00	\$2,820.00			\$218.88	\$13,555.44

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

SCHEDULE 2.11(b)
 SUBTASK 4.2 - DOCUMENT BID REVIEW

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998									
Task 2 - 1999									
Task 3 - 1997									
Task 3 - 1998									
Task 3 - 1999									
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999	8		40					8	56
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS									
SUBTOTAL 1999 HOURS	8		40					8	56
TOTAL HOURS	8		40					8	56
SUBTOTAL 1997 DIRECT LABOR COSTS									
SUBTOTAL 1998 DIRECT LABOR COSTS									
SUBTOTAL 1999 DIRECT LABOR COSTS	\$376.56		\$1,328.40					\$109.44	\$1,814.40
TOTAL DIRECT LABOR COSTS	\$376.56		\$1,328.40					\$109.44	\$1,814.40

ENGINEERING CONTRACT#: D003666
 PROJECT NAME: Lehigh Valley Railroad Derailment
 WORK ASSIGNMENT #: D003666-6

**SCHEDULE 2.11(b)1
 DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED**

NSPE	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates	\$44.37	\$36.78	\$31.31	\$26.77	\$22.15	\$17.99	\$15.93	\$12.89	
1998 Average Rates	\$45.70	\$37.88	\$32.24	\$27.57	\$22.82	\$18.53	\$16.41	\$13.28	
1999 Average Rates	\$47.07	\$39.02	\$33.21	\$28.40	\$23.50	\$19.08	\$16.91	\$13.68	
Task 1 - 1997									
Task 1 - 1998									
Task 1 - 1999									
Task 2 - 1997									
Task 2 - 1998	40			24			50	48	162
Task 2 - 1999	40			24			50	48	162
Task 3 - 1997									
Task 3 - 1998	32						40	27	99
Task 3 - 1999	40						50	30	120
	72						90	57	219
Task 4 - 1997									
Task 4 - 1998									
Task 4 - 1999	24						30	21	75
	24						30	21	75
SUBTOTAL 1997 HOURS									
SUBTOTAL 1998 HOURS	72			24			90	75	261
SUBTOTAL 1999 HOURS	64						80	51	195
TOTAL HOURS	136			24			170	126	456
Task 1 - 1997 Direct Admin Labor Costs									
Task 2 - 1997 Direct Admin Labor Costs									
Task 3 - 1997 Direct Admin Labor Costs									
Task 4 - 1997 Direct Admin Labor Costs									
SUBTOTAL 1997 DIRECT ADMIN LABOR COST									
Task 1 - 1998 Direct Admin Labor Costs									
Task 2 - 1998 Direct Admin Labor Costs	\$1,828.00			\$661.68			\$820.50	\$637.44	\$3,947.62
Task 3 - 1998 Direct Admin Labor Costs	\$1,462.40						\$656.40	\$358.56	\$2,477.36
Task 4 - 1998 Direct Admin Labor Costs									
SUBTOTAL 1998 DIRECT ADMIN LABOR COST	\$3,290.40			\$661.68			\$1,476.90	\$996.00	\$6,424.98
Task 1 - 1999 Direct Admin Labor Costs									
Task 2 - 1999 Direct Admin Labor Costs									
Task 3 - 1999 Direct Admin Labor Costs	\$1,882.80						\$845.50	\$410.40	\$3,138.70
Task 4 - 1999 Direct Admin Labor Costs	\$1,129.68						\$507.30	\$287.28	\$1,924.26
SUBTOTAL 1999 ADMIN DIRECT LABOR COST	\$3,012.48						\$1,352.80	\$697.68	\$5,062.96
TOTAL DIRECT ADMIN LABOR COSTS	\$6,302.88			\$661.68			\$2,829.70	\$1,693.68	\$11,487.94

Schedule 2.11(c)

Direct Non-Salary Costs Work Assignment Number D-003666-6

Item	Max. Reimbursement Rate (Specify Unit)	Est. No. of Units	Total Estimated Cost (\$)
A) Sample Analysis Rates	NA	NA	NA
(In-House Cost Only, for Subcontractors see Schedule 2.10(f) and 2.11(f))			
B) Miscellaneous			
1) Ex-Situ Per Diem	\$101/Day	12 Days	\$1,212.00
2) In-Situ Drilling Per Diem	\$101/Day	28 Days	\$2,828.00
3) In-Situ Pilot Per Diem	\$101/Day	24 Days	\$2,424.00
4) Ex-Situ Sample Shipment	\$60/Shipment	1 Shipment	\$60.00
5) In-Situ Drilling Shipment	\$75/Shipment	5 Shipment	\$375.00
7) CADD Equipment	\$7.50/hour	800 hours	\$6,000.00
8) Plotter Paper	\$25/hour	5 ea	\$125.00
9) Plotter Cartridges	\$25/hour	5 ea	\$125.00
10) Personal Computer	\$2.00/hour	680 hours	\$1,360.00
11) Auto Fuel & Tolls	\$325.00	L.S.	\$325.00
12) Meeting Per Diem	\$101/day	10 days	\$1,010.00
13) Airfare	\$500/trip	10 trips	\$5,000.00
14) Airport Parking	\$7/day	8 days	\$56.00
4) Task 1 (Per Diem)	\$106/day	2 Days	\$212.00
5) Task 1 (Partial Per-diem)	\$9.50/meal	2 Meals	\$19.00
6) Task 1 (Tolls)	\$8.00/Rnd Trip	1 Rnd Trip	\$8.00
7) Task 1 (Fuel)	\$25/Rnd Trip	1 Rnd Trip	\$25.00
Total Direct Non-Salary Costs			<u>\$21,164.00</u>

*See Schedule 2.10(b) for rates.

Schedule 2.11(d) 2**Maximum Reimbursement Rates for Consultant/Subconsultant Owned Equipment**

Item	Purchase Price (\$) x 85%	Usage Rate* (\$/Unit of Time)	Capital Recovery Rate (\$/Unit of Time)	O&M Rate (\$/Unit of Time)	Est. Usage (Col. 3 x6)	Est. Usage Cost (\$)
<u>Ex-Situ Pilot</u>						
Low Value Equipment	\$0.75/person-field hour x 96 Field Hours					\$72.00
Van	\$196/wk x 1 Week					\$196.00
PPP Level D	\$12/Day x 8 Days					\$96.00
Hnu	\$31/Day x 5 Days					\$155.00
<u>In-Situ Pilot Drilling</u>						
Low Value Equipment	\$0.75/person field hour x 240 Field Hours					\$180.00
Van	\$196/wk x 4 Weeks					\$784.00
PPE Level D	\$12/day x 25 Days					\$300.00
HNu	\$31/Day x 20 Days					\$620.00
LEL Meter	\$26/Day x 20 Days					\$520.00
<u>In-Situ Pilot Pilot</u>						
Low Value Equipment	\$0.75/person field hour x 160 Field Hours					\$120.00
Van	\$196/wk x 4 Week					\$784.00
PPE Level D	\$12/day x 16 Days					\$192.00
HNu	\$31/Day x 16 Days					\$496.00
LEL Meter	\$26/Day x 16 Days					\$416.00

TOTAL \$4,931.00

*Usage Rate = Capital Recovery Rate + O&M Rate.

*The maximum usage rate for an item of equipment reverts to the O&M rate when the total capital recovery reimbursement rate exceed 85% of the purchase price.

*The Capital Recovery Rate is the equipment's depreciation for the useful life of the item.

Schedule 2.11(e)

Cost-Plus-fixed-Fee Subcontracts *Work Assignment Number D-003666-6*

Name of Subcontractor	Services to be Performed	Subcontract Price
Stearns & Wheler	Water Line Design	\$324,139.13

A) Direct Salary Costs

Professional Responsibility Level	Labor Classification	Ave. Reimbursement Rate (\$/Hr)	Max. Reimbursement	Est. No. of Hours	Total Est. Direct Salary Cost (Ave. Reimb. Rate x Est. # of Hrs)
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SEE SUBCONTRACTOR COST BREAKDOWN IMMEDIATELY FOLLOWING THIS PAGE

B) Indirect Costs

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

SEE SUBCONTRACTOR COST BREAKDOWN IMMEDIATELY FOLLOWING THIS PAGE

C) Maximum Reimbursement Rates for Direct Non-Salary Costs

SEE SUBCONTRACTOR COST BREAKDOWN IMMEDIATELY FOLLOWING THIS PAGE

D) Fixed Fee

SEE SUBCONTRACTOR COST BREAKDOWN IMMEDIATELY FOLLOWING THIS PAGE

Footnotes:

- 1) These rates will be held firm until (DATE).
- 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 of fliers 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 Department and the Comptroller.
- 7) This Footnote applies to Schedules for years 4 thru 7 only. If the U.S. cost-of-living index increases at a rate greater than % 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.

SCHEDULE 2.11(a)
SUMMARY OF WORK ASSIGNMENT PRICE
SITES A AND B
WORK ASSIGNMENT #D005555-1

		Cost	
1	Direct Salary Costs (Schedules 2.10(a) and 2.11(b))	<u>\$101,694.00</u>	94848
2	Indirect Costs (Schedule 2.10(g)) [1.67 x (1)]	<u>\$169,828.98</u>	158396
3	Direct Non-Salary Costs (Schedules 2.11(c) and (d))	<u>\$39,040.00</u>	32841
SUBCONTRACT COSTS			
Cost-Plus-Fixed-Fee Subcontracts (Schedule 2.11(e))			
Name of Subcontractor		Services to be Performed	
a			
b			
c			
4	Total Cost-Plus-Fixed Fee Subcontracts	<u>\$0.00</u>	
Unit Price Subcontracts (Schedule 2.11(f))			
Name of Subcontractor		Services to be Performed	
a			
b			
c			
5	Total Unit Price Subcontracts	<u>\$0.00</u>	
6	Subcontract Management Fee (5% of (5))	<u>\$0.00</u>	
7	Total Subcontract Costs (4+5+6)	<u>\$0.00</u>	
8	Fixed Fee (Schedule 2.10(h)) (5% of (1+2))	<u>\$13,576.15</u>	12662
9	Total Work Assignment Prices (1+2+3+7+8)	<u>\$324,139.13</u>	298747

Final

SCHEDULE 2.11(b)
SUMMARY
WA# D005555-1

NSPE	IX	VIII	VII	VI	V	IV	III	II	I	Total Hours
1997 Average Rates		\$48.95	\$34.55	\$28.66	\$24.58	\$21.30	\$18.53	\$16.25	\$10.49	
1998 Average Rates		\$48.95	\$34.55	\$28.66	\$24.58	\$21.30	\$18.53	\$16.25	\$10.49	
1999 Average Rates		\$50.42	\$35.59	\$29.51	\$25.32	\$21.94	\$19.09	\$16.74	\$10.80	
Task 1 - 1997		34	16			4		10	4	68
Task 1 - 1998		6	24					10	8	48
Task 1 - 1999										0
Task 2 - 1997										0
Task 2 - 1998- Water System Portion		16	110		24	32	104	200	178	664
Task 2 - 1999										0
Task 3 - 1997		2	8		20		55	59	7	0
Task 3 - 1998 - Water System Design		53	188	92	378	260	1045	1624	353	3993
Task 3 - 1999										0
Task 4 - 1997		3	11		28		78	84	10	(24)
Task 4 - 1998										0
Task 4 - 1999- Water Contracts		12	30			310			40	392
SUBTOTAL 1997 HOURS	0	34	16	0	0	4	0	10	4	68
SUBTOTAL 1998 HOURS	0	75	322	92	402	292	1149	1834	539	4705
SUBTOTAL 1999 HOURS	0	12	30	0	0	310	0	0	40	392
TOTAL HOURS	0	121	368	92	402	606	1149	1844	583	5165
SUBTOTAL 1997 DIRECT LABOR COSTS	\$0.00	\$1,664.30	\$552.80	\$0.00	\$0.00	\$85.20	\$0.00	\$162.50	\$41.96	\$2,506.76
SUBTOTAL 1998 DIRECT LABOR COSTS	\$0.00	\$3,671.25	\$11,125.10	\$2,636.72	\$9,881.16	\$6,219.60	\$21,290.97	\$29,802.50	\$5,654.11	\$90,281.41
SUBTOTAL 1999 DIRECT LABOR COSTS	\$0.00	\$605.04	\$1,067.70	\$0.00	\$0.00	\$6,801.40	\$0.00	\$0.00	\$432.00	\$8,906.14
TOTAL DIRECT LABOR COSTS	\$0.00	\$5,940.59	\$12,745.60	\$2,636.72	\$9,881.16	\$13,106.20	\$21,290.97	\$29,965.00	\$6,128.07	\$101,694.31

T 116

- 151

- 35

485

3883

268

4752

CLIENT : <u>IT/NYSDEC</u>		PREPARED BY: <u>JCB</u>																				
PROJECT: <u>Lehigh RR</u>		CHECKED BY : <u>CME</u>		DATE: <u>2/26/1998</u>																		
		MAN-HOURS BY CATEGORY																				
CLASSIFICATION NUMBER	Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
TASK DESCRIPTION	Number	Exec V	VP	Assoc	r PmV	P M II	P M I	P E II	P E I	Eng III	Eng II	Eng I	M Des	S Des	Des	CADD	Tech	Sr Rep	P Rep	C Acct	Sec/WP	HOURS
Task 2																						
Service Area & Status of Existing System	2.1a	2		42							60			12			24				4	144
Surveying & Soils Info	2.1b			8					32	24				16			24				4	108
Water Demands	2.1c			4			24														4	32
Facilities	2.1d	2		8							40			40							6	96
Cost estimates	2.1e	1		4							20						20				6	51
Permit Assessments	2.1g	1		8							20										6	35
Admin/Legislative Options	2.1f	2		18							20										8	48
Summary/Tech Mem	2.1h	2		6							40			12			12				12	84
Administrative		6		12																40	8	66
TOTALS		16		110			24		32	24	200			80			80			40	58	664
UNIT RATES THROUGH JUNE 1997		48.95		34.55	28.66		24.58		21.30	18.53	16.25			18.53	16.25	10.49	10.49			10.49	10.49	
COST		152	0	107	89	0	76	0	66	57	50	0	0	57	50	33	33	0	0	33	33	836

Notes:

For projects to be executed beyond July 1, 1997, a 4 per cent annual allowance for inflation should be added.

Rates shown are for New York Offices. Other regions should adjust rates to suit their salary structures.

For questions, comments and suggested modifications contact DESchwinn on Cazenovia Extension 221 or send an Email message.

CLIENT : <u>IT/NYSDEC</u>												PREPARED BY: <u>JCB</u>																	
PROJECT: <u>Lehigh RR</u>												CHECKED BY : <u>CME</u>												DATE: <u>#####</u>					

TASK DESCRIPTION	EXPENSES											SUMMARY						SUMMARY			SUMMARY						
	Car	Truck	Over-	Airfare	Comptr	Eqpmt	Copy	Tel &				Overhead=	Profit=	COST PLUS FIXED FEE BASIS				HOURLY AT 2.5 MULTIPLIER			HOURLY AT 2.7 MULTIPLIER						
	Miles	Miles	nights	Car ren	CAD	Costs	& Misc	Out/Tech	Blueline	Copier	Center	Email	irect Labo	Indirect	Expenses	Cost	Profit	Total Price	Labor	Expenses	Total Price	Labor	Expenses	Total Price			
Task 2												0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Service Area & Statu	1000		5	12						200		3040	5077	1005	9122	406	9528	10526	1005	11531	11368	1005	12373				
Surveying & Soils Inf	400		4	16						200		1993	3328	766	6087	266	6353	6900	766	7666	7453	766	8219				
Water Demands										100		770	1286	100	2156	103	2259	2666	100	2766	2880	100	2980				
Facilities	500				50					100		1828	3053	633	5514	244	5759	6331	633	6963	6837	633	7470				
Cost estimates										100		785	1311	100	2196	105	2300	2718	100	2818	2935	100	3035				
Permit Assessments	500									300		713	1191	458	2362	95	2457	2470	458	2927	2667	458	3125				
Admin/Legislative O	0									100		1129	1885	100	3114	151	3264	3908	100	4008	4221	100	4321				
Summary/Tech Mem					12					200	2500	1429	2387	735	4551	191	4742	4949	735	5684	5345	735	6080				
Administrative										400		1212	2024	400	3636	162	3797	4196	400	4596	4532	400	4932				
												0	0	0	0	0	0	0	0	0	0	0	0				
												0	0	0	0	0	0	0	0	0	0	0	0				
												0	0	0	0	0	0	0	0	0	0	0	0				
												0	0	0	0	0	0	0	0	0	0	0	0				
												0	0	0	0	0	0	0	0	0	0	0	0				
TOTALS	2400		9	90					200		2500	12900	21542	4296	38738	1722	40460	44665	4296	48961	48238	4296	52534				
UNIT RATES TO 6/97	0.315		80.00	7.50					1.60	0.05	0.050	Notes: Profit is on labor only and not on expenses. Modify calculation if profit is allowed on expenses. Indirect cost and profit are computed using the values entered in cells AQ5 and AQ6.															
COST	756		720	675					320		125	1700															

PROFIT SUMMARY	
AT CLIENT OVERHEAD LIMIT	1722
AT S & W STANDARD O/H(1.85)	-600
AT 2.5 MULTIPLIER	7901
AT 2.7 MULTIPLIER	11474

ROD/SSD Approval: _____ and _____

Date: _____

Approved Price \$ _____

CLIENT : <u>IT/NYSDEC</u>		PREPARED BY: <u>JCB</u>																				
PROJECT: <u>TASK 3-DESIGN</u>		CHECKED BY : <u>CME</u>		DATE: <u>*****</u>																		
		MAN-HOURS BY CATEGORY																				
CLASSIFICATION NUMBER	Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
TASK DESCRIPTION	Number	Exec V	VP	Assoc	r Pm	P M I	P M I	P E I	P E I	Eng III	Eng II	Eng I	M Des	S Des	Des	CADD	Tech	Sr Rep	P Rep	C Acct	SecWP	HOURS
Pumping Station		10		48	92		80		120		225			260	260						55	1150
Storage Tank		4		16			50		100					75	75						20	340
Pipeline		18		72		260				125	400			400	375						90	1740
Verify Survey										120				120			80					320
Submittals																						
Preliminary		1		8							40				16						6	71
Intermediate		1		8							40				16						6	71
Final		1		8							40				16						6	71
Bid Documents																						
Permits		4		4		8		40		100					80						20	256
Administration		16		32																80		128
TOTALS		55		196	92		398		260	245	845			855	838		80			80	203	4147
UNIT RATES THROUGH JUNE 1997		48.95		34.55	28.66		24.58		21.30	18.53	16.25			18.53	16.25		10.60			10.49	10.49	
COST		152	0	107	89	0	76	0	66	57	50	0	0	57	50	0	33	0	0	33	33	803

Notes:

For projects to be executed beyond July 1, 1997, a 4 per cent annual allowance for inflation should be added.

Rates shown are for New York Offices. Other regions should adjust rates to suit their salary structures.

For questions, comments and suggested modifications contact DESchwinn on Cazenovia Extension 221 or send an Email message.

CLIENT : IT/NYSDEC

PREPARED BY: JCB

PROJECT: TASK 3-DESIGN

CHECKED BY : CME

DATE: _____

TASK DESCRIPTION	EXPENSES												Overhead= 1.67 Profit= 0.05						SUMMARY COST PLUS FIXED FEE BASIS			SUMMARY HOURLY AT 2.5 MULTIPLIER			SUMMARY HOURLY AT 2.7 MULTIPLIER		
	Car	Truck	Over-	Airfare	Comptr	Eqpmt				Copy	Tel &		irect	Labor	Indirect	Expenses	Cost	Profit	Total Price	Labor	Expenses	Total Price	Labor	Expenses	Total Price		
	Miles	Miles	nights	Car ren	CAD	Costs	& Misc	Out/Tech	Blueline	Copiers	Center	Email															
Pumping Station	1000				420				25	1000		100	22583	37714	0	3655	63952	3015	66966	78194	3655	81849	84449	3655	88104		
Storage Tank	500				120				15	1000		100	6926	11566	0	1232	19724	925	20648	23981	1232	25212	25899	1232	27131		
Pipeline	1000				620				100	1000		200	33026	55153	0	5375	93553	4409	97962	114351	5375	119726	123499	5375	128874		
Verify Survey	1200		20		100							200	5295	8843	0	3328	17466	707	18173	18335	3328	21663	19801	3328	23129		
Submittals													0	0	0	0	0	0	0	0	0	0	0	0	0		
Preliminary	250				12				245	700		100	1298	2168	0	696	4162	173	4336	4495	696	5191	4855	696	5551		
Intermediate	250				12				280	7000		50	1298	2168	0	1017	4483	173	4657	4495	1017	5512	4855	1017	5872		
Final	250				12				572		19800	100	1298	2168	0	2174	5640	173	5814	4495	2174	6669	4855	2174	7029		
Bid Documents									4160		144000		0	0	0	13856	13856	0	13856	0	13856	13856	0	13856	13856		
Permits	1000				70				40	2000		600	4517	7544	0	1604	13666	603	14269	15642	1604	17246	16893	1604	18497		
Administration												400	0	0	0	400	7684	364	8048	9446	400	9846	10201	400	10601		
TOTALS	5450		20		1366				5437	12700	163800	1850	78970	131880	33336	244186	10542	254728	273434	33336	306770	295308	33336	328644			
UNIT RATES TO 6/97	0.315		100.00		7.50				1.60	0.05	0.050		Notes: Profit is on labor only and not on expenses. Modify calculation if profit is allowed on expenses. Indirect cost and profit are computed using the values entered in cells AQ5 and AQ6.														
COST	1717		2000		10245				8699	635	8190	1850															

PROFIT SUMMARY	
AT CLIENT OVERHEAD LIMIT	10542
AT S & W STANDARD O/H(1.85)	-3672
AT 2.5 MULTIPLIER	48369
AT 2.7 MULTIPLIER	70244

ROD/SSD Approval: _____ and _____

Date: _____

Approved Price \$ _____

CLIENT : <u>IT/NYSDEC</u>		PREPARED BY: <u>JCB</u>																				
PROJECT: <u>Task 4-Lehigh Valley RR</u>		CHECKED BY : _____																				
		DATE: <u>Feb-98</u>																				
		MAN-HOURS BY CATEGORY																				
CLASSIFICATION NUMBER	Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
TASK DESCRIPTION	Number	Exec V	VP	Assoc	r Pm/	P M II	P M I	P E II	P E I	Eng III	Eng II	Eng I	M Des	S Des	Des	CADD	Tech	Sr Rep	P Rep	C Acct	Sec/WP	HOURS
Tank Contract		4		6	8				60													78
Water Main Contract		4		8					130													142
Pump Station Contract		4		16	12				120													152

Notes:

For projects to be executed beyond July 1, 1997, a 4 per cent annual allowance for inflation should be added.

Rates shown are for New York Offices. Other regions should adjust rates to suit their salary structures.

For questions, comments and suggested modifications contact DESchwinn on Cazenovia Extension 221 or send an Email message.

[illegible]

PROFIT SUMMARY	
AT CLIENT OVERHEAD LIMIT	1210
AT S & W STANDARD O/H(1.85)	-421
AT 2.5 MULTIPLIER	5552
AT 2.7 MULTIPLIER	8063

ROD/SSD Approval: _____ and _____ Date: _____ Approved Price \$ _____

Schedule 2.11(c)
Stearns & Wheeler
Direct Non-Salary Costs
Work Assignment Number D-003666-6

Item	Max. Reimbursement Rate (Specify Unit)	Est. No. of Units	Total Estimated Cost (\$)
A) Miscellaneous			
Per Diem(food & lodging)	\$100/Day	27 Days	\$2700
CADD Equipment	\$7.50/hour	1456 hours	\$10920
Telephone		LS	\$4070
Auto Mileage	\$0.315/mile	8600miles	\$2709
Prints:			
Plans	\$1.60/dwg sheet	5907 dwg. sheets	\$9451
Copies	\$0.05/copy	183800 copies	\$9190
Total Direct Non-Salary Costs			\$39040

(See Schedule 2.10(b) for other

Schedule 2.11(e)

Cost-Plus-fixed-Fee Subcontracts ***Work Assignment Number D-003666-6***

Name of Subcontractor	Services to be Performed	Subcontract Price
YEC, Inc.	Surveying Services	\$70,747.65

A) Direct Salary Costs

Professional Responsibility Level	Labor Classification	Ave. Reimbursement Rate (\$/Hr)	Max. Reimbursement	Est. No. of Hours	Total Est. Direct Salary Cost (Ave. Reimb. Rate x Est. # of Hrs
--	---------------------------------	--	-------------------------------	----------------------------------	--

SEE SUBCONTRACTOR COST BREAKDOWN IMMEDIATELY FOLLOWING THIS PAGE

B) Indirect Costs

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

SEE SUBCONTRACTOR COST BREAKDOWN IMMEDIATELY FOLLOWING THIS PAGE

C) Maximum Reimbursement Rates for Direct Non-Salary Costs

SEE SUBCONTRACTOR COST BREAKDOWN IMMEDIATELY FOLLOWING THIS PAGE

D) Fixed Fee

SEE SUBCONTRACTOR COST BREAKDOWN IMMEDIATELY FOLLOWING THIS PAGE

Footnotes:

- 1) These rates will be held firm until (DATE).
- 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 of fleers 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 Department and the Comptroller.
- 7) This Footnote applies to Schedules for years 4 thru 7 only. If the U.S. cost-of-living index increases at a rate greater than _% 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.

Schedule 2.11(e)
Cost Plus-Fixed-Fee Subcontracts
Work Assignment Number:
(Lehigh Valley Railroad)

Date: March 25, 1998

<u>1. NAME OF SUBCONTRACTOR</u>	<u>SERVICES TO BE PERFORMED</u>	<u>SUBCONTRACT PRICE</u>
YEC, INC.	SURVEY SERVICES	\$ 70,747.65

A. Direct Salary Costs

<u>Professional Responsibility Level</u>	<u>Labor Classi- fication</u>	<u>Average Reimbursement Rate (\$/Hr.)</u>	<u>Maximum Reimbursement Rate (\$/Hr.)</u>	<u>Estimated Number of Hours</u>	<u>Total Estimated Direct Salary Cost (\$)</u>
Principle	VIII	1998 45.64	1998 49.29	20	912.80
Licensed Surveyor/ Senior Geologist/ Scientist/Engineer	V	1998 30.17	1998 33.19	206	6,215.02
Staff Geologist/ Scientist/Engineer	IV	1998 26.22	1998 28.84	0	0.00
Staff Geologist/ Scientist/Engineer/ Senior Draftsperson	III	1998 22.75	1998 25.25	56	1,274.00
Senior Technician/ Staff Engineer/ Scientist/Geologist	II	1998 16.84	1998 18.86	24	404.16
Technician/ Draftsperson	I	1998 15.26	1998 17.09	146	2,227.96
Total Direct Salary Costs:				452.00	\$ 11,033.94

Footnotes:

- 1) The 1998 rates will be held firm until 10/31/98 (DATE).
- 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.
- 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 Federal GS-18 rate, whichever is lower.

- 6) The maximum rates in each labor category can be modified only by mutual agreement and approved by both the Department and the Comptroller.
- 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.

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:

\$ 12,909.71

C. Maximum Reimbursement Rates for Direct Non-Salary Costs:

<u>Item</u>	<u>Max. Reimbursement Rate</u> <u>(Specify Unit)</u>	<u>Estimated No. of</u> <u>Units</u>	<u>Total Estimated Direct</u> <u>Non-Salary Cost</u>
1. Travel			
Mileage	\$0.315 /mile	1950 miles	614.25
Tolls	\$10.00 /mob	3 mob.	30.00
Per Diem	\$101.00 /mdy	22 mndys	2,222.00
2. Expenses			
Survey Equip Rental	\$65 /day	11 days	715.00
CAD Computer	\$15 /hour	56 hours	840.00
Reproduction (Bond)	\$2.10 /sheet	172 sheets	361.20
Field Supplies (Stakes, paint, pknails)	\$150	1 lump sum	150.00
Mail/Tel/Phone/Copies	\$200	1 lump sum	200.00
3. Subcontractor			
Aerial Map(Golden Aerial)	\$30,780	1 lump sum	30,780.00
GPS (RU-SH)	\$7,300	1 lump sum	7,300.00
Total Direct Non-Salary Costs:			\$ 43,212.45

D. Fixed Fee

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

\$ 3,591.55

* ASSUMPTIONS: Individual trees will not be designated. Deliverables of plots will be on bond.

Schedule 2.11(f)

Unit Price Subcontracts
Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Groundwater Treatment & Technology	BVE Pilot Test	\$99,800	\$4,990

Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1.) Mobilization / Demobilization	\$67,800.00	L. S.	\$67,800.00
2.) Setup for Packer Testing	\$1,750.00	3	\$5,250.00
3.) Delivery Removal of Carbon Drums	\$985.00	8	\$7,880.00
4.) Packer Testing	\$185.00	102*	\$18,870.00

* An additional 56 hours
have been assigned to
cover the cost of bedrx

Sub Total Subcontract Price	<u>\$99,800</u>
Subcontract Management Fee	<u>\$ 4,990</u>
TOTAL	<u>\$ 104,790</u>

Schedule 2.11(f)

Unit Price Subcontracts
Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Nothnangle Drilling	Soil & Rock Well Drilling	\$43,200.00	\$2,160.00

Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1. Mob/Demob	\$ 450.00 each	1	\$450.00
2. Air Hammer/Rotary Drilling 10-inch	\$ 22.00/foot	290	\$6,380.00
3. Install Well Casing	\$ 250.00 each	29	\$7,250.00
4. Air Hammer Drilling 8-inch Borehole	\$ 7.00/foot	1750	\$12,250.00
5. Develop Wells	\$ 130.00 each	29	\$3,770.00
6. NX Coring	\$ 35.00/foot	200	\$7,000.00
7. Grout Cored Boreholes	\$ 2.00/foot	200	\$400.00
8. 55gal Drums	\$ 30.00	150	\$4,500.00
9. Split Spoon sampling	\$ 18.00/foot	50	\$900.00
10. Grout Split Spoon Boreholes	\$ 25.00 each	12	\$300.00
Sub Total Subcontract Price			<u>\$ 43,200.00</u>
Subcontract Management Fee			<u>\$ 2,160.00</u>
TOTAL			<u>\$ 45,360.00</u>

Schedule 2.11(f)

Unit Price Subcontracts
Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Not Yet Identified	Electrical Engineering Spill Site	\$35,000.00	\$0.00

Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1.) To Be Determined	\$35,000.00	L. S.	\$35,000.00

Sub Total Subcontract Price	<u>\$ 35,000.00</u>
Subcontract Management Fee	<u>\$ 0.00</u>
TOTAL	<u>\$ 35,000.00 *</u>

* Scope of work for this activity cannot be finalized until system design has been defined. Therefore, firm pricing cannot be obtained at this time. This work may be better performed as an add-on to the contract at a later date.

Schedule 2.11(f)

Unit Price Subcontracts
Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
RECRA LabNet	Laboratory Analysis	\$26,725.00	\$1,336.25

Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1). Soil Samples	\$100/sample	22	\$2,200.00
2). Soil MS/MSD	\$100/sample	2	\$200.00
3). Soil Field Blank	\$100/sample	2	\$200.00
4). Rock Samples	\$125/sample	13	\$1,625.00
5). Rock MS/MSD	\$100/sample	1	\$100.00
6). Rock FieldBlank	\$100/sample	3	\$300.00
7). Air Samples	\$340/sample	65	\$22,100.00

Sub Total Subcontract Price	<u>\$26,725.00</u>
Subcontract Management Fee	<u>\$1,336.25</u>
TOTAL	<u>\$28,061.25</u>

Schedule 2.11(f)

Unit Price Subcontracts
Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
AAA Environmental	Construction of SVE	\$8,500.00	\$0.00

Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1.) Excavation/Pilot Test/ Soil Pile Construction/ Disassembly & Disposal	\$6,850.00	L. S.	\$6,850.00
2.) Carbon Skid w/ assoc. Fixtures	\$1,650.00	L.S..	\$1,650.00

Sub Total Subcontract Price	<u>\$ 8,500.00</u>
Subcontract Management Fee	<u>\$ 0.00</u>
TOTAL	<u>\$ 8,500.00</u>

Schedule 2.11(f)

Unit Price Subcontracts
Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Copies Now	Printing/Reproduction	<u>\$6631.36</u>	<u>\$0.00</u>

Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1. Reproduction double-sided text pages	\$0.064 /double-sided page	23,000 pages (92 documents @ 250 pgs. ea.)	\$1472.00
2. Reproduction double-sided text pages	\$0.066 /double-sided page	13,800 pages (92 documents @ 150 pgs. ea.)	\$910.80
3. B&W copies of 24" x 36" drawings (folded into map pockets)	\$2.67 /drawing	368 drawings (92 documents @ 4 drawings ea)	\$982.56
4. B&W copies of 24" x 36" drawings (stapled and bound)	\$0.738 /drawing	3,680 drawings (92 documents @ 40 drawings ea.)	\$2715.84
5. Delivery	\$0.00 /submission	8 submissions	\$0.00
6. Assembly of 92 three ring binders (includes insertion of 150 text pages and 4 folded maps into pockets)	\$1.15 /binder	92 binders	\$105.80
7. Assembly of 92 three ring binders (includes insertion of 250 text pages only)	\$0.75 /binder	92 binders	\$69.00
TOTAL (incl. 6% tax).			\$6631.36

Schedule 2.11(f)

Unit Price Subcontracts
Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Alliance Shorthand Reporting	Preparation of Minutes During Prebid/Public Meetings	\$3,100.00	\$0.00

Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1.) To Be Determined	\$3,100.00	L. S.	\$3,100.00

Sub Total Subcontract Price	<u>\$ 3,100.00</u>
Subcontract Management Fee	<u>\$ 0.00</u>
TOTAL	<u>\$ 3,100.00</u>

Schedule 2.11(f)

***Unit Price Subcontracts
Work Assignment Number D-003666-6***

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
EDV, Inc.	Data Validation	\$1,208.00	\$0.00

Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1). Soil Samples (95-1)	\$14/sample	22	\$308.00
2). Soil Field Blank (95-1)	\$13/sample	2	\$26.00
3). Rock Samples	\$14/sample	13	\$182.00
4). Rock Field Blank	\$14/sample	3	\$42.00
5). Air Samples (T014)	\$10/sample	65	\$650.00

Sub Total Subcontract Price	<u>\$ 1,208.00</u>
Subcontract Management Fee	<u>\$ 0.00</u>
TOTAL (estimated cost)	<u>\$ 1,208.00</u>

Schedule 2.11 (g)

**Monthly Cost Control Report
Summary of Fiscal Information**

Engineering/Contract #: D003666
 Project Name: Lehigh Valley Railroad Derailment
 Work Assignment #: D003666-6
 Task #/Name _____
 Complete (%) _____

Date Prepared: _____
 Billing Period: _____
 Invoice #: _____

Expenditure Category	A	B	C	D	E	F	G	H
	Costs Claimed This Period	Paid to Date	Total Disallowed to Date	Total Costs Incurred to Date (A+B+C)	Estimated Costs to Completion	Estimated Total Work Assignment Price (A+B+E)	Approved Budget	Estimated Under/Over (G-F)
1. Direct Salary Costs				0.00		0.00	130,229.00	130,229.00
1a. Premium OT Dollars				0.00		0.00		0.00
2. Indirect Costs 163%	0.00			0.00		0.00	212,273.00	212,273.00
3. Subtotal Direct Salary, OT and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	342,502.00	342,502.00
4. Travel				0.00		0.00	13,119.00	13,119.00
5. Other Non-Salary Costs				0.00		0.00	12,976.00	12,976.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	26,095.00	26,095.00
7. Subcontractors				0.00		0.00	619,051.00	619,051.00
7a. Subcontractor Mgmt. Fee				0.00		0.00	8,486.00	8,486.00
8. Total WA Cost	0.00	0.00	0.00	0.00	0.00	0.00	996,134.00	996,134.00
9. Fixed Fee (6.4% of (3))	0.00			0.00		0.00	21,920.00	21,920.00
10. Total WA Price	0.00	0.00	0.00	0.00	0.00	0.00	1,018,054.00	1,018,054.00
11. Retainage (5%)	0.00	0.00		0.00		0.00		
12. Net Invoice Amount	0.00							

Project Manager (Engineer) _____

Date: _____

Schedule 2.11 (h)
Monthly Cost Control Report
Summary of Labor hours

Number of Direct Labor Hours Expended to Date/Estimated Number of Direct Labor Hours to Completion

Engineer/Contract #: D00366

Project Name: Lehigh Valley Railroad Derailment

Work Assignment #: D003666-6

Date Prepared: _____

Billing Period: _____

Invoice #: _____

NPSE Labor Classification	IX Exp/Est*	VIII Exp/Est	VII Exp/Est	VI Exp/Est	V Exp/Est	IV Exp/Est	III Exp/Est	II Exp/Est	I Exp/Est	Admin/ Support	Total No. of Direct Labor Hours Exp/Est
Task 1 - Exp		0	0	0	0	0	0	0	0		0
Task 1 - Est		55	0	52	167	5	0	0	41		320
Task 2 - Exp		0	0	0	0	0	0	0	0		0
Task 2 - Est		156	0	436	320	208	276	50	164		1610
Task 3 - Exp		0	0	0	0	0	0	0	0		0
Task 3 - Est		196	104	316	440	860	0	90	265		2271
Task 4 - Exp		0	0	0	0	0	0	0	0		0
Task 4 - Est		104	0	152	120	120	0	30	45		571
Task 5 - Exp											0
Task 5 - Est											0
Task 6 - Exp											0
Task 6 - Est											0
Task 7 - Exp											0
Task 7 - Est											0
Task 8 - Exp											0
Task 8 - Est											0
Task 9 - Exp											0
Task 9 - Est											0
Task 10 - Exp											0
Task 10 - Est											0
Task 11 - Exp											0
Task 11 - Est											0
Task 12 - Exp											0
Task 12 - Est											0
Total Hours - Exp	0	0	0	0	0	0	0	0	0	0	0
Total Hours - Est	0	511	104	956	1047	1193	276	170	515	0	4772

* Expended/Estimated

Ground/Water Treatment & Technology

PO Box 1174 - Denville, NJ 07834
Phone (201) 983 0901 Fax (201) 983 0903

FACIMILE TRANSMITTAL

To: Ed Rashak 12:45

Fax #: 732 469 7275

Company: IT Corp.

Phone #: 732 469 5599

From: Bob Kunzel

Re: Additional Work - RFQ E81893

Date: Feb. 24, 1998

of Pages: 2

Comments

Ed

Please call if you have any questions or need anything else.

Bob Kunzel



**GROUND/WATER TREATMENT
& TECHNOLOGY, INC.**

P.O. BOX 1174 DENVILLE, NEW JERSEY 07834
Phone (973) 983-0901 • Fax (973) 983-0903

February 25, 1998

Via Fax Transmission (732) 469 7275

International Technology Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873-1248

Attention: Mr. Ed Rashak

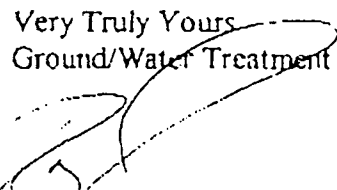
Reference: Additional Work Quotation - Your Project No. E81893
Lchigh Valley Railroad / NYSDEC

Dear Mr. Rashak:

Confirming our telephone conversation today, Ground/Water Treatment & Technology, Inc. will complete vapor extraction testing on 8 additional wells for the hourly rate of \$185.00. This rate would be charged for setup time, the actual testing and removal of the testing equipment. We understand that the wells consist of a 8" casing and we will require a 8" X 2" Fernco type coupling (provided without charge) to connect the pump to the well. The pump will consist of one of the same pumps used during the packer testing. We will also collect samples of the discharge in bags provided by you. All analytical work is by others.

We trust this is fully responsive to your request. If you have any questions, please call.

Very Truly Yours
Ground/Water Treatment and Technology, Inc.


Robert G. Kunzel
Executive Vice President



**GROUND/WATER TREATMENT
& TECHNOLOGY, INC.**

P.O. BOX 1174 DENVILLE, NEW JERSEY 07834
Phone (973) 983-0901 • Fax (973) 983-0903

February 10, 1998

International Technology Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873-1248

Attention: Mr. Ed Rashak

Reference: Request for Quotation - Your Project No. E81893
Lehigh Valley Railroad / NYSDEC

Dear Mr. Rashak;

Thank you for including Ground/Water Treatment & Technology, Inc. on your list of bidders for the above referenced project. In preparing our proposal we have reviewed the information provided in your facsimile dated February 3, 1998. We have not visited the site.

As you know we specialize in the completion of technically oriented projects exactly such as this. We also design/build vapor extraction and air sparging systems so we are familiar with the type of data and the level of precision that is required. We have recently completed the construction of a testing rig specifically for vapor extraction and air sparging projects. The system consists of a data logger that measures air flow and pressure on a continuous basis. The system is set up on a trailer and comes complete with a compressor, blower and generator.

We propose to complete this work with our specially designed box truck and testing trailer described above. The truck was constructed as a technical service vehicle and comes equipped and stocked with all of the fittings and tools required to operate and maintain treatment plants of all types. The truck is partitioned with an office space in the front. We have enclosed a Statement of Qualifications which further describes our qualifications and Experience.

We propose to complete the work as described in the specifications with the following exceptions;

Data Logger - We propose to utilize a 32 channel data logger which will measure the 4 - 20 mA signal produced by the vacuum transducers. The data logger speed is user defined up to 960 channels per second. The advantage over the separate 4 channel units is the uniform start time for the test.

Page 2 of 2
International Technology, Inc.
February 10, 1998

Mobil Hoist - Our truck is equipped with a pump hoist with a maximum 2000 lb capacity and 7' reach. The unit can be set up at the well head if access to the well head with the truck is not feasible.

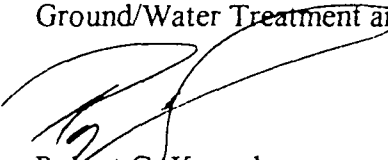
Carbon Units - We propose to supply a vapor phase carbon unit that holds 275# of carbon instead of the 225# specified. We have assumed that the carbon will be considered non hazardous.

We have attached your request for quotation sheet which indicates our charges for this work.

The charge for Mobilization and Demobilization includes life of job rental of all associated equipment as well as engineering time and report preparation. We have assumed that the project will be completed in one mobilization.

We trust this is fully responsive to your request and we look forward to working with you and IT on this project. If you have any questions, please call.

Very Truly Yours
Ground/Water Treatment and Technology, Inc.



Robert G. Kunzel
Executive Vice President





Our full service box truck is equipped with the necessary inventory to accomplish almost any job while on the road. It also services as a mobile office for personnel in the field with a desktop, lights, and heat. The service truck is also equipped with a large variety of spare parts necessary to provide uninterrupted service when problems arise in treatment facilities. The spare parts include pH probes, metering pumps, level sensors, gaskets, electrical components, and much more.



GROUND/WATER TREATMENT & TECHNOLOGY, INC.

REQUEST FOR QUOTATION

Date: January 30, 1998

OFFER MUST BE RECEIVED BY 02/10/98, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No. (732) 469-5599
Fax No. (732) 469-7275

Quotation Valid for: 210 Days

Quotation Prepared by: GROUND/WATER TREATMENT & TECHNOLOGY

Signature: Robert Kunze

Title: EXC. V.P.

Date: 2/10/98 Telephone: 973 983 0901

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	67800	67800
2	Setup for Packer Testing	3	each	1750	5250
3	Packer Testing	45	hours	185	8325
4	Delivery/Removal of Carbon Drums	8	each	985	7880
		Subtotal			89255
		Tax			INC.
		Freight			INC.
		Grand Total			89255
Method of Shipment: OUR TRUCK		F.O.B. Point/Ship Terms: JOB SITE		Terms of Payment: NET 60	
Shipment can be made in 30 days from receipt of order					

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

* SEE OUR LETTER DATED 2/10/98



ERD Environmental, Inc.

An ERD Waste Corp. Company

6205 Easton Road • Pipersville, PA 18947-1025 • 215.766.7230 • Fax 215.766.9730 • www.erdwaste.com

February 10, 1998

Mr. Ed Rashak
IT Corp.
2200 Cottontail Lane
Somerset N.J. 08873

Re: Lehigh Valley Derailment Site
New York State

Dear Mr. Rashak:

Attached, please find our bid for performing vapor extraction pilot testing at the above referenced site. We have also attached an alternate bid for the exact same work, except that 36 inch packers will be used rather than the specified 54 inch packers. The 36 inch packers will provide 18 inches of contact with the borehole wall whereas the 54 inch packers will provide 28 inches of contact with the borehole wall. This alternative will provide a cost savings of \$22,411.

You may wish to consider a third alternative using what are known as "Mooney Ball" packers. These are lightweight spherical packers designed for use at lower pressures, but should be well within the pressures generated during the pilot test. We anticipate that the use of this type of packer would provide a cost savings of roughly \$35,000 over the bid as specified. If you would like to consider this alternative, or a combination with standard packers, please contact us.

We appreciate the opportunity to submit this bid and look forward to working with IT Corporation.

Sincerely,

ERD Environmental, Inc.

Daniel FitzGerald
Engineering Director

FAWTP60\DAN\TQUOTE.WPD

REQUEST FOR QUOTATION

ERD Environmental, Inc.
Bid for pilot testing at Lehigh
Valley Derailment Site, New York
State

Date: January 30, 1998
OFFER MUST BE RECEIVED BY 02/10/98, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:
Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No. (732) 469-5599
Fax No. (732) 469-7275

Quotation Valid for: 210 Days

Quotation Prepared by: Daniel Fitz Gerald

Signature: Daniel Fitz Gerald

Title: Engineering Director

Date: 2/10/98 Telephone: 215-766-7230

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	93014	93014
2	Setup for Packer Testing	3	each	2037.00	6112
3	Packer Testing	45	hours	141.00	6345
4	Delivery/Removal of Carbon Drums	8	each	798.00	6384
				Subtotal	111855
				Tax	
				Freight	
				Grand Total	111855.00
Method of Shipment		F.O.B. Point/Ship Terms:		Terms of Payment	Shipment can be made in days from receipt of order

1. Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
2. Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
3. Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

REQUEST FOR QUOTATION

ALTERNATE BID

ERD Environmental, Inc.
Bid for pilot testing at Lehigh
Valley Derailment Site, New York
State

Date: January 30, 1998OFFER MUST BE RECEIVED BY 02/10/98, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:
Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No. (732) 469-5599
Fax No. (732) 469-7275

Quotation Valid for: 210 Days

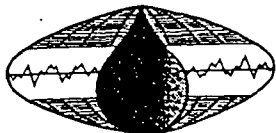
Quotation Prepared by: DANIEL FITZGERALDSignature: Daniel FitzGeraldTitle: Director of EngineeringDate: 2/10/98 Telephone: 215 766 7230

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	\$70603	70603
2	Setup for Packer Testing	3	each	2037	6112
3	Packer Testing	45	hours	141	6345
4	Delivery/Removal of Carbon Drums	8	each	798	6384
Subtotal					
Tax					
Freight					
Grand Total					\$89,444.00
Method of Shipment	F.O.B. Point/Ship Terms:	Terms of Payment:	Shipment can be made in days from receipt of order		

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

Earth Data INCORPORATED



GROUND WATER AND ENVIRONMENTAL CONSULTANTS
ST. MICHAELS, MARYLAND AND EXTON, PENNSYLVANIA

February 12, 1998

Mr. Edward P. Rashak
Project Manager
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873-1248

**RE: Proposal to provide Hydrogeological Field Services: Packer Testing;
Lehigh Valley Railroad Derailment Site, Town of Leroy, Genesee County, New
York**

Dear Mr. Rashak:

In response to your request, Earth Data Incorporated (Earth Data) is pleased to provide IT Corporation (IT) with this proposal to provide all necessary labor and equipment to perform *in situ* bedrock vapor extraction pilot tests at the above referenced project site.

SCOPE-OF-WORK

Three open borehole vapor extraction wells will each be pilot tested at three different intervals, with six dedicated open borehole bedrock observation wells monitored during each extraction well test, for a total of 18 observation wells monitored during nine separate vapor extraction tests. Each vapor extraction and observation well will be fitted with an inflatable straddle packer system during a pilot test. Extraction wells will be 6-inches nominal diameter to a depth of about 60 feet, with 10 feet of 8-inch diameter steel casing grouted into bedrock. Observation wells will be constructed similarly.

Each extraction well will be packed off at three identical depth intervals, with each of six surrounding observation wells packed off at three depth intervals identical to the test well to facilitate testing and monitoring three (3) layers of the bedrock vadose zone. One packed zone in an extraction well will be tested at a time by withdrawing vapor at a steady sustained rate until the test interval and any responding observation wells reasonably equilibrate to the induced pressure loss. Time-series vapor quality samples will be collected at the start, mid-point and end of a withdrawal test, for offsite laboratory analysis for trichloroethene and other target parameters.

Mr. Edward P. Rashak
February 12, 1998
Page 2

Test Equipment

One extraction test well and six observation wells will be equipped with the packer configuration or string shown in Figure 1. Seven individual packer strings will be required for test execution and observation. One packer string will consist of two inflatable packers connected in series with 2-inch inside diameter (I.D.) galvanized steel lift pipe to create three test intervals after inflation.

Vapor will be drawn out of a particular test interval through a length (minimum 5-feet) of slotted pipe in the lift pipe string. The extraction well will be temporarily sealed airtight at the top of the well during an extraction test. This will be accomplished using an expanding well seal modified to accommodate the packer lift pipe and transducer lines. Observation wells will be sealed airtight with a modified well cover.

An electronic digital data logger, capable of storing and creating diskette data deliverables, equipped with vapor pressure transducers will be used to monitor and record pressure changes in each interval in the test well and observation wells. A transducer, or air line connected to an individual transducer, will be located in each packer interval, as shown, for a total of three transducers per test and observation well, for a total of 21 transducers. The type and number of dataloggers will be selected to assure that all three intervals per an observation well will be logged by one data logger to prevent splitting intervals between two or more dataloggers, to better assure data integrity. The extraction test well will be monitored via three higher range vacuum pressure transducers to assure measurement of anticipated higher vacuum changes.

Vapor will be withdrawn from a test interval using a regenerative blower or a positive displacement vacuum pump, to assure sustainable 1-100 cfm vapor flow rates at zero (0-inches mercury, Hg) to approximately 14 inches Hg vacuum, although 10 to 20 cfm at 3 to 9 inches Hg is optimum. An in line moisture filter will be required to separate out moisture, especially potentially from the lowest test interval. All off gas generated during the pilot tests will be treated using a vapor carbon adsorption system.

A flow monitoring and control panel at ground surface will be used at the extraction well and will consist of the following components in series within a 2-inch I.D. vacuum flow line in progressive order from the well head to the pump (see Figure 2): real-time vapor meter (PID/FID) port; vapor sampling port; vacuum gauge; flow valve, flow meter and flow dilution valve. Electrical power will be obtained from portable generators.

Test Procedure

One extraction well will be tested at a time and observed by six dedicated observation wells in close proximity to the extraction well. Predetermined test intervals will be selected for the three extraction test wells. Straddle packer spreads will be constructed in the field as individual components are lowered into the wells via hoist truck. Observation well straddle packer spreads will be identical to the extraction test well packer string. Once the packers are in place and inflated in the observation wells, the wells will be sealed at the top of casing. Observation wells will remain sealed until all tests in the three intervals at an extraction well are complete. An appropriate number and type of dataloggers equipped with low vacuum pressure transducers, for maximum sensitivity, will be programed to log at a time interval sufficient to record any pressure changes over time. Observation well logger start times will be coordinated with the test well start time.

Following installation of the test well packer string, the well will be sealed to complete three individual test zones. One interval in one extraction well will be tested at a time, with the intervals above and below and in surrounding observation wells monitored simultaneously. After the first interval test, the packer string will be removed to relocate the slotted pipe to a new interval, with a solid section added to the old interval. The packer string will be replaced and the well will be resealed for the next test. The packer string will be removed a second time to complete the third test.

At each test well an in line flow control and sampling system panel, located at ground surface before the above ground pump (see Figure 2), will be used to regulate, monitor and sample a particular test interval. Each interval test is intended to determine: 1) the sustainable vapor withdrawal rate within the optimum range of VOC vapor phase contaminant recovery, 2) the vertical and lateral extent of test pressure drop, 2) the types and concentrations of vapor phase contaminants in the withdrawal stream over time.

A withdrawal test will consist of starting a vacuum pump at a time coordinated with the automatic start of all data loggers. The lowest rated flow-per-vacuum pump (regenerative blower type) will be used first to withdraw vapor at the ambient rate and vacuum that the permeability of a packed interval will allow. If a zone has a low permeability ($<10^{-9}$ cm², silt range) and a regenerative pump is under capacity to sustain an optimum flow at a higher vacuum, a second, positive displacement pump will be used to test the interval. Test durations will be determined in the field based on: 1) time to achieve stable vapor flow, if sustainable, out of a test interval, 2) stable, or steady slow pressure drops at effected observation intervals, and 3) real-time monitored vapor quality changes, or "tailing-off." Test durations are estimated at 5 hours, for a total of 45 hours.

Flow stream vapor quality will be monitored by a field vapor meter (PID detector preferred; FID detector if moisture problem) inserted into the flowstream via the in line meter port. Field

Mr. Edward P. Rashak
February 12, 1998
Page 4

screening will aid in determining test duration and sampling intervals. Three bedrock vapor samples will be collected during each vapor test as follows: 1) following a test start (after one interval volume removed), 2) at the peak flowstream concentration, as determined by the field detector, and 3) near test end to document any concentration tailing. Vapor samples will be collected in Tedlar® bags, provided by IT, at the direction of IT from the effluent flow stream out of the pump. If flow dilution at the pump is required to sustain a reasonable flow rate out of a particular flow stream, influent sampling may be required, using a vacuum sample cannister, to be provided by IT.

Test flow rates and vacuums will be manually measured via the field gauges for manual recording at suitable intervals to document any changes during the test.

Following an interval test, the packer string will be removed for relocation of the slotted inlet pipe as previously indicated. When all three intervals at a test well are complete, packer strings from both the test well and observation wells will be relocated to the next test cluster.

Earth Data will provide a crew of three technicians to perform the *in situ* vacuum extraction packer testing. Separate computer files will be established for each zone to be tested and observation zones, as directed by the IT hydrogeologist in the field. Vacuum pressure data collected will be in ASCII format and presented to your representative on a 3.5 inch diskette. A field form will be provided to summarize all pertinent information resulting from the tests. One copy of the data disk will be provided upon the completion of the field effort. Extra copies of the data disks can be provided at the costs quoted herein.

DECONTAMINATION

All packer testing equipment will be steam cleaned onsite following a cluster test. Earth Data will provide the necessary materials to perform the decontamination procedure. It is understood that potable water is available near the site at a township maintenance facility. It is understood decontamination can be performed on site without collection of wash water.

HEALTH AND SAFETY

All of Earth Data's employees working on-site will perform the proposed field activities in accordance with the established health and safety plan. As a matter of company policy, Earth Data requires that a copy of the health and safety plan be provided at least two weeks prior to our mobilization to the site.

All of Earth Data's field personnel working onsite will have completed an approved 40-hour health and safety training course, annual health and safety refresher training, and will have medicals under an approved medical surveillance program. This training and monitoring are

Mr. Edward P. Rashak
February 12, 1998
Page 5

provided at no cost to IT.

Earth Data will provide personal protective equipment for our personnel to perform at Level D. As a matter of company policy, Earth Data provides personal protective equipment to our employees for a contingency upgrade to Level C. There will be a 15 percent increase in the rates quoted herein for all work performed at Level C. IT will be responsible for providing all necessary on-site safety briefings and detection equipment to protect Earth Data's personnel and equipment while present onsite.

RESPONSIBILITIES

Earth Data will perform the proposed in situ vacuum extraction pilot testing acting as a subcontractor to IT. Straddle packer intervals and in situ vacuum extraction pilot testing will be performed as directed by IT. Earth Data will be solely responsible for supervising and directing its employees in the performance of the services and in selecting and implementing the means, methods, sequences and procedures used in connection with the services.

Well seal designs and packer setup time estimates for this project require top of steel casings at all extraction and observation wells to be above ground stickups (2-3 foot) with horizontal, preferably factory finished ends. It will be the responsibility of IT to assure casing construction conforms to the above. Any casing recutting or grinding will be performed at the hourly rate quoted herein.

It will be the responsibility of IT to provide vapor sampling containers and to provide for the shipment and laboratory analysis of any vapor samples. It will be the responsibility of IT to collect, manage and dispose of waste materials generated by Earth Data's services performed hereunder. All manifesting of spent carbon generated as a part of testing will be the responsibility of IT.

As proposed, Earth Data will not provide technical reports or interpretations of the data generated by the *in situ* vacuum extraction pilot testing. However, if requested, reports and interpretations can be provided at the consulting rates quoted herein.

Mr. Edward P. Rashak
February 12, 1998
Page 6

RATES AND TERMS OF PAYMENT

Earth Data proposes to perform the *in situ* vacuum extraction pilot testing described herein on a time and materials basis. Earth Data's rates to provide these services are as follows:

Mobilization/Demobilization	\$ per event
Hourly rate for field team and equipment	\$ 275.00/hr.
Data analysis, report preparation, consulting	\$ 80.00/hr.
Additional Data Diskettes	\$ 40.00/diskette
Per Diem, Lodging and Meals	\$ 75.00/person/night
Carbon (180 lbs/drum plus ship. & regen.)	\$ 575.00/drum

The normal work day will be 10 hours in duration, between the hours of 8:00 a.m. and 6:00 p.m., Monday through Friday. As previously indicated, for any work at Level C, a 15 percent increase in the hourly rate will be charged. A 20% increase in the hourly rate will be charged for overtime (time spent on-site in excess of 10 hours) as well as for work on weekends and holidays. IT's obligation to pay for the proposed services, if authorized, shall not be dependent or contingent upon IT obtaining payment from its client or obtaining any financing, payments or approvals from any third party, including any governmental entity

Invoices will be submitted for the work completed on a monthly basis, terms net thirty (30) days from the date of the invoice. Past-due balances shall be subject to an interest rate of 1.5 percent per month (18 percent on an annual basis).

NON BINDING BUDGET ESTIMATE

The following estimate of time and associated costs to perform the hydrogeological field services described herein is provided for your budget purposes only, it does not represent a fixed price for services:

In Situ Vacuum Extraction Pilot Testing

Mobilization/Demobilization	
Equipment/Preparation/Mobilization	\$ 47,550.00
Engineering/Fabrication	\$ 14,560.00
Travel	\$ 1,900.00
Per Diem (3 persons @ 20 nights)	\$ 4,500.00
Mobilization Subtotal	\$ 68,500.00

Mr. Edward P. Rashak
February 12, 1998
Page 7

Test Setup (\$9,800 x 3 setups)	\$ 29,400.00
Vacuum Testing (45 hrs @ \$245/hr)	\$ 12,375.00
Carbon (shipping & regeneration for 8 drums)	\$ 4,600.00

Total Estimated Project Cost	\$ 114,875.00
-------------------------------------	----------------------

OTHER ASSUMPTIONS, REPRESENTATIONS AND CONDITIONS

The proposed Scope of Work and costs are based on and subject to the terms and conditions of the IT Corporation Work Agreement and the NYSDEC Standard Contract, attached herein.

TIMING OF PERFORMANCE

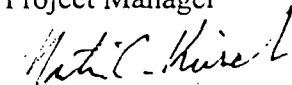
Earth Data will require three months notice prior to project start to schedule and mobilize equipment required to perform the services described herein.

This estimate is valid for ninety (90) days. Subsequent to that date, we reserve the right to review the basis of payment to allow for changing costs and scheduling. If this proposal is acceptable to IT, please sign this proposal below and forward it to Earth Data and we will proceed with the proposed work. In the meantime, if you have any questions concerning the scope of work, associated costs or contract, do not hesitate to contact us.

Sincerely,



Joshua E. Sobelman
Project Manager



Martin C. Kirsch
Coordinator/Field Services

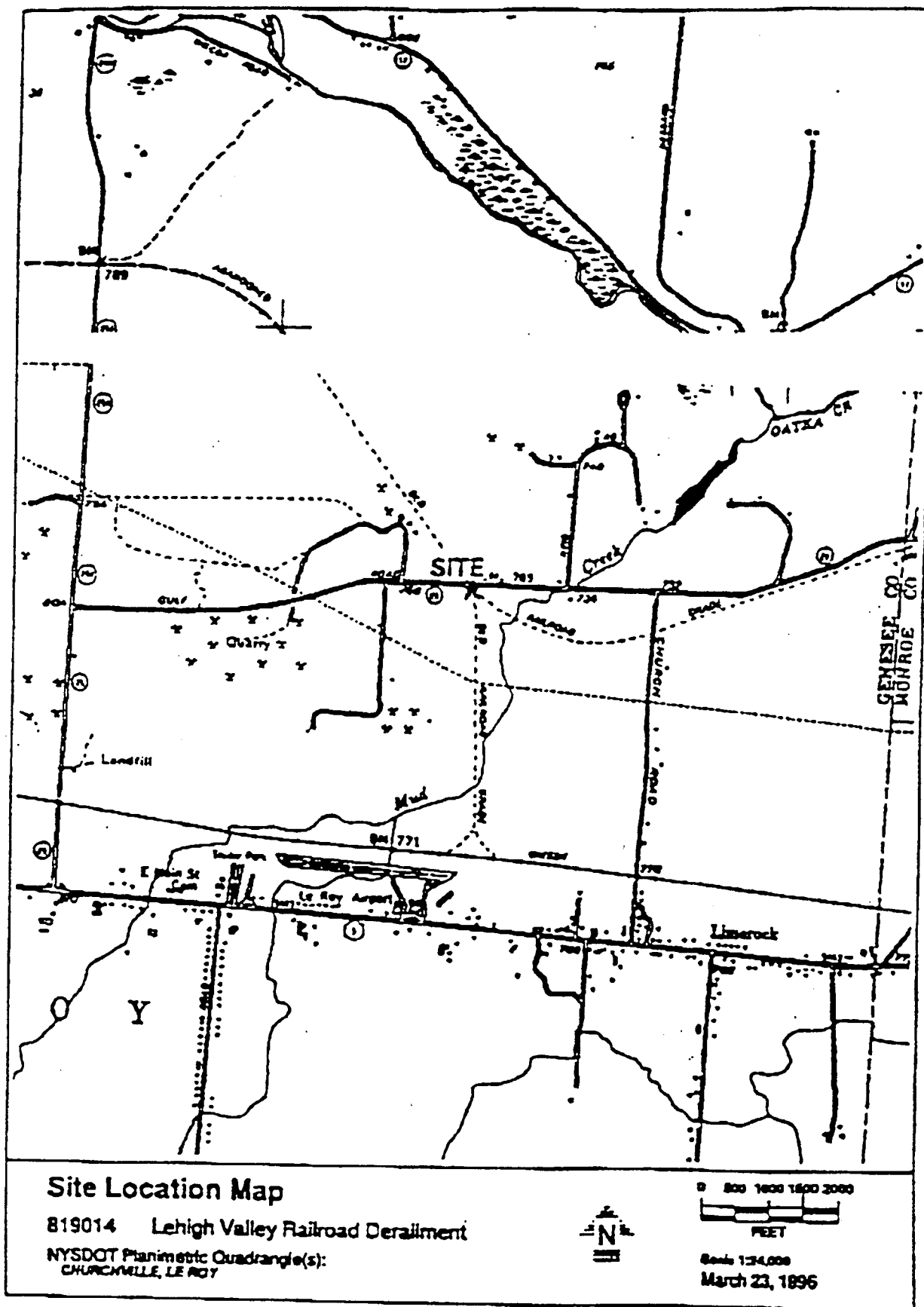


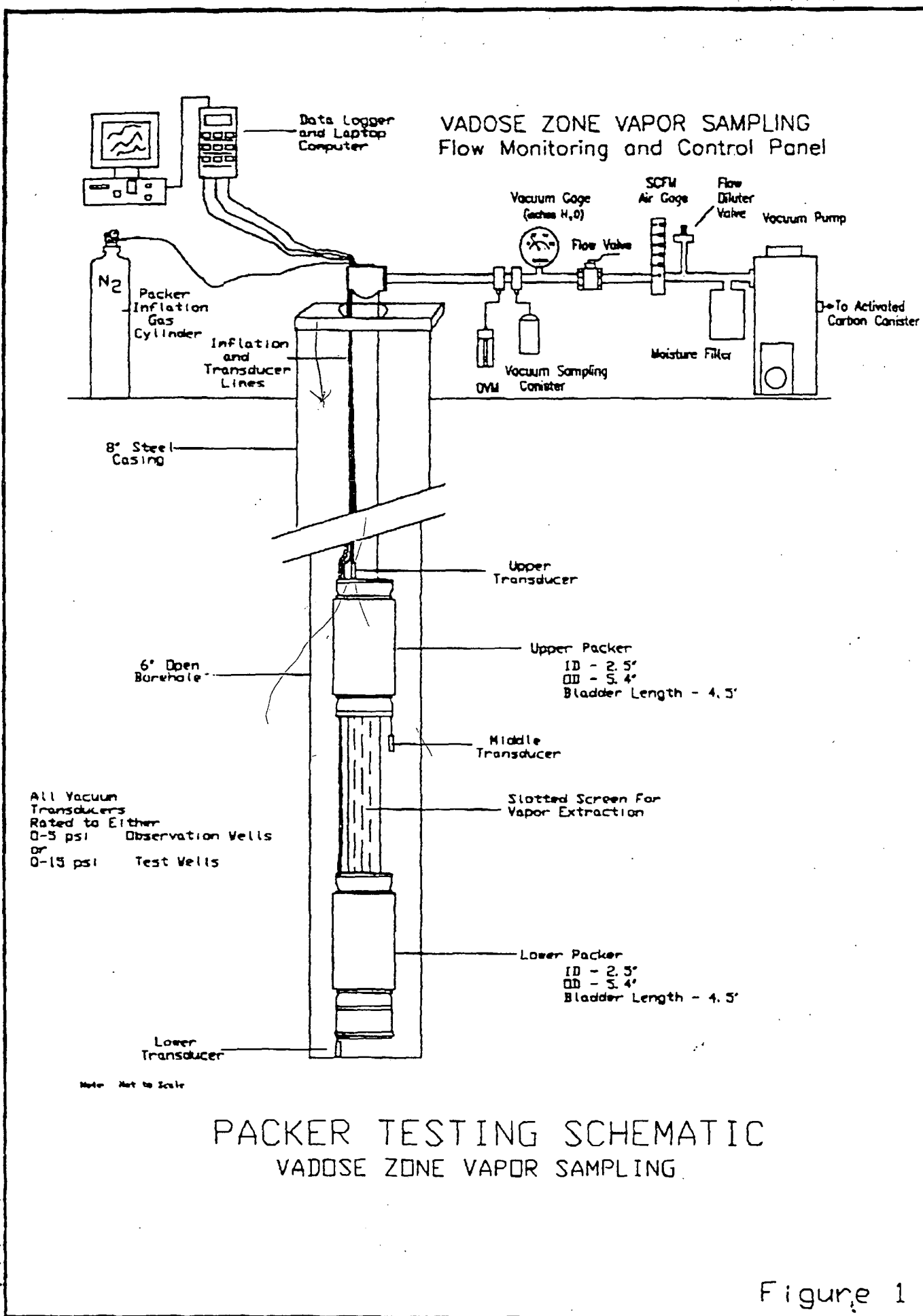
Eric B. Schmidley, P.G.
Senior Hydrogeologist/Project Manager

cc: Earth Data - MD Office - P4792

ACCEPTED AS PROPOSED:

_____/____/____





w2.dwg 01/28/98 4:37pm J.R.O.

Figure 1

SENI BR-17 CUKORAKALION
Z-3-30 - Z-107A - 11 WWT - - SHERIDAN -
Z-107A William Dunham

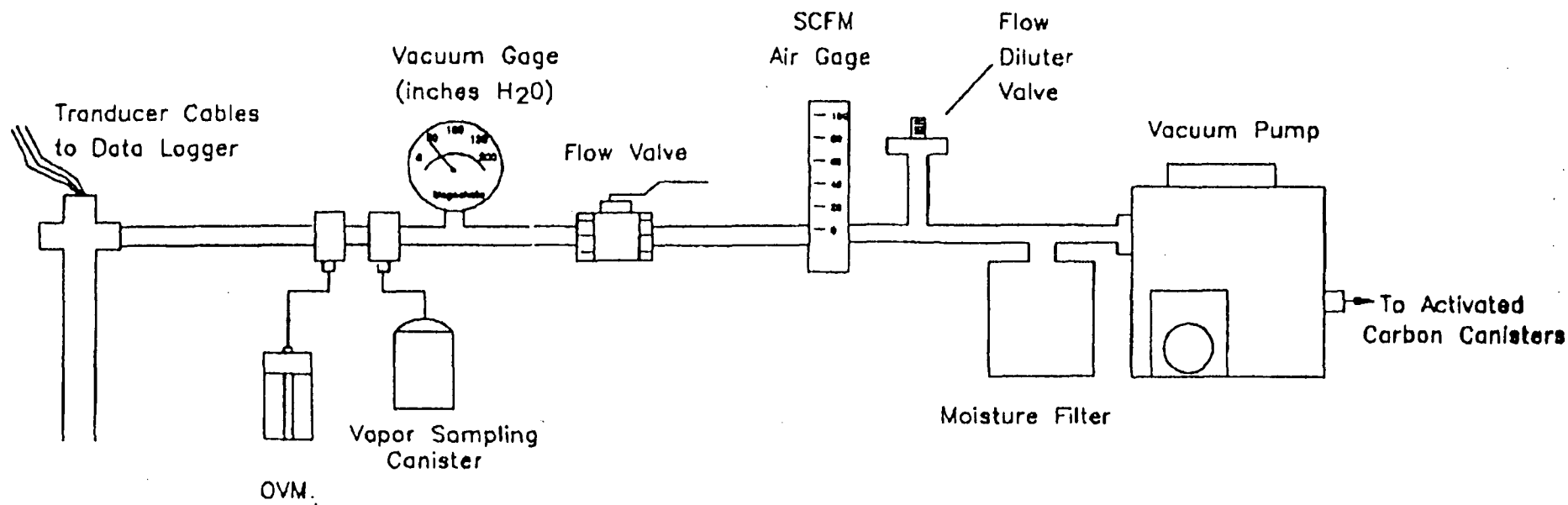


Figure 2

REQUEST FOR QUOTATION

Date: January 30, 1998OFFER MUST BE RECEIVED BY 07/10/98 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No. (732) 469-5599
Fax No. (732) 469-7275

Quotation Valid for: 210 Days

Quotation Prepared by:

Signature:

Title:

Date: Telephone:

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	68,500	68,500
2	Setup for Packer Testing	3	each	9,800	29,400
3	Packer Testing	45	hours	275	12,375
4	Delivery/Removal of Carbon Drums	8	each	575	4,600
		Subtotal		\$114,875	
		Tax			
		Freight			
		Grand Total		\$114,875	
Method of Shipment:		F.O.B. Point/Ship Terms:		Terms of Payment:	
				Shipment can be made in _____ days from receipt of order	

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

ENVIROGEN, INC.

Princeton Research Center
4100 Quakerbridge Road
Lawrenceville, NJ 08648
(609) 936-9300

***** Facsimile Transmission *****

Date : 2/13/98

Pages : 2

Please Deliver to : Dana Boyadjian or Ed Rashak 2:38

Company : International Technology Corporation

Fax Phone : 908-469-7275
Phone : 908-560-4220

From : Scott Drew

Subject : Quotation

Dana and Ed:

Attached is our bid for the New York State soil vapor extraction pilot test. Thanks for the opportunity and the extension on the bid date. If you have any questions, please call.

Scott Drew

Confidentiality Notice

This facsimile is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged and confidential. If the reader of this facsimile is not the intended recipient, you are hereby notified that any disclosure, distribution, or copying of this information is strictly prohibited. If you have received this facsimile in error, please notify us immediately by telephone. Thank you.

REQUEST FOR QUOTATION

Date: January 30, 1998

OFFER MUST BE RECEIVED BY 02/10/98, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak
 IT Corporation
 2200 Cottontail Lane
 Somerset, New Jersey 08873
 Telephone No. (732) 469-5599
 Fax No. (732) 469-7275

Quotation Valid for: 210 Days

Quotation Prepared by: ENVIROGEN, INC.

Signature: *Handwritten Signature*

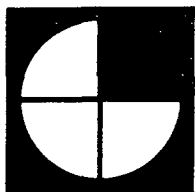
Title: PROGRAM DIRECTOR, REMEDIATION

Date: 02/13/98 Telephone: 609-936-9300, x 202

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	70,000	70,000
2	Setup for Packer Testing	3	each	32,000	96,000
3	Packer Testing	45	hours	933	41,985
4	Delivery/Removal of Carbon Drums	8	each	1,800	14,400
Subtotal				222,385	
Tax				-	
Freight				-	
Grand Total				222,385	
Method of Shipment: NA	F.O.B. Point/Ship Terms: NA	Terms of Payment: NET 30	Shipment can be made in 30 days from receipt of order		

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.



Gartner Lee Limited

140 Renfrew Drive
Suite 102
Markham, Ontario
L3R 6B3

Tel: (905) 477-8400
Fax: (905) 477-1456

Consultants in the Environment

Expertise

- Environmental Planning
- Ecological Science
- Geoscience
- Engineering

Client Services

- Ecological Planning
- Waste Management
- Site & Route Selection
- Environmental Impact Assessment
- Monitoring
- Facility Development
- Property Assessments & Audits
- Remediation & Cleanup

February 11, 1998

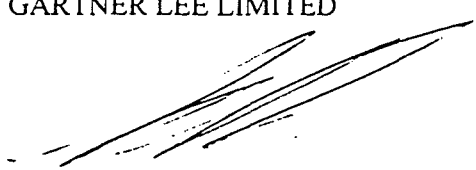
Mr. Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey
08873

Dear Mr. Rashak:

Re: Request for Quotation for the Performance of In Situ Bedrock Vapour Extraction Tests at the Lehigh Valley Railroad Derailment Site

Thank you very much for the opportunity to respond to the above mentioned project. Although Gartner Lee Limited is technically qualified and competent to conduct this work; key staff and materials have been assigned to other projects. We therefore must unfortunately decline at this time. We trust that this has not inconvenienced you and we would appreciate the opportunity to participate in these types of projects in the future.

Yours very truly,
GARTNER LEE LIMITED



David G. Leask, B.Sc.
Project Manager
Senior Consultant

DGL:mm

ENVIRONMENTAL ALLIANCE

- Engineering
- Remediation
- Consulting

February 6, 1998

Ed Rashak
IT Corp.
2200 Cortontail Lane
Somerset, NJ 08873-1248

Dear Ed:

This letter is to inform you that Environmental Alliance, Inc. (Alliance) has reviewed the bid package for the Lehigh Valley Railroad project, and must decline the opportunity to submit a bid. Thank you.

Sincerely,
ENVIRONMENTAL ALLIANCE, INC.



Doug Miller, P.G.
Project Manager

Post-It® Fax Note 7671		Date	2/6/98	# of pages	1
To	Ed 213	From	Doug		
Co/Dept		Co.			
Phone #		Phone #			
Fax #	732-469-7775	Fax #			

YEC, INC./YEC ENGINEERING, P.C.

Clarkstown Executive Park
612 Corporate Way
Suite 4M
Valley Cottage, NY 10989
(914) 268-3203

March 25, 1998

Dana Boyadjian
International Technology Corp.
2200 Cottontail Lane
Somerset, New Jersey 08873-1248

Re: Revised Lehigh Valley Railroad Site Survey Proposal, Town of LeRoy, N.Y.

Dear Mr. Boyadjian:

YEC, Inc. is pleased to submit our revised 2.11(e) schedule for the above-referenced project for your review and submission to NYSDEC. The revised 2.11(e) reflects the following comments addressed in Ms. Carol D. Perry's letter dated March 24, 1998.

Because of the large size of the survey, YEC proposes using aerial photo survey/mapping and Global Positioning System (GPS) to conduct topographic and ground control surveys. After discussing with Mr. John Byron of Stearns & Wheeler on the scope of work, the following assumptions were made for the cost proposal:

1. The aerial photo survey & mapping will include approximately 68,000 ft of roadway mapping at 200-foot wide strip @ 2 ft contour. Individual trees will not be designated. However, perimeter outline only of wooded and heavy growth areas will be plotted.
2. The GPS survey will pre-target up to 20 aerial control points; tie-in all the control points horizontally and vertically to the state HARN reference; locate 60 soil borings; and locate wetland flags approximately 60 feet either on the north or south side of George Street along Spring Creek.
3. YEC's survey crew will provide conduct utilities surveys, provide temporary benchmarks at every street intersection or every 500 feet for a total length of approximately 58,000 ft of roadway, survey approximately 12 geoprobe and 24 vapor extraction wells near the spill site area, and provide CAD mapping of the above.

If you have any questions, please feel free to contact this office.

Yours very truly,



Y.S. Ed Chen, Ph.D., P.E.
President, YEC, Inc.

YEC, INC./YEC ENGINEERING, P.C.

Clarkstown Executive Park
612 Corporate Way
Suite 4M
Valley Cottage, NY 10989
(914) 268-3203

February 18, 1998

Dana Boyadjian
IT Corporation
2200 Cottontail Lane
Somerset, NJ 08873-1248

RE: Lehigh Valley Railroad Site Survey Proposal
Town of LeRoy, N.Y.

Dear Mr. Boyadjian:

Attached please find the quotations for aerial photography and mapping compilation, as well as a separate quotation for GPS services. Five photography and mapping companies and five GPS firms responded to YEC's request for proposal. The following responses were received for the aerial / mapping portion:

Company	Aerial Photography	Mapping Compilation	Total Cost
Golden Aerials Inc.	\$6,700	\$27,000	\$33,700*
LaFave, White & McGivern	\$3,050	\$31,550	\$34,600
East Coast Mapping, Inc.	\$4,300	\$30,462	\$34,762
Lockwood Mapping Inc.	\$2,665	\$37,500	\$40,165
Geo Maps International	\$3,000	\$46,000	\$49,000

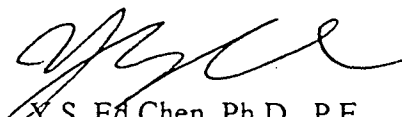
*Lump sum quote assuming +/- 75,000 linear feet of roadway mapping at 200 foot wide strips.

The following responses were received for GPS services:

Company	Total Cost
RU-SH	\$10,660
Lockwood Mapping Inc.	\$10,850
LaFave, White & McGivern	\$15,225
East Coast Mapping, Inc.	\$19,713
Golden Aerials Inc.	Did not submit bid

YEC recommends the low bidders, Golden Aerials Inc., be awarded the contract for the aerial / mapping portion, and RU-SH be awarded the contract for GPS services portion. If you have any questions, please feel free to call at any time.

Sincerely,


Y.S. Ed Chen, Ph.D., P.E.
President, YEC, Inc

** revised prices for
reduced scope of work.

Schedule 2.11(e)
Cost Plus-Fixed-Fee Subcontracts
Work Assignment Number:
(Lehigh Valley Railroad)

Date: March 25, 1998

<u>1. NAME OF SUBCONTRACTOR</u>	<u>SERVICES TO BE PERFORMED</u>	<u>SUBCONTRACT PRICE</u>
YEC, INC.	SURVEY SERVICES	\$ 70,747.65

A. Direct Salary Costs

<u>Professional Responsibility Level</u>	<u>Labor Classi- fication</u>	<u>Average Reimbursement Rate (\$/Hr.)</u>	<u>Maximum Reimbursement Rate (\$/Hr.)</u>	<u>Estimated Number of Hours</u>	<u>Total Estimated Direct Salary Cost (\$)</u>
Principle	VIII	1998 45.64	1998 49.29	20	912.80
Licensed Surveyor/ Senior Geologist/ Scientist/Engineer	V	1998 30.17	1998 33.19	206	6,215.02
Staff Geologist/ Scientist/Engineer	IV	1998 26.22	1998 28.84	0	0.00
Staff Geologist/ Scientist/Engineer/ Senior Draftsperson	III	1998 22.75	1998 25.25	56	1,274.00
Senior Technician/ Staff Engineer/ Scientist/Geologist	II	1998 16.84	1998 18.86	24	404.16
Technician/ Draftsperson	I	1998 15.26	1998 17.09	146	2,227.96
Total Direct Salary Costs:				452.00	\$ 11,033.94

Footnotes:

- 1) The 1998 rates will be held firm until 10/31/98 (DATE).
- 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.
- 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 Federal GS-13 rate, whichever is lower.

- 6) The maximum rates in each labor category can be modified only by mutual agreement and approved by both the Department and the Comptroller.
- 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.

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:

\$ 12,909.71

C. Maximum Reimbursement Rates for Direct Non-Salary Costs:

<u>Item</u>	<u>Max. Reimbursement Rate</u> <u>(Specify Unit)</u>	<u>Estimated No. of</u> <u>Units</u>	<u>Total Estimated Direct</u> <u>Non-Salary Cost</u>
1. Travel			
Mileage	\$0.315 /mile	1950 miles	614.25
Tolls	\$10.00 /mob	3 mob.	30.00
Per Diem	\$101.00 /indy	22 mdys	2,222.00
2. Expenses			
Survey Equipmt Rental	\$65 /day	11 days	715.00
CAD Computer	\$15 /hour	56 hours	840.00
Reproduction (Bond)	\$2.10 /sheet	172 sheets	361.20
Field Supplies (Stakes, paint, pknails)	\$150	1 lump sum	150.00
Mail/Tel/Phone/Copies	\$200	1 lump sum	200.00
3. Subcontractor			
Aerial Map(Golden Aerial)	\$30,780	1 lump sum	30,780.00
GPS (RU-SH)	\$7,300	1 lump sum	7,300.00
Total Direct Non-Salary Costs:			\$ 43,212.45

D. Fixed Fee

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

\$ 3,591.55

* ASSUMPTIONS: Individual trees will not be designated. Deliverables of plots will be on bond.

Revised Quote

GPS CONSULTANTS & LAND SURVEYORS, P.C.

7855 MAIN STREET • P.O. BOX 654

FISHERS, NY 14453

(716) 924-7790

FAX (716) 924-7845

FRANCIS D. RUSSELL, PLS

FULL SERVICE SURVEY & MAPPING - GPS CONTROL - OPTICAL/LASER MACHINE ALIGNMENT

~~Ed Chen~~ To: Dana Boyadjian 4/15
YEC, Inc.

March 26, 1998

Clarkstown Executive Park
612 Corporate Way, Suite 4M
Valley Cottage, New York 10989

Re: GPS for Aerial Photo Control at Route 5 & Oatka Crcek, Wheatland

Dear Mr Chen,

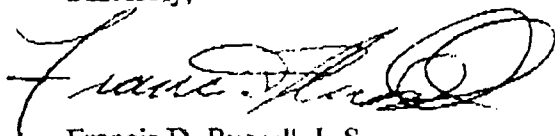
The following is the estimate of cost and for the above GPS survey. I will provide the following services in regards to this project.

- 1) Pre-target the proposed location of the aerial control points. We will need a clearer drawing identifying approximate distances to verifiable markers e.g. intersections, etc.
- 2) Horizontal and Vertical control for the 20 +/- control points set. I will tie all points to the state HARN reference and an appropriate number of vertical points to define the local Geoid. All work will be tied to NAD 83/92 for horizontal control and expressed as state plane coordinates for the Transverse Mercator Western zone and vertical will be shown as NAVD 88. Methods and procedures will be used to establish a minimum tolerance of 1 part in 15,000 to meet the aerial mapping requirements.
- 3) I will locate with the aid of GPS the +/- 60 test boring's. Boring's will be located with stop and go GPS techniques with a horizontal and vertical tolerance of +/- 1 feet. I am assuming the boring locations will be clearly identified in the field.
- 4) Supply a local GPS survey in a small area at the north end to determine the location of a few wetland flags either on the north or south side of the north end intersection of Spring street and the east west road coming from Mumford.

The above work will be completed for a lump sum fee of \$7,300.00. Invoicing will be at the time of delivery with net due in thirty days. RU-SH will provide you with a digital disk showing the coordinates for all points located. We will also provide a brief report outlining the methods and procedures used to derive those coordinates. RU-SH will provide a 2% credit for payments, month for payments received after thirty days.

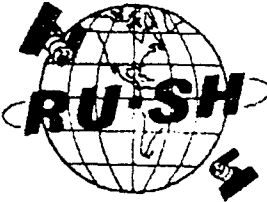
RU-SH will start work after written notice to proceed. We expect to deliver the results of this survey within ten business days of completions of the field work. Let me know if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Francis D. Russell".

Francis D. Russell, L.S.

GPS CONSULTANTS &



LAND SURVEYORS, P.C.

7855 MAIN STREET • P.O. BOX 654

FISHERS, NY 14453

(716) 924-7790

FAX (716) 924-7845

FRANCIS D. RUSSELL, PLS

FULL SERVICE SURVEY & MAPPING – GPS CONTROL – OPTICAL/LASER MACHINE ALIGNMENT

Ed Chen

February 18, 1998

YEC, Inc.

Clarkstown Executive Park

612 Corporate Way, Suite 4M

Valley Cottage, New York 10989

Re: GPS for Aerial Photo Control at Route 5 & Oatka Creek, Wheatland

Dear Mr Chen,

The following is the estimate of cost and for the above GPS survey. I will provide the following services in regards to this project.

- 1) Pre-target the proposed location of the aerial control points. We will need a clearer drawing identifying approximate distances to verifiable markers e.g. intersections, etc.
- 2) Horizontal and Vertical control for the 39 control points set. I will tie all points to the state HARN reference and an appropriate number of vertical points to define the local Geoid. All work will be tied to NAD 83/92 for horizontal control and expressed as state plane coordinates for the Transverse Mercator Western zone and vertical will be shown as NAVD 88. Methods and procedures will be used to establish a minimum tolerance of 1 part in 15,000 to meet the aerial mapping requirements.
- 3) I will locate with the aid of GPS the +/- 60 test boring's. Boring's will be located with stop and go GPS techniques with a horizontal and vertical tolerance of +/- 1feet. I am assuming the boring locations will be clearly identified in the field.
- 4) Supply a local GPS survey in a small area at the north end to determine the location of a few wetland flags either on the north or south side of the north end intersection of Spring street and the east west road coming from Mumford.

The above work will be completed for a lump sum fee of \$10,660.00. Invoicing will be at the time of delivery with net due in thirty days. RU-SH will provide you with a digital disk showing the coordinates for all points located. We will also provide a brief report outlining the methods and procedures used to derive those coordinates. RU-SH will provide a 2% credit for payments received within fifteen days of the date of the invoice. We will charge a late fee of 1 ½ % per month for payments received after thirty days.

RU-SH will start work within 48 hours of written notice to proceed. We expect to deliver the results of this survey within ten business days of completions of the field work. Let me know if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Francis D. Russell".

Francis D. Russell, F.S.

LOCKWOOD
MAPPING, INC.

TELECOPY COVER SHEET

TO: GIANNI DEL DUCA.
YEC INCDATE: 2-24-98FROM: KEITH ADAMSLockwood Mapping, Inc.
36 Karlan Drive
Rochester, NY 14617
Phone: (716) 342-5810
Fax: (716) 342-6847WE ARE SENDING A TOTAL OF 1 PAGES, INCLUDING THIS COVER SHEET.
IF ALL PAGES ARE NOT RECEIVED CLEARLY, PLEASE NOTIFY US.RE: REVISED PRICE QUOTATION CALEDONIA AREA.ADDITIONAL 17000' RE 2/23/99 FAXAERIAL PHOTOGRAPHY INCREASE FROM \$2465.00 TO \$2665.00TOPOGRAPHIC MAPPING @ .50 PER LINEAR FOOT75000 FT = \$37500.00ADDITIONAL GPS POINTS INCREASE FROM \$7700.00 TO \$10850.00

LOCKWOOD
MAPPING, INC.

TELECOPY COVER SHEET

TO: GIANNI DEL DUCA
YEC INCDATE: 2-18-98FROM: KEITH ADAMS
Lockwood Mapping, Inc.
36 Karlan Drive
Rochester, NY 14617
Phone: (716) 342-5810
Fax: (716) 342-6847WE ARE SENDING A TOTAL OF 1 PAGES, INCLUDING THIS COVER SHEET.
IF ALL PAGES ARE NOT RECEIVED CLEARLY, PLEASE NOTIFY US.

RE: PRICE QUOTATION CALEDONIA AREA LETOY NY QUAD-
1/ PROVIDE GPS VALUES FOR MAPPING GROUND CONTROL
2/ PROVIDE XYZ GPS COORDINATES FOR 60 BORING LOCATIONS,
± 1000' APART
3/ PROVIDE WETLAND FLAGGING FOR ± 500 SQ FEET OF WETLAND
TOTAL \$ 7 700.00

GPS Only

February 23, 1998

Mr. Ed Chen, P.E., President
YEC, Inc.
Clarkstown Executive Park
612 Corporate Way
Valley Cottage, NY 10989

Re: Leroy/Caledonia Water Project - Revision 2/23/98
Aerial Photography & Photogrammetric Mapping, 75,000 L.F.
Optional GPS Photo Control, Boring & Wetland GPS Locations
LWM Proposal P98-013

Dear Mr. Chen:

LaFave, White & McGivern, L.S., P.C. is pleased to submit our proposal to acquire aerial photography and prepare digital stereo-photogrammetric mapping of the subject project. We understand that if we are selected that you will furnish the necessary horizontal and vertical photo control through the surveyor selected for this project. Enclosed please find a copy of the Leroy, Caladonia and Clifton USGS quad sheets showing the project area, proposed flight lines and approximate locations of the necessary photo control points.

SCOPE OF SERVICES - PHOTOGRAMMETRIC MAPPING

1.0 Project Scope

- 1.1 We understand that there is approximately *75,000 lineal feet* of proposed water line route to fly and map. The mapping corridor is to be centered along each respective road and is to be *200 feet in width*. The map scale is to be *1"=50'* with a *two (2) foot contour interval*. The mapping is to be furnished in Autocad files. Microstation files can be furnished instead of Autocad if so desired.

2.0 Aerial Photography

- 2.1 Aerial photography shall be flown during the Spring 1998 leaf/snow free photographic season with a 230mm by 230mm format precision metric aerial mapping camera with a calibrated 153mm (6 inch) focal length lens with forward image motion compensation. The camera shall be either a Leica Wild RC 20 or RC 30 which has been calibrated by the USGS within the last three years prior to flight. The aerial photography shall be flown at 2400 foot above mean terrain (AMT) which is a photo scale of 1" = 400'. This is the usual photo scale used to prepare 1" = 50' scale mapping from and is very suitable for an accurate two foot contour interval.
- 2.2 It shall require six (6) flight lines and approximately 68 exposures to cover the total project. Two (2) each contact prints shall be prepared with one set being used for the control points. One clean set of the contact prints shall be delivered. A set of film diapositives shall be prepared for the photogrammetric mapping. LWM shall select the necessary horizontal and vertical control points. This can be after photography with natural feature photo points or targets may be placed by your firm prior to aerial photography as you select.
- 2.3 The aerial photography shall be flown during leaf and snow free conditions, with good sunlight, without cloud shadow, when the sun angle is higher than 30° above the horizon.
- 2.4 The ground at the project site is at present almost entirely free of snow cover. If these conditions prevail and the notice to proceed is forthcoming in the near future we expect that aerial photography could be flown any time during the remainder of February, weather permitting. At this point in time we have about two and one half hours of sunlight 30 degrees above the horizon at this latitude.

3.0 Analytical Aerial Triangulation

- 3.1 Analytical aerial triangulation shall be performed with the Zeiss C-120 analytical stereoplotter. The computations and least square adjustment shall be completed with Zeiss Strim software. It is our experience that with our measuring procedures and this software, that the RMS in horizontal and vertical is less than 1:12,000 of the aerial photography flight altitude. This procedure alleviates the necessity of model control.
- 3.2 It is anticipated that a total of 20 horizontal and 32 vertical natural feature photo control points shall be required to control the photogrammetric mapping for the entire project. If *targets* and *GPS* is used then all targets would be both horizontally and vertically controlled and it would require only 39 *targets*.

4.0 Project Mapping

- 4.1 The mapping shall be compiled with an analytical digital stereoplotter, either a Zeiss C-120, P3, or P33, in a two shift environment.
- 4.2 The mapping shall be compiled directly in digital format at the scale of $1'' = 50'$ with a *two (2) foot contour interval* at the analytical stereoplotter.
- 4.3 All map features shall be collected directly in layers with Kork (KDMS) software at the digital analytical stereoplotter.
- 4.4 The digital map data is then exported to a standalone graphics edit station where it shall be translated into *Autocad version 12* or microstation as the Client selects. If desired your firm may furnish LWM with their desired Autocad symbols, layers, etc. The map data shall be edited and reviewed in either Autocad or microstation to assure it's being complete and correct. A paper plot shall be made and edited/ reviewed as part of the final edit process. The digital Autocad 12 .DWG files shall be shipped at the scale of $1'' = 50'$ along with a bond paper proof plot and one set of final 24" by 36" mylar sheets. It is assumed that the client's surveyor shall accomplish all field edit, obtain structure and invert elevations and enter all data to the digital mapping.

5.0 Map Accuracy

- 5.1 Cultural or Planimetric features normal to $1'' = 50'$ scale mapping which are visible or identifiable on, or are interpretable from the aerial photography shall include, but not be limited to the following: buildings, silos, tanks, roads, railroads, ferry slips, piers, dams, power plants, substations, airfield runways, quarries, borrow pits, cemeteries, orchards, fences, stone walls, retaining walls, driveways, trails, sidewalks, curbs, parking areas, culverts, bridges, utility poles, hedgerows, woods outlines, lone trees within the road ROW (some trees smaller than 6" dbh may not be seen), brooks, drainage features, swamps, streams, canals, ponds, reservoirs, and lakes.
- 5.2 Mapping accuracies shall be as follows:
 1. The horizontal map accuracy shall be such that ninety (90) percent of all well defined map features shall be accurate to within at least one-fortieth ($1/40$) of an inch at map scale of their true coordinate position and none of the map features shall be misplaced by more than one-twentieth ($1/20$) of an inch at map scale from their true coordinate position.
 2. The vertical map accuracy shall be such that ninety (90) percent of the elevations determined from the solid-line contour shall have an accuracy with respect to true elevation of one-half ($1/2$) contour interval or better, and the remaining ten (10) percent of such elevations shall not be in error by more than one contour interval. In areas where

the ground is obscured by dense vegetation the contours will be dashed so as to indicate that they are approximate form lines only and are of doubtful accuracy.

3. Spot elevations placed on the maps shall be such that ninety (90) percent of such elevations shall be accurate in respect to true elevation to within one-fourth (1/4) of the contour interval.
4. The map's vertical accuracy shall be based on the respective contour interval of two (2) feet.

6.0 Schedule

- 6.1 It is anticipated that the project shall be flown during the *Spring 1998 leaf/snow free photographic season* at first opportunity after notice to proceed. This of course also depends on good photographic and flying weather. With this year's unusual snow free conditions at the project site aerial photography may be flown from this date forward provided the area is not blanked by another snowstorm.
- 6.2 If the photo control is accomplished through natural feature photo control, the points shall then shall be picked on the control photos and shipped to your firm within 15 days after the date of photography.
- 6.3 Mapping shall be completed along each road and shipped when each road is complete. We shall map each road in the order the client selects. All mapping shall be complete within *eight weeks* after receipt of the photo control data.
- 6.4 Should the project be targeted prior to aerial photography, the mapping shall be completed within ten (10) weeks after the date of the aerial photography provided the control data is received within two (2) weeks after the date of the aerial photography.

7.0 Fee

- 7.1 Our lump sum fee is as follows:

Aerial Photography	\$ 3,050.00
Mapping	<u>31,550.00</u>
TOTAL:	\$34,600.00

- 7.2 Additional corridor length mapping beyond your requested 75,000 lineal feet may be mapped at \$0.41 per lineal foot provided that it is covered by the project's controlled stereo aerial photography. The corridor width quoted on for mapping is 200 feet wide.

8.0 Photo Control Diagram

- 8.1 Attached is the control diagram for the project based on setting targeted photo points and flying the aerial photography at 2400' AMT (1" = 400' scale).

GPS SCOPE OF SERVICES

9.0 Optional GPS Photo Control Survey

- 9.1 As an option LWM can set the *39 necessary photo control targets* and control them horizontally and vertically by GPS methods. Several pairs of GPS intervisible stations can also be set and observed. These stations could then be used to tie traverse surveys established for field edit or other purposes. The horizontal accuracy shall be second order class II and the vertical accuracy shall be about 0.10 foot. The GPS control shall be tied to HARN stations and the vertical control to several recoverable NGS benchmarks.

- 9.2 Our *fee* for the GPS control Survey is \$ 10,725.00.

10.0 Optional Soil Boring Locations by GPS

- 10.1 It is estimated that there will be *sixty (60) soil borings* to locate horizontally and vertically by GPS methods either before the boring, provided a stake is set at the desired location or after the borings have been accomplished. In either case we will have to know where the desired soil boring location is.

- 10.2 We assume that a separate trip will have to be made to locate the soil borings. As a result our *fee* is \$ 3,000.00 for a total of *sixty (60)* soil borings.

11.0 Optional Wetland Locations By GPS

- 11.1 It is understood that the wetlands to be located are on Spring Creek in the vicinity of the intersection of George Street and Spring Street and would be within or just outside the highway ROW.

- 11.2 We assume that a separate trip shall have to be made to field survey the wetlands after they have been flagged. As a result our *fee* is \$ 1,500.00.

- 11.3 If the soil boring locations and the wetland locations can be coordinated so that they can be accomplished at the same time as the GPS photo control then there would be some reduction in cost.

Thank you for requesting our firm for a mapping proposal and GPS services. We look forward to selection and working with you on this project. If you have any questions or require any revisions of the proposed scope, please do not hesitate to contact us at 1-800-427-9036. We of course are available to meet with you to discuss this project.

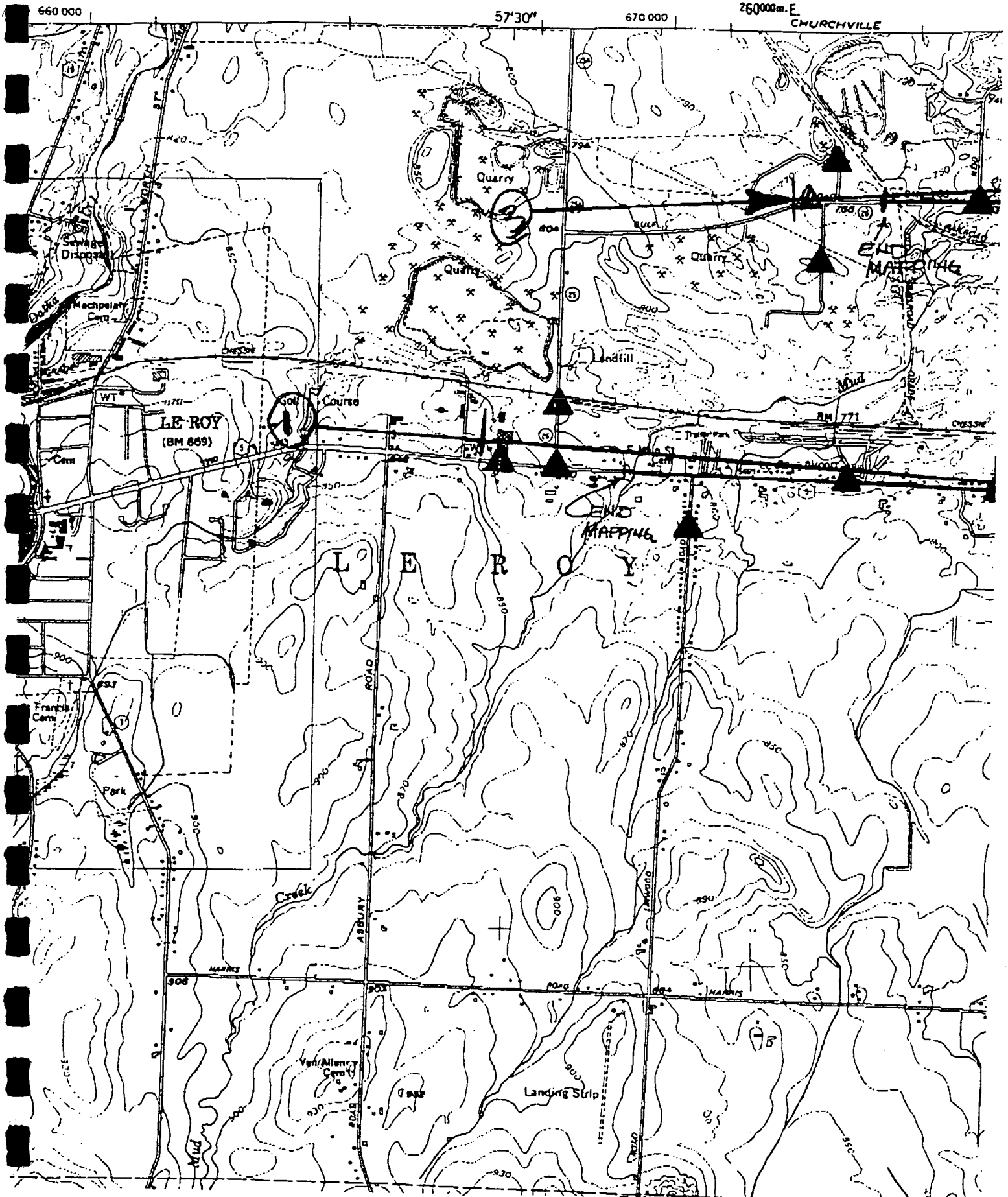
Very truly yours,
LaFave, White & McGivern, L.S., P.C.

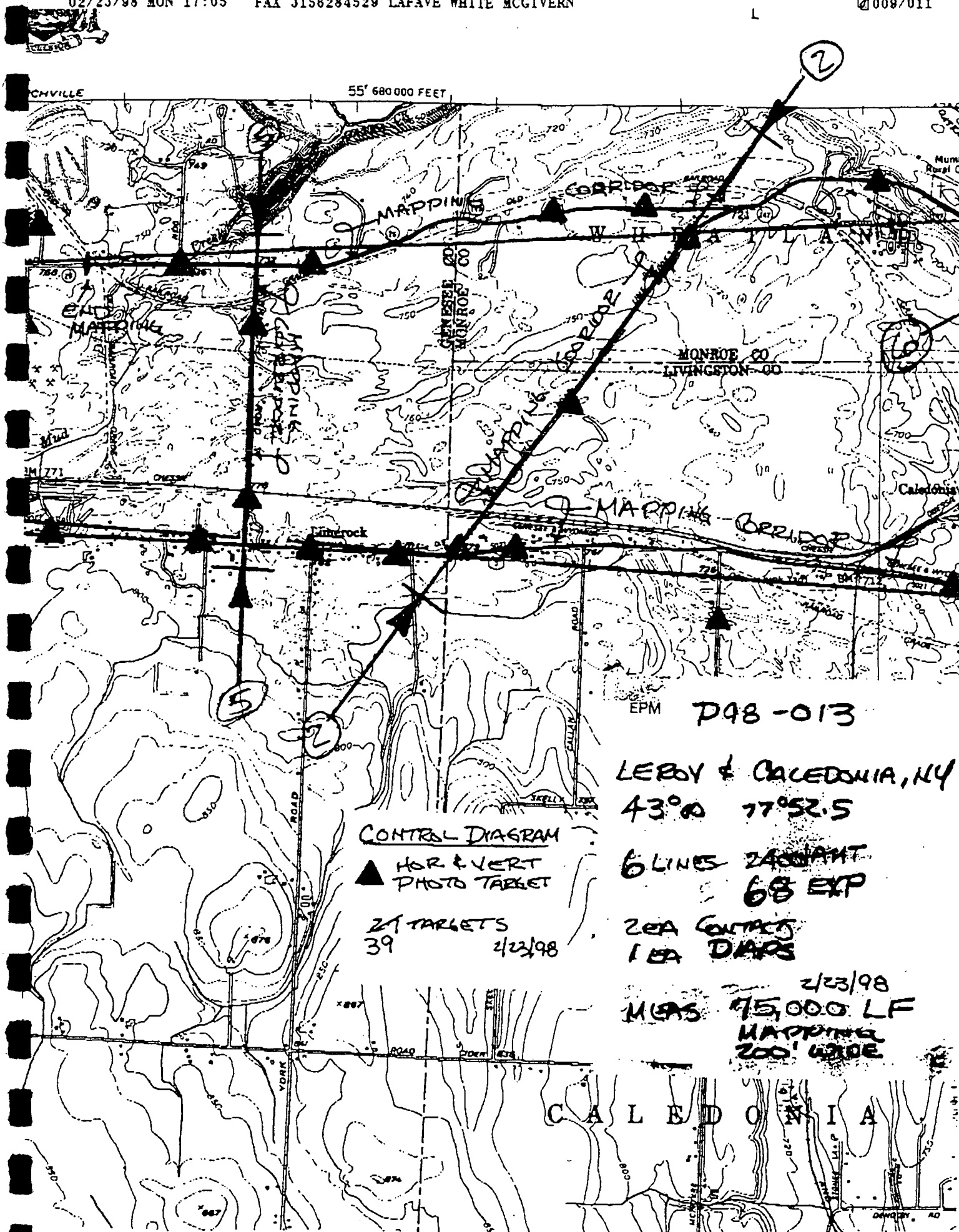
Edward P. McKinney

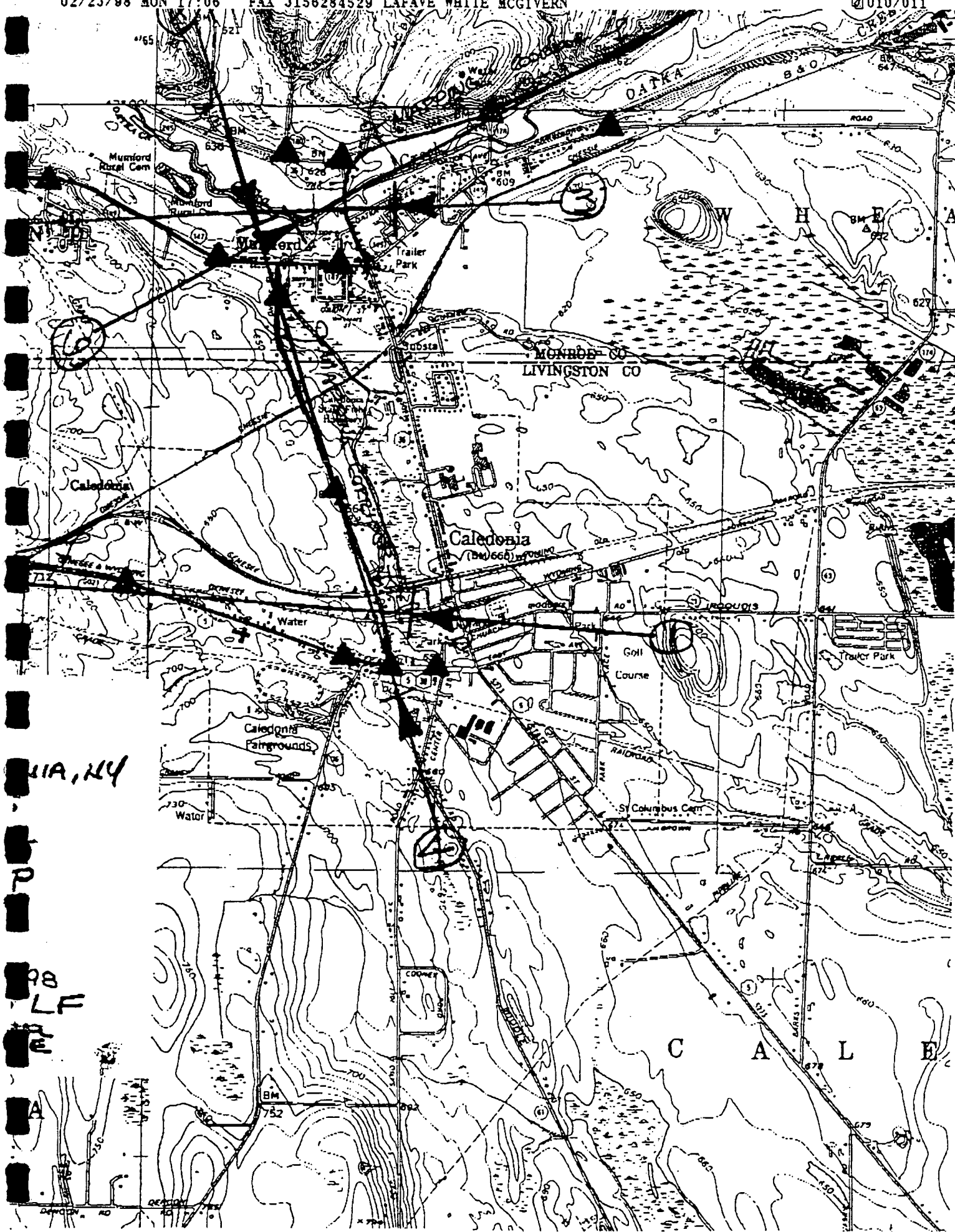
Edward P. McKinney, L.S., C.P. (ASP&RS)
Director of Marketing

EPM/epm
enc: Control Diagrams-3 pages

ORK STATE
TRANSPORTATION



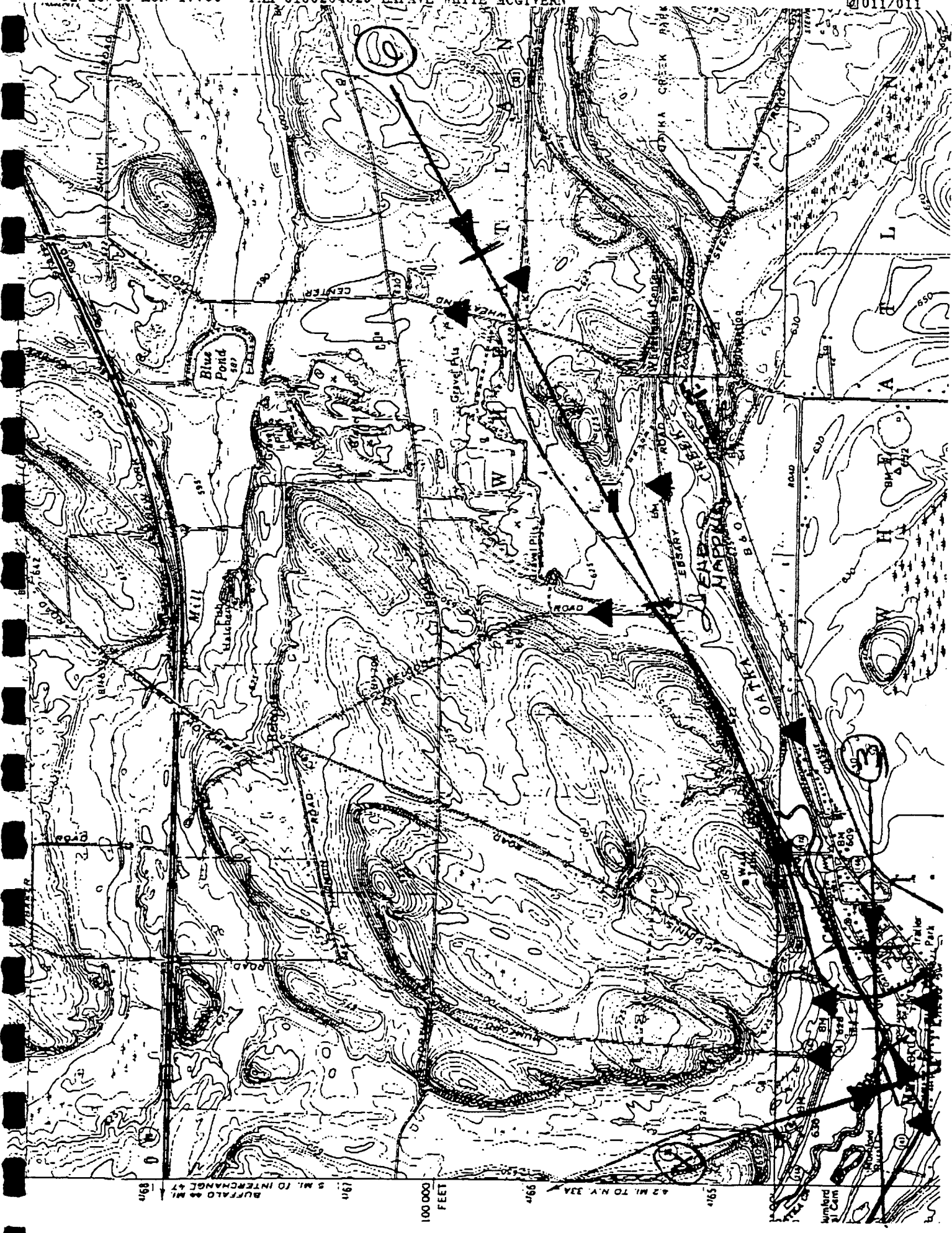




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CONFIDENTIAL**EAST COAST MAPPING, INC.**

February 23, 1998
P17568

YEC, Inc.
Clarkstown Executive Park
612 Corporate Way, Suite 4M
Valley Cottage, NY 10989

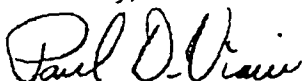
Attn: Gianni Del Duca

Dear Mr. Del Duca,

In response to our telephone conversation of this morning, East Coast Mapping is submitting these additional prices for your review. East Coast Mapping will increase the area to be flown by ^{23,000}~~17,000~~ linear feet. This added photography will require an additional 11 GPS control points. The cost of the GPS survey will increase by \$5,225.00. The additional flight and mapping costs will be \$8,992.00. When this additional work is added to the previous scope, the total GPS survey costs will be \$19,713.00 and the total aerial mapping costs would be ~~\$32,762.00~~ ^{34,762.00} *DBD*.

If you need any additional data, please call at anytime. We thank you for the opportunity to submit this quotation.

Sincerely,



Paul D. Viani
Vice President

PDV/lc

EAST COAST MAPPING, INC.

February 18, 1998
P17568

YEC, Inc.
Clarkstown Executive Park
612 Corporate Way, Suite 4M
Valley Cottage, NY 10989

Attn: Gianni Del Ducca

Dear Mr. Del Ducca,

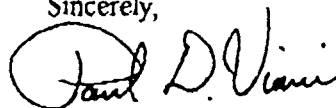
In response to our telephone conversation of this morning, East Coast Mapping is submitting these additional prices for your review.

East Coast Mapping will survey the required ^{37 500} 26 ground control points for use during photogrammetric mapping. East Coast Mapping will also survey 60 boring locations which are dispersed along the 52,000 linear feet of roadway to be mapped. The last task will be the location of wetland flagging along a section of Spring Street. This wetland area measures approximately 50' x 60' and is in the far easterly section of the project.

The total cost for this site survey work will be \$14,488.00. East Coast Mapping is planning to make two trips to the Wheatland, NY area. The first trip would be to complete the aerial mapping control and the second trip would complete the borings and wetland flagging locations.

If this scope of work should change for any reason or if there are any questions regarding the methods to be used, please do not hesitate to call this office at any time.

Sincerely,



Paul D. Viani
Vice President

PDV/lc

- Revised Quote -

GOLDEN AERIAL SURVEYS INC

PHONE 203-426-3322

FAX QUOTE

FAX 203-426-8867

141 MT. PLEASANT RD. - P.O. BOX 747 NEWTOWN, CONNECTICUT 06470

THIS REQUEST IS FROM:

Company

YEC, INC

Address

Valley Cottage, NY

FAX 732-469-7275

Fax

914-268-5313

Contact

GIANNI DEL DUCA

Date

3/23/98

PROJECT SPECIFICATIONS

Location

LEROY NY

No. Acres

Strip Length

68,000 ft

Strip Width

200 ft

Mapping Scale

1"=50'

Cont. Int.

2'

MR DANA BOYADJIAN
Items To Be Delivered:

Special Request

Ink Drafting on Mylar

Digital Output (Format)

ACAD

Survey Control Provided By:

YEC

NOTE: I DO NOT HAVE QUAD MAPS (THEY HAVE BEEN ORDERED)
FOR THE AREA EXTENDING 10,000 FT EASTERLY. YOU
SHOULD PLAN FOR AT LEAST 6 MORE CONTROL
POINTS IN THAT AREA.

INCLUDE COPY OF U.S.G.S. QUAD MAP WITH APPROX. PROJECT LIMITS SHOWN

RESERVED FOR G.A.S.

COMMENTS:

NEW FLIGHT \$3200 -

QUOTED PRICE:

\$30,780 -

ANALYTICAL CONTROL 3100 -

Lump Sum Per Acre Linear

MAPPING 0.364 PER FOOT

GAS Contact

LENNY JOHNSON

Approximate Horizontal and Vertical Control Locations are Shown on the Attached Map

Targets are Recommended

Photo ID Should Be Sufficient

To Lenny Johnson

From Gianni Del Duca

*Move to East 10,000 ft

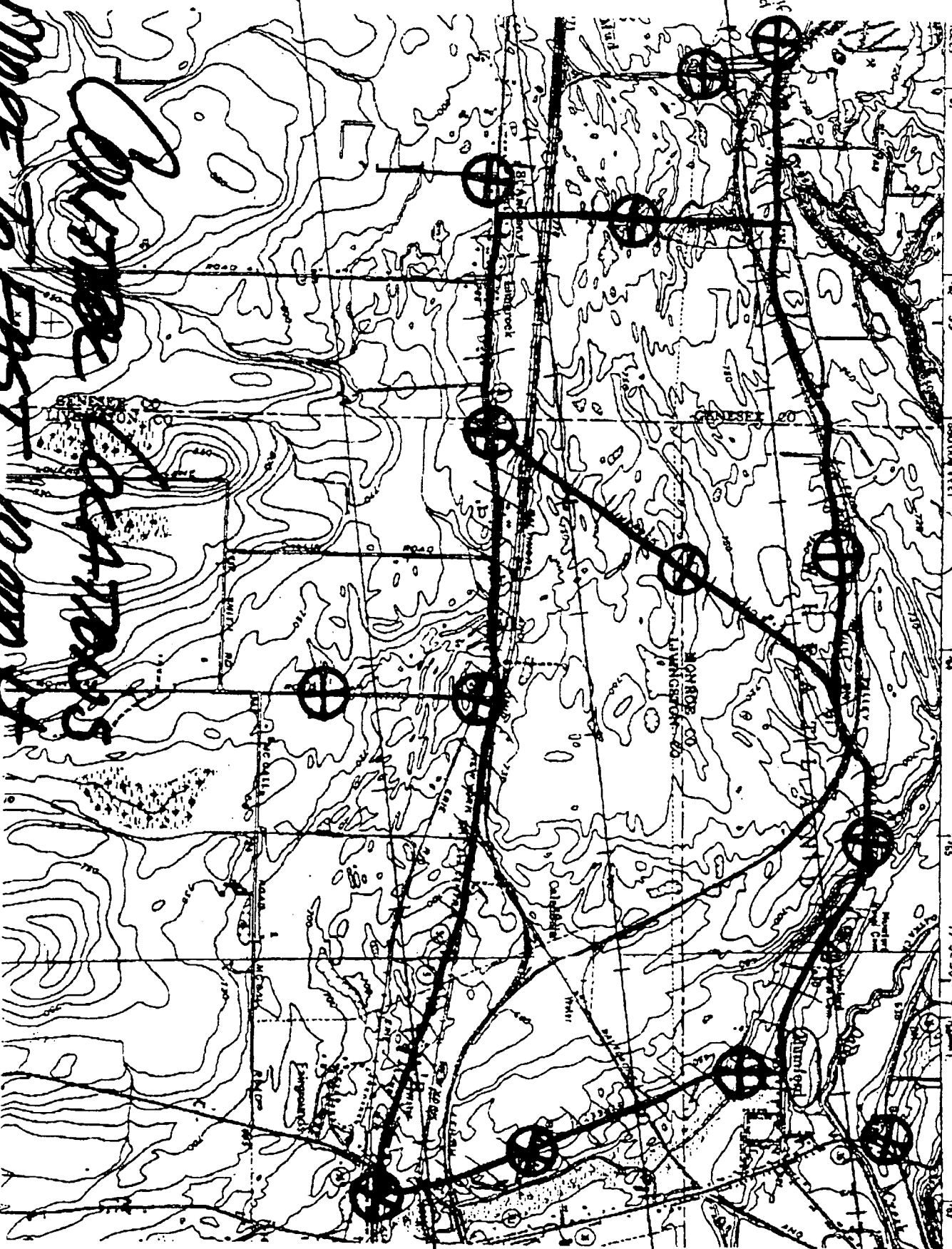
Colin

EW YORK
PUBLIC WORKS
SUPERINTENDENT

Include only the dashed  lines.

LE ROY QUADRANGLE
NEW YORK
7.5 MINUTE SERIES (TOPOGRAPHIC)
NAD CALCOMP 14 QUADRANGLE

1981
GEOLOGICAL SURVEY



GOLDEN AERIAL SURVEYS

INC

PHONE 203-426-3322

FAX QUOTE

FAX 203-426-8867

141 MT. PLEASANT RD. - P.O. BOX 747 - NEWTOWN, CONNECTICUT 06470

THIS REQUEST IS FROM:

Company Yec. Inc.

Phone _____

Fax 914-268-5313

Address _____

Contact Gianni DeLucaDate 2-24-98

PROJECT SPECIFICATIONS

Location Leroy, NY

Items To Be Delivered:

No. Acres _____

Special Request _____

Strip Length \$ 75000ftInk Drafting on Mylar ✓Strip Width 200 ftDigital Output (Format) ACADMapping Scale 1" = 50 Cont. Int. 2'Survey Control Provided By: YEC

INCLUDE COPY OF U.S.G.S. QUAD MAP WITH APPROX. PROJECT LIMITS SHOWN

RESERVED FOR G.A.S.

COMMENTS: Flight-New - \$3200QUOTED PRICE: \$33,700Mapping 0.36\$ per FOOTLump Sum Per Acre LinearAnalytical control Solution \$3500GAS Contact Rick Markey

Approximate Horizontal and Vertical Control Locations are Shown on the Attached Map

Targets are Recommended

Photo ID Should Be Sufficient

February 23, 1998

Mr. Ed Chen, P.E., President
YEC, Inc.
Clarkstown Executive Park
612 Corporate Way
Valley Cottage, NY 10989

Re: **Leroy/Caledonia Water Project - Revision 2/23/98**
Aerial Photography & Photogrammetric Mapping, 75,000 L.F.
Optional GPS Photo Control, Boring & Wetland GPS Locations
LWM Proposal P98-013

Dear Mr. Chen:

LaFave, White & McGivern, L.S., P.C. is pleased to submit our proposal to acquire aerial photography and prepare digital stereo-photogrammetric mapping of the subject project. We understand that if we are selected that you will furnish the necessary horizontal and vertical photo control through the surveyor selected for this project. Enclosed please find a copy of the Leroy, Caladonia and Clifton USGS quad sheets showing the project area, proposed flight lines and approximate locations of the necessary photo control points.

SCOPE OF SERVICES - PHOTOGRAMMETRIC MAPPING

1.0 Project Scope

- 1.1 We understand that there is approximately *75,000 lineal feet* of proposed water line route to fly and map. The mapping corridor is to be centered along each respective road and is to be *200 feet in width*. The map scale is to be *1"=50'* with a *two (2) foot contour interval*. The mapping is to be furnished in Autocad files. Microstation files can be furnished instead of Autocad if so desired.

2.0 Aerial Photography

- 2.1 Aerial photography shall be flown during the Spring 1998 leaf/snow free photographic season with a 230mm by 230mm format precision metric aerial mapping camera with a calibrated 153mm (6 inch) focal length lens with forward image motion compensation. The camera shall be either a Leica Wild RC 20 or RC 30 which has been calibrated by the USGS within the last three years prior to flight. The aerial photography shall be flown at 2400 foot above mean terrain (AMT) which is a photo scale of 1" = 400'. This is the usual photo scale used to prepare 1" = 50' scale mapping from and is very suitable for an accurate two foot contour interval.
- 2.2 It shall require six (6) flight lines and approximately 68 exposures to cover the total project. Two (2) each contact prints shall be prepared with one set being used for the control points. One clean set of the contact prints shall be delivered. A set of film diapositives shall be prepared for the photogrammetric mapping. LWM shall select the necessary horizontal and vertical control points. This can be after photography with natural feature photo points or targets may be placed by your firm prior to aerial photography as you select.
- 2.3 The aerial photography shall be flown during leaf and snow free conditions, with good sunlight, without cloud shadow, when the sun angle is higher than 30° above the horizon.
- 2.4 The ground at the project site is at present almost entirely free of snow cover. If these conditions prevail and the notice to proceed is forthcoming in the near future we expect that aerial photography could be flown any time during the remainder of February, weather permitting. At this point in time we have about two and one half hours of sunlight 30 degrees above the horizon at this latitude.

3.0 Analytical Aerial Triangulation

- 3.1 Analytical aerial triangulation shall be performed with the Zeiss C-120 analytical stereoplotter. The computations and least square adjustment shall be completed with Zeiss Strim software. It is our experience that with our measuring procedures and this software, that the RMS in horizontal and vertical is less than 1:12,000 of the aerial photography flight altitude. This procedure alleviates the necessity of model control.
- 3.2 It is anticipated that a total of 20 horizontal and 32 vertical natural feature photo control points shall be required to control the photogrammetric mapping for the entire project. If *targets* and *GPS* is used then all targets would be both horizontally and vertically controlled and it would require only *39 targets*.

4.0 Project Mapping

- 4.1 The mapping shall be compiled with an analytical digital stereoplotter, either a Zeiss C-120, P3, or P33, in a two shift environment.
- 4.2 The mapping shall be compiled directly in digital format at the scale of $1" = 50'$ with a *two (2) foot contour interval* at the analytical stereoplotter.
- 4.3 All map features shall be collected directly in layers with Kork (KDMS) software at the digital analytical stereoplotter.
- 4.4 The digital map data is then exported to a standalone graphics edit station where it shall be translated into *Autocad version 12* or microstation as the Client selects. If desired your firm may furnish LWM with their desired Autocad symbols, layers, etc. The map data shall be edited and reviewed in either Autocad or microstation to assure it's being complete and correct. A paper plot shall be made and edited/ reviewed as part of the final edit process. The digital Autocad 12 .DWG files shall be shipped at the scale of $1" = 50'$ along with a bond paper proof plot and one set of final 24" by 36" mylar sheets. It is assumed that the client's surveyor shall accomplish all field edit, obtain structure and invert elevations and enter all data to the digital mapping.

5.0 Map Accuracy

- 5.1 Cultural or Planimetric features normal to $1" = 50'$ scale mapping which are visible or identifiable on, or are interpretable from the aerial photography shall include, but not be limited to the following: buildings, silos, tanks, roads, railroads, ferry slips, piers, dams, power plants, substations, airfield runways, quarries, borrow pits, cemeteries, orchards, fences, stone walls, retaining walls, driveways, trails, sidewalks, curbs, parking areas, culverts, bridges, utility poles, hedgerows, woods outlines, lone trees within the road ROW (some trees smaller than 6" dbh may not be seen), brooks, drainage features, swamps, streams, canals, ponds, reservoirs, and lakes.
- 5.2 Mapping accuracies shall be as follows:
 1. The horizontal map accuracy shall be such that ninety (90) percent of all well defined map features shall be accurate to within at least one-fortieth ($1/40$) of an inch at map scale of their true coordinate position and none of the map features shall be misplaced by more than one-twentieth ($1/20$) of an inch at map scale from their true coordinate position.
 2. The vertical map accuracy shall be such that ninety (90) percent of the elevations determined from the solid-line contour shall have an accuracy with respect to true elevation of one-half ($1/2$) contour interval or better, and the remaining ten (10) percent of such elevations shall not be in error by more than one contour interval. In areas where

the ground is obscured by dense vegetation the contours will be dashed so as to indicate that they are approximate form lines only and are of doubtful accuracy.

3. Spot elevations placed on the maps shall be such that ninety (90) percent of such elevations shall be accurate in respect to true elevation to within one-fourth (1/4) of the contour interval.
4. The map's vertical accuracy shall be based on the respective contour interval of two (2) feet.

6.0 Schedule

- 6.1 It is anticipated that the project shall be flown during the *Spring 1998 leaf/snow free photographic season* at first opportunity after notice to proceed. This of course also depends on good photographic and flying weather. With this year's unusual snow free conditions at the project site aerial photography may be flown from this date forward provided the area is not blanked by another snowstorm.
- 6.2 If the photo control is accomplished through natural feature photo control, the points shall then shall be picked on the control photos and shipped to your firm within 15 days after the date of photography.
- 6.3 Mapping shall be completed along each road and shipped when each road is complete. We shall map each road in the order the client selects. All mapping shall be complete within *eight weeks* after receipt of the photo control data.
- 6.4 Should the project be targeted prior to aerial photography, the mapping shall be completed within ten (10) weeks after the date of the aerial photography provided the control data is received within two (2) weeks after the date of the aerial photography.

7.0 Fee

- 7.1 Our lump sum fee is as follows:

Aerial Photography	\$ 3,050.00
Mapping	<u>31,550.00</u>
TOTAL:	\$34,600.00

- 7.2 Additional corridor length mapping beyond your requested 75,000 lineal feet may be mapped at \$0.41 per lineal foot provided that it is covered by the project's controlled stereo aerial photography. The corridor width quoted on for mapping is 200 feet wide.

8.0 Photo Control Diagram

- 8.1 Attached is the control diagram for the project based on setting targeted photo points and flying the aerial photography at 2400' AMT (1" = 400' scale).

GPS SCOPE OF SERVICES

9.0 Optional GPS Photo Control Survey

- 9.1 As an option LWM can set the *39 necessary photo control targets* and control them horizontally and vertically by GPS methods. Several pairs of GPS intervisible stations can also be set and observed. These stations could then be used to tie traverse surveys established for field edit or other purposes. The horizontal accuracy shall be second order class II and the vertical accuracy shall be about 0.10 foot. The GPS control shall be tied to HARN stations and the vertical control to several recoverable NGS benchmarks.

- 9.2 Our *fee* for the GPS control Survey is \$ 10,725.00.

10.0 Optional Soil Boring Locations by GPS

- 10.1 It is estimated that there will be *sixty (60) soil borings* to locate horizontally and vertically by GPS methods either before the boring, provided a stake is set at the desired location or after the borings have been accomplished. In either case we will have to know where the desired soil boring location is.
- 10.2 We assume that a separate trip will have to be made to locate the soil borings. As a result our *fee* is \$ 3,000.00 for a total of *sixty (60)* soil borings.

11.0 Optional Wetland Locations By GPS

- 11.1 It is understood that the wetlands to be located are on Spring Creek in the vicinity of the intersection of George Street and Spring Street and would be within or just outside the highway ROW.
- 11.2 We assume that a separate trip shall have to be made to field survey the wetlands after they have been flagged. As a result our *fee* is \$ 1,500.00.
- 11.3 If the soil boring locations and the wetland locations can be coordinated so that they can be accomplished at the same time as the GPS photo control then there would be some reduction in cost.

Thank you for requesting our firm for a mapping proposal and GPS services. We look forward to selection and working with you on this project. If you have any questions or require any revisions of the proposed scope, please do not hesitate to contact us at 1-800-427-9036. We of course are available to meet with you to discuss this project.

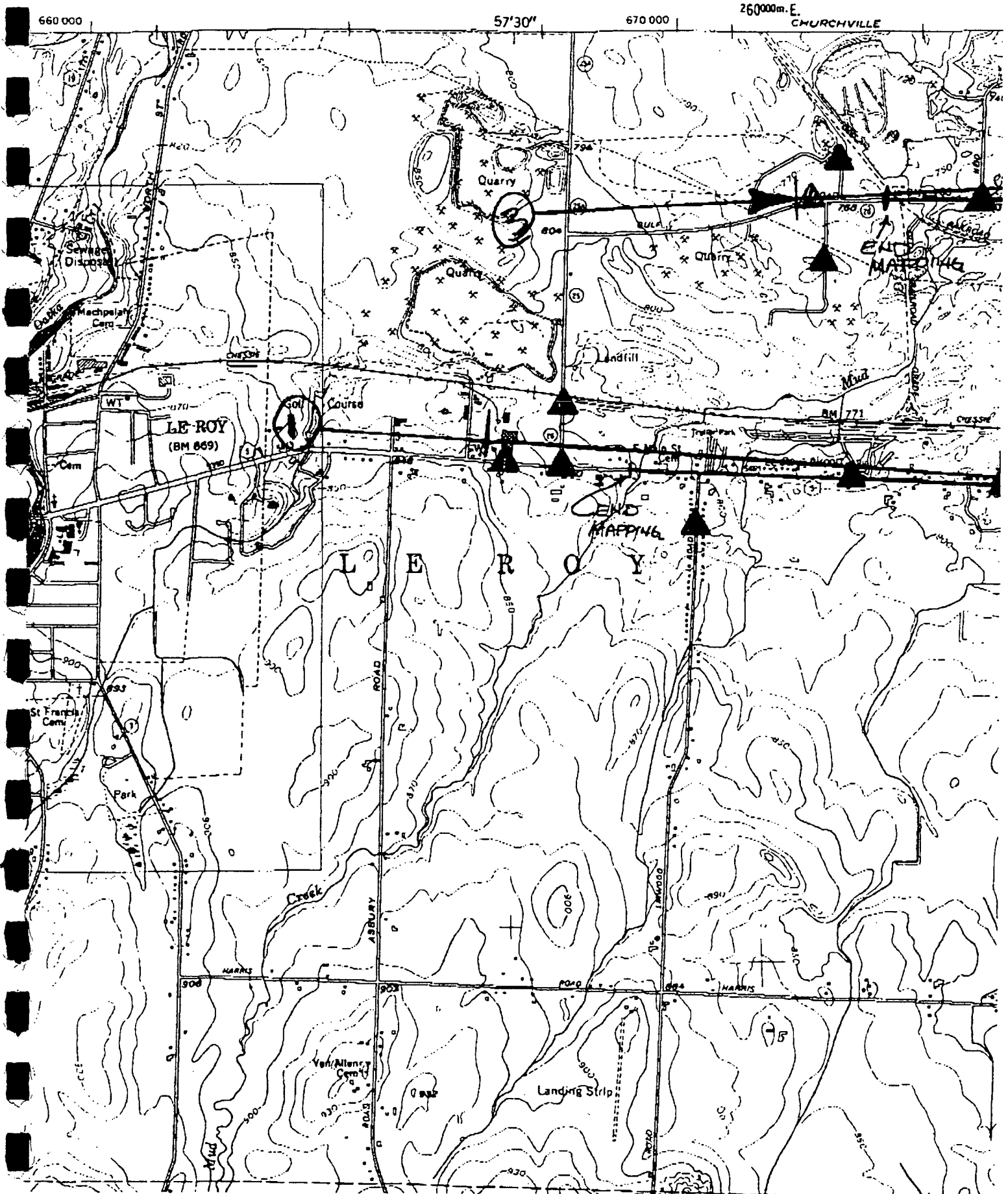
Very truly yours,
LaFave, White & McGivern, L.S., P.C.

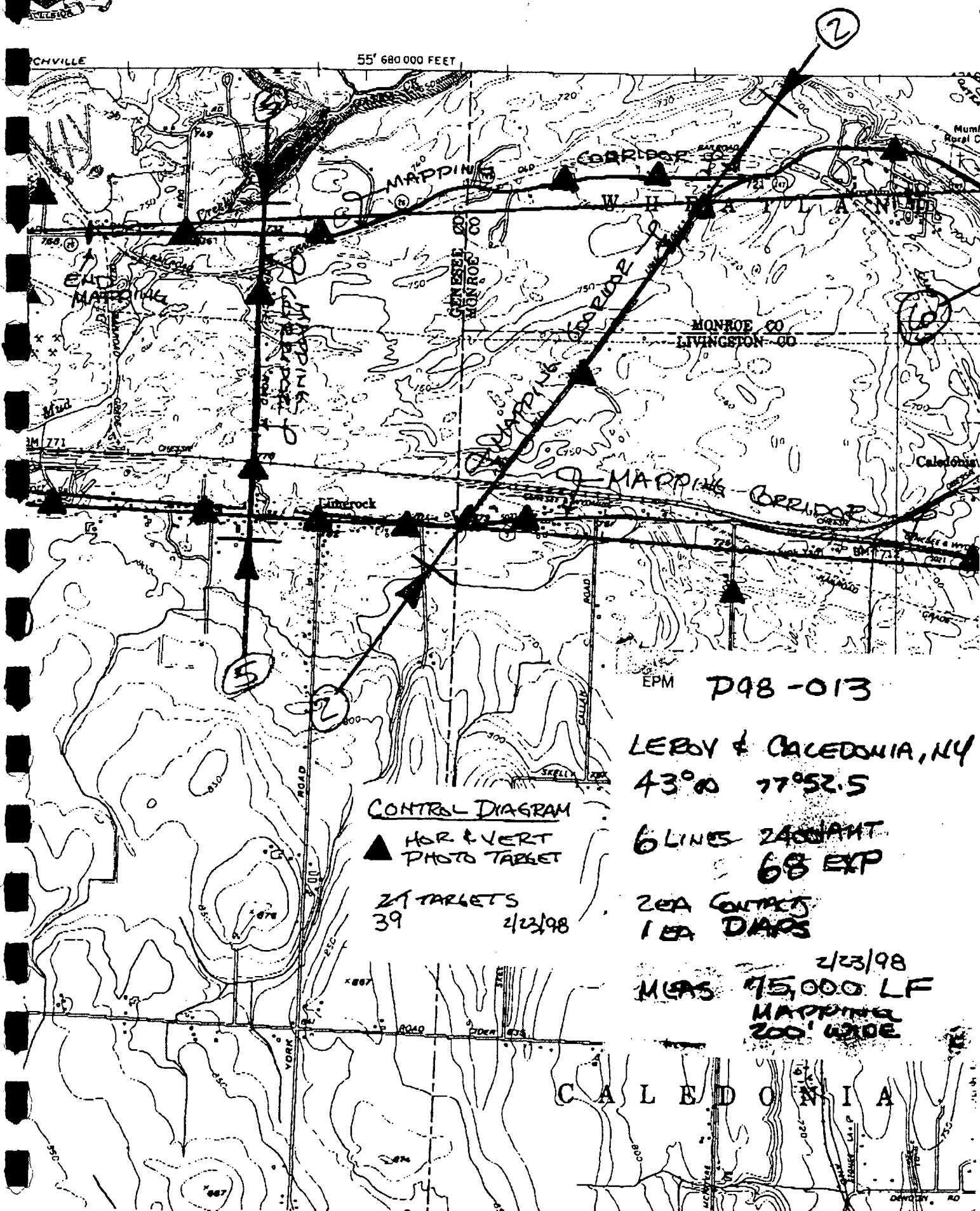
Edward P. McKinney

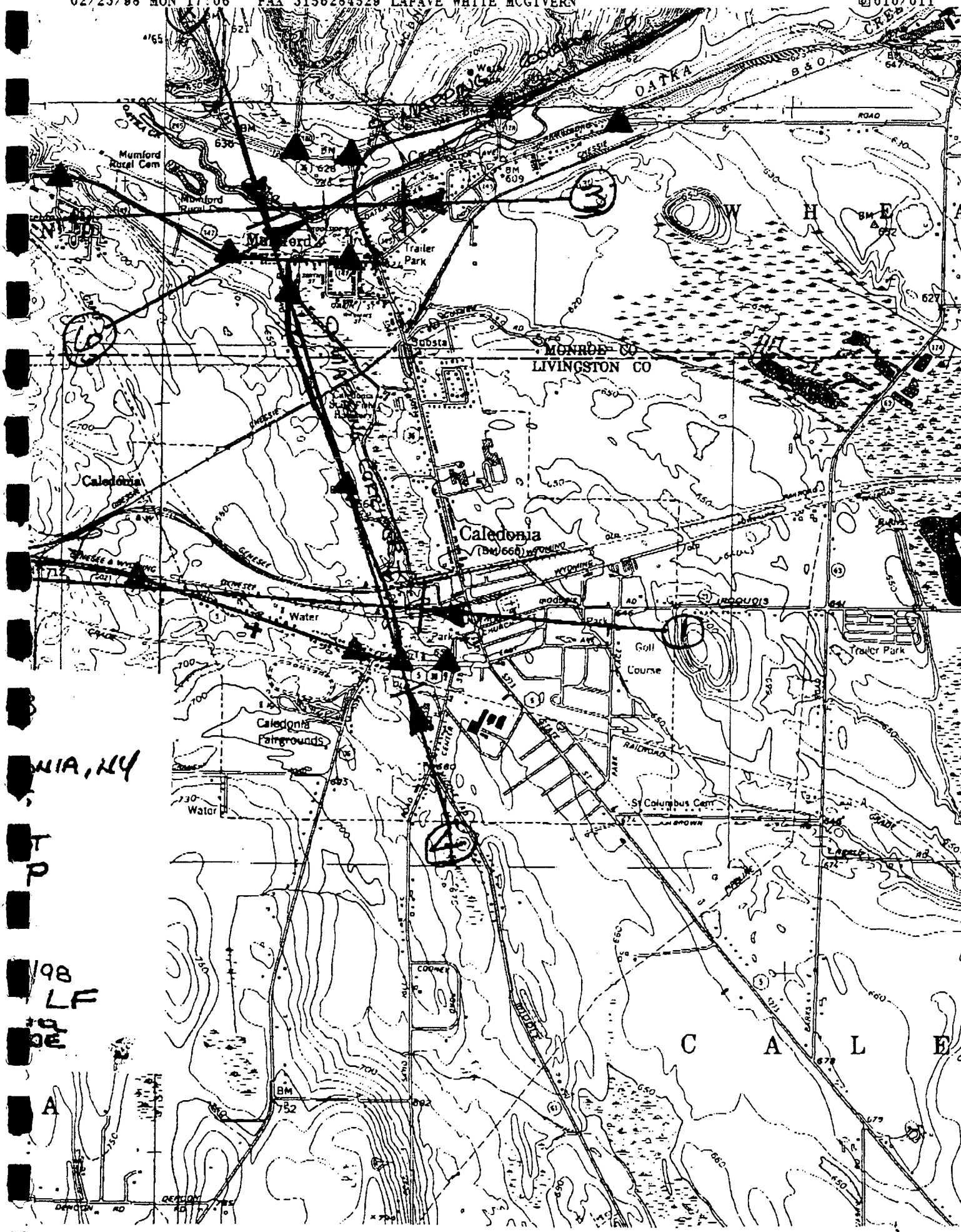
Edward P. McKinney, L.S., C.P. (ASP&RS)
Director of Marketing

EPM/epm
enc: Control Diagrams-3 pages

ARK STATE
TRANSPORTATION







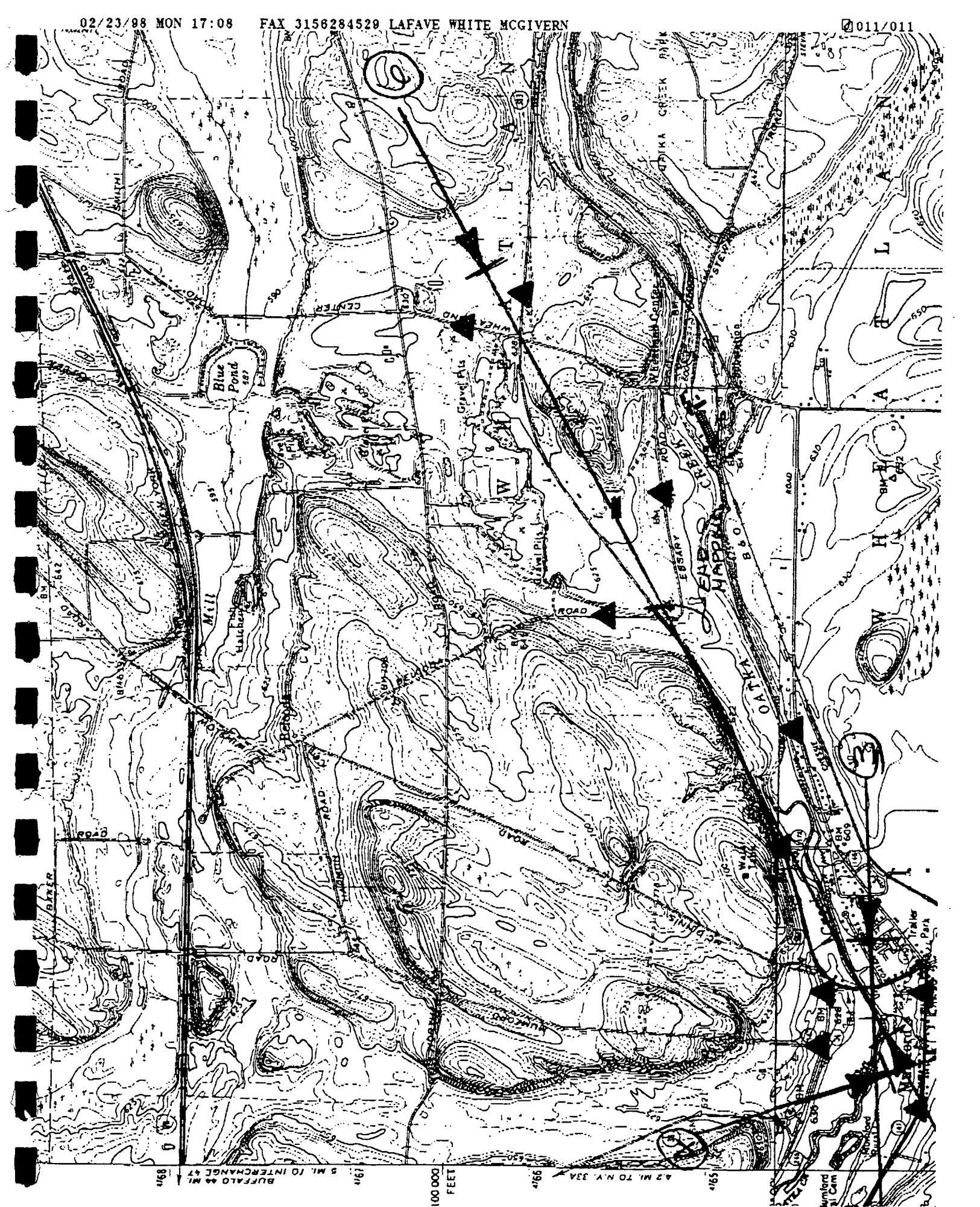
CALEDONIA, NY

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A



EAST COAST MAPPING, INC.

EAST COAST MAPPING, INC.

February 23, 1998
P17568

YEC, Inc.
Clarkstown Executive Park
612 Corporate Way, Suite 4M
Valley Cottage, NY 10989

Attn: Gianni Del Duca

Dear Mr. Del Duca,

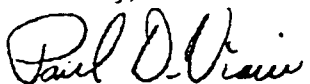
23,000
DAP
8,992
DAP

In response to our telephone conversation of this morning, East Coast Mapping is submitting these additional prices for your review. East Coast Mapping will increase the area to be flown by ~~17,000~~ linear feet. This added photography will require an additional 11 GPS control points. The cost of the GPS survey will increase by \$5,225.00. The additional flight and mapping costs will be ~~\$8,792.00~~. When this additional work is added to the previous scope, the total GPS survey costs will be \$19,713.00 and the total aerial mapping costs would be ~~\$32,762.00~~.

34,762 DAP

If you need any additional data, please call at anytime. We thank you for the opportunity to submit this quotation.

Sincerely,



Paul D. Viani
Vice President

PDV/lc



EAST COAST MAPPING, INC.

February 13, 1998
P17568

YEC, Inc.
Clarkstown Executive Park
612 Corporate Way, Suite 4M
Valley Cottage, NY 10989

Attn: Gianni Del Duca

RE: Aerial mapping for the Route # 5 site in Wheatland, NY

Dear Mr. Del Duca,

The purpose of this letter is to provide you with our cost estimate for digital mapping services to be performed on the Route # 5 site in Wheatland, NY. The following pages describe the project area, proposed scope of services, schedule and cost. The enclosed Attachment A is a map of the project area that illustrates the mapping limits, photo coverage and the required ground control. The aerial photography for this project area will be scheduled as soon as authorization is received and the appropriate weather conditions are available.

It is understood that your firm will provide the required control for mapping. It is recommended that control targets be placed at the locations shown in Attachment A prior to the performance of aerial photography. If this is not convenient, then photo-id points will be selected by ECM after obtaining the aerial photos.

Please review the enclosed proposal. If you require any changes or have any questions, please do not hesitate to contact me. We look forward to the opportunity to perform this work for you.

Sincerely,

Paul D. Viani
Vice President

PDV/lc

PROPOSAL FOR PROFESSIONAL SERVICES

CLIENT: YEC, Inc.
612 Corporate Way, Suite 4M
Wheatland, NY 10989

A. PROJECT AREA

This proposal is for services concerning the following mapping project:

Project Name and Location: Route # 5 & Oatka Creek, Wheatland, NY

Project Size: 75,000 ± linear feet of road at 200' wide

Intended Map Usage: Planning & Design

Project Area Description: Lightly developed existing roadway with rolling terrain.

A project area map is enclosed as Attachment A.

B. SCOPE OF SERVICES

The scope of services to be provided by East Coast Mapping, Inc. (ECM) are outlined as follows:

1. Aerial Photography:

a. Specifications

Film Type: Black & White Photo Scale: 1"=400' Photo Date: Spring, 1998

Deliverables: One (1) set of 9" x 9" contact prints.

Other (specify): None

The camera to be used on this photo mission will be a high resolution camera with a United States Geological Survey calibration report within the last three (3) years.

2. Ground Control Survey: (to be provided by client)

a. Horizontal Control

b. Vertical Control

Accuracy: 1 Part/15,000 Parts Accuracy: 0.2 Ft/10,000 Linear Feet Traversed

Datum: Determined by Client Datum: Determined by Client

Technique: Determined by Client Technique: Determined by Client

c. Monumentation: Determined by Client

d. Control Point Targets: 6 Feet in Diameter

e. Utility Structure Signalization: Not Applicable

EAST COAST MAPPING, INC.

3. Digital Mapping:

- a. Digital mapping shall be performed to meet the United States National Map Accuracy Standards. The standards of accuracy shall comply with the following:

Map publication scale of: 1"=40' Contour Interval of: 2'

Additional specifications (specify): None

b. Deliverables:

Map Sheets: Ink on Mylar: ☒ (24" x 36") Paper: ☐

Digital Map Data: Yes: ☒ No: ☐

Software Format: AutoCAD 12 Magnetic Media: 3.5" Disk

Digital Classification System: Provided by YEC, Inc.

c. Mapping features to be shown:

Airport Apparatus	Driveways	Railroad Tracks	Towers
Bridges	Excavation/Quarries	Recreational Facilities	Trails
Buildings	Fences	Rivers and Brooks	Catch Basins
Cemeteries	Foundations	Roads	Hydrants
Concrete Slabs	Geodetic Points	Road Names	Light Poles
Contours	Lakes and Ponds	Sidewalks	Manholes
Culverts	Parking Lots	Spot Heights	Utility Poles
Curbs	Point Trees	Swamps	Vegetation Boundaries
Drainage Ditches	Power Lines	Swimming Pools	Walls

Additional Instructions (specify): Client based rotation & layering scheme.

C. SCHEDULE

The mapping shall be completed within 30 days of receipt of the control data and aerial photography at our office.

D. CONTRACT PRICE

The cost to provide the services as outlined above is itemized as follows:

1. Aerial Photography	\$3,150.00
2. Ground Control Survey	N/A
3. Map Compilation	\$20,820.00
4. Other	N/A
Total	\$23,970.00

EAST COAST MAPPING, INC.

9 Constitution Drive Bedford, NH 03110 / 603-472-2452 FAX 603-472-2464

LOCKWOOD
MAPPING, INC.

TELECOPY COVER SHEET

TO: GIANNI DEL DUCA.
YEC INCDATE: 2-24-98FROM: KEITH ADAMS
Lockwood Mapping, Inc.
36 Karlan Drive
Rochester, NY 14617
Phone: (716) 342-5810
Fax: (716) 342-6847WE ARE SENDING A TOTAL OF 1 PAGES, INCLUDING THIS COVER SHEET.
IF ALL PAGES ARE NOT RECEIVED CLEARLY, PLEASE NOTIFY US.RE: REVISED PRICE QUOTATION CALEDONIA AREA.ADDITIONAL 17000' RE 2/23/99 FAXAERIAL PHOTOGRAPHY INCREASE FROM \$2465.00 TO \$2665.00TOPOGRAPHIC MAPPING @ .50 PER LINEAR FOOT75000 FT = \$37500.00ADDITIONAL GPS POINTS INCREASE FROM \$7700.00 TO \$10850.00

LOCKWOOD
MAPPING, INC.



36 KARLAN DRIVE • ROCHESTER, NEW YORK 14617
716-342-5810 FAX: 716-342-6847

February 12, 1998

Mr. Gianni Del Duca
YEC, Inc.
612 Corporate Way
Valley Cottage, NY 10989

Re: LeRoy, NY

Dear Mr. Del Duca:

Enclosed is our proposal for photography and mapping of your proposed project in LeRoy, NY.

We have estimated the area to be mapped contains 53,000 linear feet, but this may change when the mapping limits are established on the new photography.

I trust this proposal, #1598/98, is satisfactory, and will proceed upon receipt of a signed copy of the contract page.

Should any additional information be required, please do not hesitate to contact me.

Sincerely yours,

Lockwood Mapping, Inc.

J. Donald Faso

JDF:bol
Enclosures

February 12, 1998

PROPOSAL TO

YEC, Inc.
612 Corporate Way
Valley Cottage, NY 10989

Attention: Mr. Gianni Del Duca

PROJECT LOCATION: LeRoy, NY

QUOTATION #1598/98

REQUIREMENTS:

1. New vertical aerial photography covering the route, as outlined on the plan supplied by the client.
2. Topographic strip mapping at the scale of 40'/1" with 2' contours, digitized and presented either as magnetic tape or diskette.

For the purpose of this proposal, the project has been estimated to cover 53,000' in length, with a band width of 200.

RECOMMENDATIONS:

1. That new vertical aerial photography at the approximate scale of 400'/1" be exposed during the spring 1998. The time of photography to be during the absence of leaves on the trees and snow on the ground.
2. That the necessary horizontal and vertical photogrammetric ground control be established by the client. Location of required points to be indicated on one set of stereo contact prints by Lockwood Mapping, Inc.
3. That the photography in conjunction with the ground control be placed in a Kern DSR14 Fully Analytical Stereo Plotting Instrument, and topographic manuscripts be compiled and digitized at the scale of 40'/1". Full detail would be plotted building-front-to-building-front.
4. When the mapping band width is 200, any building fronting on the route, but falling outside the 200 band, would also be plotted.
5. The vertical relief be indicated by 2' contours, with spot elevations shown on all isolations and in flat areas.
6. The final delivery item to the client to be either on diskette or CD ROM plus a check proof plot ink on vellum.

YEC, Inc.
Quotation #1598/98

February 12, 1998

SPECIFICATIONS:

All work performed would be in accordance with standard photogrammetric practices utilizing stereo plotting equipment.

A complete set of specifications have been attached to form part of this proposal.

SCHEDULE OF FEES:

1. To obtain new vertical aerial photography at the approximate scale of 400'/1", and provide two complete sets of stereo contact prints, one set marked with control, the cost would be \$ 2,465.00.
2. To prepare digitized topographic strip mapping at the scale of 40'/1" with a 2' contour interval, the cost would be, \$0.50 per foot.

There are an estimated 53,000' feet for a total cost of \$26,500.00.

Invoicing will be based on the actual number of feet mapped.

There would be a minimum mapping fee of \$1,000.00.

TERMS AND CONDITIONS:

Invoices would be issued upon completion of the photography, and upon delivery of the digitized mapping.

Payment of invoices should be made within 60 days to avoid the application of financing charges. A late payment charge of 1% per month will be added to the unpaid balance.

This proposal, may be considered firm until July 31, 1998; thereafter subject to confirmation, or revision.

This proposal, if accepted, will be carried out with due diligence subject to Acts of God, etc., beyond the control of the company.

LOCKWOOD MAPPING, INC.



J. Donald Faso

JDF:bol
Enc.



305 CENTRAL AVENUE, BETHPAGE, NEW YORK 11714

(516) 827-9100 FAX (516) 827-9101

February 23, 1998

Mr. G. Del Duca
YEC, Inc.
612 Corporate Way Suite 4M
Valley Cottage, NY 10989

RE: Leroy, NY project
Proposal #98-16 (rev)

Dear Mr. Del Duca,

Regarding your fax of today, we are pleased to submit the following proposal for furnishing photogrammetric services for the above mapping project.

For your consideration, we present the following:

AREA TO BE MAPPED - Approximately 75,000 linear feet along street centerlines (200 foot wide) located Leroy, NY.

MAP SCALE - 1" = 50', showing 2 foot contours.

AERIAL PHOTOGRAPHY - New aerial photography will be taken of the project site at an approximate negative scale of 1" = 400'. The site will be covered by 6 strips, 55 stereo models.

FIELD CONTROL - Geomaps will supply a written description and picture pinprick for each field control location. Field control measurements are not covered by this proposal.

ANALYTICAL TRIANGULATION - To minimize the number of required field located control points, analytical triangulation will be used to extend control to all exposures.

PHOTOGRAMMETRY - All visible 50 scale detail will be digitized on a DSR-14 analytical stereo plotter.

DELIVERABLES - All mapping will be delivered as final edited sheets, plotted on paper and on MS DOS diskettes in AutoCAD format.

FEE - Our fee for supplying the above: \$ 49,000.

PAYMENT SCHEDULE - \$ 4,900.00 retainer, the remainder due 30 days from final delivery.

Thank you for considering us on this project. Trusting we may be of service to you.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Bill Crawbuck".
William Crawbuck
President

YEC< Inc. accepts the contents, conditions and payment terms of this proposal and authorizes Geomaps International, Inc. to proceed with the work outlined herein.

Authorized Signature _____ Title _____ Date _____

Feb. 05 1938 02:27PM F1

1821 Scottsville-Mumford Road
Scottsville, New York 14546
PHONE: (716) 538-2328
FAX: (716) 538-2357

FAX: (732) 469-7275

FROM: Timothy Nothnagle

 Hard Copy Will Not Be Sent

MESSAGE: _____

FROM : NOTHNAGLE
SENT BY: IT CORPORATION

PHONE NO. : 716 538 2357
1-15-36 110-0000 11 0000 00000000

Feb. 05 1998 02:26PM P2

REQUEST FOR QUOTATION

NOTHNAGLE DRILLING
1821 Scottsville-Mumford Road
Scottsville, NY 14546

Date: January 14, 1998
OFFER MUST BE RECEIVED BY 01/26/97 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:
Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No. (732) 469-5599
Fax No. (732) 469-7275

Quotation Valid for: 180 Days
Quotation Prepared by: Timothy M. Notnagle
Signature: *Timothy M. Notnagle*
Title: President
Date: 1/23/98 Telephone: (716) 538-2328

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	\$450.00	450.00
2	Air Hammer/Air Rotary Drilling - 10-Inch Borehole	290	foot	\$22.00	6380.00
3	Install 8-Inch Diameter Locking Well Casing to 10 foot Depth	29	each	\$250.00	7250.00
4	Air Hammer Drilling - 8-Inch Borehole	1750	foot	\$7.00	12250.00
5	Develop 29 Monitoring Wells for One Hour	29	each	\$130.00	3770.00
6	NX Coring	200	foot	\$35.00	7000.00
7	Cement Grout Cored Boreholes	200	foot	\$2.00	400.00
8	55-gallon Open Top Drums for Drill Cuttings	150	each	\$30.00	4500.00
9	Continuous Split-spoon Sampling	50	foot	\$18.00	900.00
10	Cement Grout Split-spoon Boreholes	12	each	\$25.00	300.00
11	Multipier for Level C	0	hour	\$30.00	0.00
Ship To: Somerset, New Jersey		Subtotal		\$43,200.00	
		Tax		N.A.	
		Freight		N.A.	
		Grand Total		\$43,200.00	
Method of Shipment:	F.O.B. Point/Ship Terms:	Terms of Payment:	Shipment can be made in days from receipt of order		

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.



Environmental
PRODUCTS & SERVICES, INC.

P.O. Box 369, Liverpool, NY 13088 (315) 451-6666, FAX (315) 457-6652, (800) THE-TANK

February 6, 1998

Mr. Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, NJ 08873

Tel: (732) 469-5599
Fax: (732) 469-7275

RE: REVISED UNIT DRILLING PRICES FOR LEHIGH RAILROAD SPILL

Dear Mr. Rashak:

Environmental Products & Services, Inc. is pleased to provide you with our revised unit prices as well as a revised projected budget (as shown on your bid form) for drilling, setting 8" casing, down the hole hammer drilling up to 60' in rock, soil sampling an estimated 12 locations up to a depth of 8' each and rock coring an estimated 2 locations up to a depth of 100' each. These revised prices reflect the project being accomplished using a salaried driller (EPS Drilling Manager Steve Laramée) in lieu of an hourly driller. Using a salaried driller, EPS expects to work extra long hours (12 to 14 hours/day) on the project. This approach allows us to lower our costs in a number of areas including wages, per diem lodging and travel times. If selected, EPS needs IT Corporation's assurance that they will provide appropriate staff, which will allow EPS to work the extended hours we need to produce enough revenue to make a profit.

Environmental Products & Services, Inc. would like to suggest the use of rollofts to place the soil into. in lieu of drums (as included in the bid). Rental charges would be approximately \$600.00/rolloft/month. At the completion of the project, IT Corporation can then coordinate disposal of the material within the rolloff(s), which should be substantially less expensive than the disposal of the estimated quantity of drums.

These figures are contingent upon the customer's assurance that all boring locations will be accessible to our truck-mounted drill rig and all boring locations will be clear of any on-site **underground and overhead** utilities and obstructions before drilling commences. Any down time out of EPS's control except for adverse weather conditions or mechanical breakdowns will be billed at \$150.00 per hour.

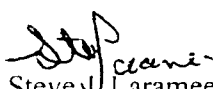
This quotation is valid for 30 days from the above date and subject to verification thereafter. Standard payment terms are cash in advance, Visa/MasterCard, or phased billing with credit approval on net 10 days. Service charges may be imposed at 1.5 percent per month on all past due balances. The customer will be responsible for all costs of collection, including, but not limited to, reasonable attorney's fees, court costs, and collection service fees.

The customer agrees to indemnify, exonerate, and hold Environmental Products & Services, Inc. harmless against loss, damage, or expense, by reasons of suits, claims, demands, judgments, and causes of action for personal injury, death, or property damage rising out of or in any way in consequence of the performance of all work undertaken by Environmental Products & Services, Inc. except that in no instance shall the customer be held responsible for any liability claim demand or cause of action attributable solely to the negligence of Environmental Products & Services, Inc.

If you should have any questions or require further information, please contact me at (315) 451-6666.

Very truly yours,

ENVIRONMENTAL PRODUCTS & SERVICES, INC.


Steve Laramie, CWD, Drilling Manager
Syracuse Branch

SJL/lk
1347.306

c: Dave Dake, Environmental Products & Services, Inc.

If you are in agreement with this proposal, please sign below and return a copy for our files.

This proposal is understood and accepted:

By: _____

Title: _____

Date: _____

Purchase Order Number: _____
(fax/mail hard copy)



REQUEST FOR QUOTATION

Date: January 14, 1998OFFER MUST BE RECEIVED BY 01/26/97, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak

IT Corporation

2200 Cottontail Lane

Somerset, New Jersey 08873

Telephone No. (732) 469-5589

Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by: Steven J. Laramee, CWD

Signature: *Steven J. Laramee*

Title: Drilling Manager

Date: 2/6/98 Telephone: (315) 451-6666

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total		
1	Mobilization/Demobilization	1	each	2,360.	2,360.		
2	Air Hammer/Air Rotary Drilling - 10-inch Borehole	290	foot	36.	10,490.		
3	Install 8-inch Diameter Locking Well Casing to 10 foot Depth	29	each	220.	6,380.		
4	Air Hammer Drilling - 6-inch Borehole	1750	foot	10.	17,500.		
5	Develop 29 Monitoring Wells for One Hour	29	each	64.	1,856.		
6	NX Coring	200	foot	30.	6,000.		
7	Cement Grout Cored Boreholes	200	foot	3.	600.		
8	55-gallon Open Top Drums for Drill Cuttings	150	each	20.	3,000.		
9	Continuous Split-spoon Sampling	50	foot	9.44	472.		
10	Cement Grout Split-spoon Boreholes	12	each	15.	180.		
11	Multiplier for Level C	0	hour	50.	0.		
Ship To: Somerset, New Jersey		Subtotal		48,188.00			
		Tax		.00			
		Freight		.00			
		Grand Total		48,188.00			
Method of Shipment: N/A		F.O.B. Point/Ship Terms: N/A		Terms of Payment: See terms and conditions		Shipment can be made in days from receipt of order	

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

PAGE 1 of 2

REQUEST FOR QUOTATION

Date January 14, 1989

OFFER MUST BE RECEIVED BY 01/26/97 12 Noon

THIS IS NOT AN ORDER

Attn:

ADDRESS OFFERS AND REFER QUESTIONS TO

Edward Rashak

IT Corporation

2200 Cottontail Lane

Somerset, New Jersey 08873

Telephone No. (732) 469-5599

Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by: Rocky Baye

Signature: Rocky Baye

Title: DRILL Supervisor

Date: 1/26/98 Telephone: 315 623-7496

AMERICAN AUGER

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	500.	500.
2	Air Hammer/Air Rotary Drilling - 10-inch Borehole	280	foot	24.	6960.
3	Install 8-inch Diameter Locking Well Casing to 10 foot Depth	29	each	250.	7250.
4	Air Hammer Drilling - 6-inch Borehole	1750	foot	13.	32750.
5	Develop 29 Monitoring Wells for One Hour	29	each	50.	1450.
6	NX Coring	200	foot	30.	6000.
7	Cement Grout Cored Boreholes	200	foot	3.	600.
8	55-gallon Open Top Drums for Drill Cuttings	150	each	35.	5250.
9	Continuous Split-spoon Sampling	50	foot	15.	750.
10	Cement Grout Split-spoon Boreholes	12	each	15.	180.
11	Multiplier for Level C	0	hour	50.	0.
Ship To: Somerset, New Jersey		Subtotal			
		Tax			
		Freight			
		Grand Total			\$51,680
Method of Shipment		F.O.B. Point/Ship Terms:		Terms of Payment:	
				Shipment can be made in _____ days from receipt of order.	

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

AMERICAN AUGER
& DITCHING Co., Inc.

REPRESENTATIONS & CERTIFICATIONS

Read each section and complete or check each blank and/or box as appropriate.

1. Type of organization

Officer represents and certifies that it operates as:

- ☒ A corporation incorporated under the laws of the state of NY
☐ An individual
☐ A partnership
☐ A non-profit organization
☐ A joint venture
☐ A corporation registered for business in the country of _____

2. Taxpayer Identification

Business Entity - Tax Identification No. (TIN):

16-1243205

Individuals - Social Security No.: _____

Officer further represents that:

- ☒ It is incorporated and therefore exempt from backup withholding; or
☐ It is an organization exempt from backup withholding (i.e., agency or instrumentality of a local, state or foreign government).

Commodity(ies) provided:

- ☐ Materials only
☐ Materials and Services
☒ Services only

3. Small Business and Small Disadvantaged Business Status Certification (FAR 52.219-8)

The officer hereby represents and certifies that it is a: (check applicable boxes)

- 1) ☒ Small Business
 ☐ Large Business
 ☐ Nonprofit Business
 ☐ Foreign Business (non U.S.)
2) ☐ Disadvantaged Business
3) ☒ Woman-Owned Business
4) ☐ Labor Surplus Area Business
5) ☐ Historically Black College & Univ. / Minority Institution
6) ☐ Nonprofit Agency for the Blind and Other Severely Handicapped
7) ☐ Economically Disadvantaged Indian Tribe or Native Hawaiian Organization

SIGNATURE/CERTIFICATION

By signing below, the contractor hereby certifies and represents that the information provided is current, accurate, and complete. The contractor further certifies that it will notify IT of any changes to said information provided.

Authorized Signature: Judy Baya, Pres.Printed Name: JUDY BAYATitle: PresidentDate: 1-27-98



January 26, 1998

IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873-1248

Phone: (732) 469-5599
Fax: (732) 469-7275

Attention: Mr. Edward Rashak

Reference: Proposal for Drilling Services
Lehigh Valley Railroad Derailment Site
LeRoy New York
Maxim Proposal Number PB-98-0027

Dear Mr. Rashak:

Maxim Technologies of New York, Inc..(Maxim) is pleased to present our proposal for the above referenced project. Maxim understands that the scope of work includes drilling 29 bedrock monitoring wells to a depth 60 feet, coring bedrock to 100 feet at two locations and advancing 12 test borings to eight feet.

Maxim's costs to complete this project are presented on the bid form provided by IT Corporation. We expect that the drilling will require approximately 43 days for completion using one drill rig. Maxim can provide additional drill rigs for this work if requested.

Maxim can mobilization for this work on June 1, 1998 pending receipt of formal authorization to proceed. If any changes, additions or deletions are applied to the work scope, Maxim reserves the right to adjust our fees.

Maxim has made the following assumptions in preparation of this proposal:

- Work locations are truck-rig accessible;
- IT Corporation is responsible for clearing public and private, on-site underground utilities at the drilling locations;

S-5167 South Park Ave. • P.O. Box 0913 • Hamburg, NY 14075 • (716) 649-8110 • Fax: (716) 649-8051

Austin Research Engineers • Chen-Northern • Empire Soils Investigations
Kansas City Testing • Southwestern Laboratories • Twin City Testing



- Once any drums are filed they become the property of others and Maxim will not be responsible for the disposal or movement of the drums off the project site.
- Maxim assumes this is NOT a prevailing wage rate or union project.
- Maxim assumes this project can be completed in Level D PPE.

If you have any questions or if we can provide further assistance, please contact our office. We look forward to working with you on this project.

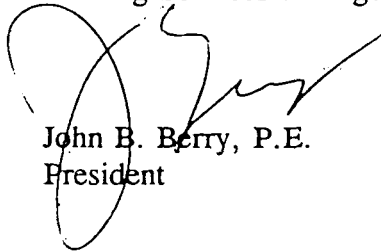
Sincerely,

MAXIM TECHNOLOGIES OF NEW YORK, INC.



Jerry A. Jones

Drilling Services Manager



John B. Berry, P.E.

President

REQUEST FOR QUOTATION

Maxim Technologies of New York, Inc.
 Maxim Proposal PB-98-0027
 January 26, 1998

Date: January 14 1998OFFER MUST BE RECEIVED BY 01/26/97, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak
 IT Corporation
 2200 Cottontail Lane
 Somerset, New Jersey 08873
 Telephone No. (732) 469-5599
 Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by:

Signature:

Title:

Date: Telephone:

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	900	900
2	Air Hammer/Air Rotary Drilling - 10-inch Borehole	290	foot	40	11,600
3	Install 8-inch Diameter Locking Well Casing to 10 foot Depth	29	each	346	10,034
4	Air Hammer Drilling - 6-inch Borehole	1750	foot	19.90	34,825
5	Develop 29 Monitoring Wells for One Hour	29	each	34-	986
6	NX Coring	200	foot	29-	5800
7	Cement Grout Cored Boreholes	200	foot	3-	600
8	55-gallon Open Top Drums for Drill Cuttings	150	each	47-	7050
9	Continuous Split-spoon Sampling	50	foot	10-	500
10	Cement Grout Split-spoon Boreholes	12	each	15	180
11	Multiplier for Level C	0	hour	500	
Ship To: Somerset, New Jersey		Subtotal			
		Tax			
		Freight			
		Grand Total			
Method of Shipment:		F.O.B. Point/Ship Terms:	Terms of Payment:	Shipment can be made in days from receipt of order	

\$ 72,475.00

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.



Central Jersey Industrial Park
Chimney Rock Road, Bldg. 9W
Bound Brook, NJ 08805
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (732) 356-1009

January 23, 1998

Mr. Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, NJ 08873-1248

Re: *NY State Department of Conservation
Lehigh Valley Railroad Derailment Site*

Dear Mr. Rashak:

Summit Drilling Company, Inc. {"Summit"} is pleased to submit herewith our price quote for the above-referenced project.

We have carefully examined the specifications as outlined in your Request for Quotation dated January 15, 1998. We propose to furnish all labor, material, tools, equipment, supervision and other matters and items necessary for the completion of this work, and shall complete this work, in accordance with these specifications, for the unit price as indicated in the attached Bid Sheet.

Summit would like to thank you for affording us the opportunity to become part of the IT Corporation team on this project. Should you have any questions or require additional information, please contact me at {908} 722-4266.

Sincerely,

SUMMIT DRILLING CO., INC.

Robert R. Kreilick, Jr., P.G.
Vice President of Operations

RRK:sk

Enclosure

file: itny.ltr

REQUEST FOR QUOTATION

Date: January 14, 1998

OFFER MUST BE RECEIVED BY 01/28/97, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No. (732) 469-5599
Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by: Summit Drilling Co., Inc.

Signature:

Title: VP of Operations

Date: 1/23/98 Telephone: 908-722-4266

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	8750	8750
2	Air Hammer/Air Rotary Drilling - 10-Inch Borehole	290	foot	36	10440
3	Install 8-Inch Diameter Locking Well Casing to 10 foot Depth	29	each	345	10005
4	Air Hammer Drilling - 8-Inch Borehole	1750	foot	12	21000
5	Develop 29 Monitoring Wells for One Hour	29	each	195	5655
6	NX Coring	200	foot	40	8000
7	Cement Grout Cored Boreholes	200	foot	6	1200
8	55-gallon Open Top Drums for Drill Cuttings	150	each	45	6750
9	Continuous Split-spoon Sampling	60	foot	20	1000
10	Cement Grout Split-spoon Boreholes	12	each	25	300
11	Multiplier for Level C	0	hour	95	n/a
Ship To: Somerset, New Jersey		Subtotal			
		Tax			
		Freight			
		Grand Total \$73,100.00			
Method of Shipment		F.O.B. Point/Ship Terms:		Terms of Payment	Shipment can be made in days from receipt of order

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.



**Contract
Drilling
and
Testing**

1951-1 Hamburg Turnpike
Buffalo, NY 14218

Phone: (716) 821-5911
Fax: (716) 821-0163

55 Oliver Street
Cohoes, New York 12047

Phone: (518) 238-1145
Fax: (518) 238-1249

P.O. Box 416 • 208 Le Fevre Road
Stockertown, PA 18083

Phone: (610) 746-2670
Fax: (610) 746-2669

TOLL FREE: 1-800-821-5911

February 6, 1998

Edward Rashak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone: 732-469-5599 / Fax: 732-469-7275

*Reference: Drilling Services -- LeHigh Valley Railroad Derailment Sites
Town of Leroy, Genesee County, New York*

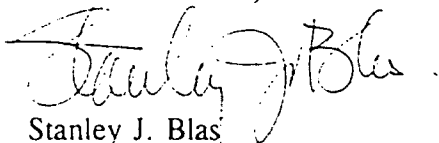
Gentlemen,

Pursuant to your request, we have adjusted our Unit Rates to provide our best and final offer for the above referenced work.

We trust that this proposal meets with your approval.

If you should have any questions, please do not hesitate to contact our office at any time.

Sincerely,
SJB SERVICES, INC.



Stanley J. Blas
President

vah / Attachment / NYD-2133A

PROPOSAL ACCEPTED BY:

DATE ACCEPTED:



"QUALITY & SERVICE THE WAY IT USED TO BE"



REQUEST FOR QUOTATION

Date: January 14, 1998

OFFER MUST BE RECEIVED BY 01/26/97 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak

IT Corporation

2200 Cottontail Lane

Somerset, New Jersey 08873

Telephone No. (732) 469-5599

Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by:

Signature:



Title: President

Date: 1/23/98 Telephone: (716) 821-5911

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	\$ 500.	\$ 500.
2	Air Hammer/Air Rotary Drilling - 10-inch Borehole	290	foot	40.	11,600.
3	Install 8-inch Diameter Locking Well Casing to 10 foot Depth	29	each	400.	11,600.
4	Air Hammer Drilling - 6-inch Borehole	1750	foot	22.	38,500.
5	Develop 29 Monitoring Wells for One Hour	29	each	130.	3,770.
6	NX Coring	200	foot	28.	5,600.
7	Cement Grout Cored Boreholes	200	foot	4.	800.
8	55-gallon Open Top Drums for Drill Cuttings	150	each	30.	4,500.
9	Continuous Split-spoon Sampling	50	foot	11.	550.
10	Cement Grout Split-spoon Boreholes	12	each	5.	60.
11	Multiplier for Level C	0	hour	20%	
Ship To: Somerset, New Jersey		Subtotal		\$ 77,480.	
		Tax		NA	
		Freight		NA	
		Grand Total		\$ 77,480.	
Method of Shipment:	F.O.B. Point/Ship Terms:	Terms of Payment:	Shipment can be made in days from receipt of order		

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.



January 26, 1998

2:79

Mr. Edward Rashak
International Technology Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873-1248

Re: Drilling Services
Lehigh Valley Railroad Dcrailment Site
Town of LeRoy, New York
Proposal No. 114

Dear Mr. Rashak:

Enclosed is our cost estimate for the above project.

Thank you for this opportunity to offer our cost estimate.

Very truly yours,

PARRATT - WOLFF, INC.

A handwritten signature in cursive script, reading 'Michael D. Ellingworth', followed by a circular stamp.

Michael D. Ellingworth
V.P. - Manager-Field Operations
MDE/blo



REQUEST FOR QUOTATION

Date: January 14, 1998

OFFER MUST BE RECEIVED BY 01/28/97 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Rashak
IT Corporation
2200 Cottonball Lane
Somerset, New Jersey 08873
Telephone No. (732) 468-5599
Fax No. (732) 469-7273

Quotation Valid for: 180 Days

Quotation Prepared by: *Parrott Wolfline.*

Signature: *Michael Ellington*

Title: *C.P.*

Date: *1/26/98* Telephone: *1-800-782-7260*

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	7925. ⁰⁰	7925. ⁰⁰
2	Air Hammer/Air Rotary Drilling - 10-Inch Borehole	290	foot	25. ⁰⁰	7250. ⁰⁰
3	Instal 8-Inch Diameter Locking Well Casing to 10 foot Depth	28	each	400. ⁰⁰	11200. ⁰⁰
4	Air Hammer Drilling - 8-Inch Borehole	1750	foot	20. ⁰⁰	35000. ⁰⁰
5	Develop 29 Monitoring Wells for One Hour	29	each	65. ⁰⁰	1885. ⁰⁰
6	NX Coring	200	foot	35. ⁰⁰	7000. ⁰⁰
7	Cement Grout Cored Boreholes	200	foot	3. ⁰⁰	600. ⁰⁰
8	55-gallon Open Top Drums for Drill Cuttings	150	each	65. ⁰⁰	9750. ⁰⁰
9	Continuous Split-spoon Sampling	80	foot	10. ⁰⁰	1000. ⁰⁰
10	Cement Grout Split-spoon Boreholes	12	each	35. ⁰⁰	420. ⁰⁰
11	Multiplier for Level C	0	hour	50. ⁰⁰	—
Ship To: Somerset, New Jersey		Subtotal			82,430. ⁰⁰
		Tax			Final
		Freight			Final
		Grand Total			82,430. ⁰⁰
Method of Shipment	F.O.B. Point/Ship Terms:	Terms of Payment	Shipment can be made in _____ days from receipt of order		

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

Advanced Remediation Technologies Corporation

200 Main Street
The Pavuk Professional Bldg.
Blakely, Pennsylvania 18447



January 27, 1998

Mr. Edward Roshak
IT Corporation
2200 Cottontail Lane
Somerset, NJ 08873

Re: NYSDEC Lehigh Valley Railroad Derailment
ART Corp. Proposal #: 98-416

Dear Mr. Roshak,

Advanced Remediation Technologies Corporation (ART Corp.) is pleased to submit the following cost estimate for the above referenced project.

Please contact me at 717-489-3892 with any questions you may have in reference the attached proposal.

Sincerely with thanks,

Jody Cordaro
Vice President

JGC/kac

Enclosures

IT Corporation
ART Proposal #: 98-416
Bid Assumptions

1. Work to be done at non-union rates
2. Level D health & safety precautions. If necessary upgrade to Level C, add 15% to fottage and hourly rates; add 35% to upgrade to Level B.
3. Engineer will provide monitoring, if necessary.
4. Decontamination can be performed at drill locations.
5. Source of water available.
6. Site must be accessible for truck mounted drilling equipment.
7. Utility clearance by others.
8. Abandoned well materials to be left on site.
9. Drums will be left on site.



REQUEST FOR QUOTATION

Date: January 14, 1998

OFFER MUST BE RECEIVED BY 01/28/98 12 Noon

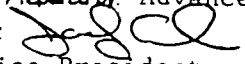
THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Edward Raskak
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No.: (732) 468-5599
Fax No.: (732) 468-7275

Quotation Valid for: 180 Days

Quotation Prepared by: Advanced Remediation Technologies Corporation

Signature: 

Title: Vice President

Date: 1-27-98 Telephone: (717) 489-3892

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Mobilization/Demobilization	1	each	20,000	20,000
2	Air Hammer/Air Rotary Drilling - 10-inch Borehole	280	foot	59.00	17,110
3	Install 8-inch Diameter Locking Well Casing to 10 foot Depth	29	each	550.00	15,950
4	Air Hammer Drilling - 6-inch Borehole	1750	foot	31.25	54,688
5	Develop 29 Monitoring Wells for One Hour	28	each	170.00	4,930
6	NX Coring	200	foot	46.00	9,200
7	Cement Grout Cored Boreholes	200	foot	7.70	1,540
8	55-gallon Open Top Drums for Drill Cuttings	150	each	57.50	8,625
9	Continuous Split-spoon Sampling	50	foot	38.00	1,900
10	Cement Grout Split-spoon Boreholes	12	each	550.00	6,600
11	Multiborer for Level C	0	hour	35.00	
Ship To: Somerset, New Jersey.		Subtotal			\$140,543.00
		Tax			
		Freight			
		Grand Total			\$140,543.00
Method of Shipment	F.O.B. Port/Ship Terms	Terms of Payment:	Shipment can be made in _____ days from receipt of order		

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE SUPERFUND STANDBY CONTRACT
ANALYTICAL SERVICESLABORATORY NAME: Recra Environmental, Inc., LabNet-PhiladelphiaADDRESS: 208 Welsh Pool Road, Lionville PA 19341SIGNATURE: [Signature]TITLE: Vice President DATE: 2/19/98

The following bid proposal is submitted in response to a NYSDEC standby contract. The following items must be considered in bid preparation:

- All analytical methods reference the NYSDEC-ASP 10/95 unless specifically stated otherwise.
- All prices submitted shall reflect the analysis and reporting to be in accordance with the New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC-ASP), October 1995.
- Required turnaround time is 30 calendar days from Verifiable Time of Sample Receipt (VTSR). Costs shall include all required preparations and analyses. The data package shall be complete and in compliance with the approved work plan and NYSDEC-ASP at the 30 day delivery date.
- All prices shall include the supply of coolers and bottles by the laboratory in accordance with NYSDEC ASP, Exhibit I.
- Data packages which are not complete or do not contain all analyses of the sample delivery group will be considered late 31 days after VTSR. Costs for late reporting shall be modified to reflect the following price reductions per sample:

Days 32-35	10% reduction
Days 36-45	20% reduction
Days 46-55	30% reduction
Days 56-65	40% reduction

After 65 days, the lab subcontract shall be considered for a default termination.

- Clarification of data packages must be provided in writing within three business days of the inquiry. The day the inquiry is made shall be considered a business day and two business days later shall be considered the 3rd business day. If clarifications are not received within the three days, the data package may be considered late or not entitled to the premium for expedited testing and turnaround.
- If holding times are exceeded or a laboratory otherwise violates NYSDEC-ASP criteria but the data is partially useable, NYSDEC may make partial payment based on percentage usefulness after applying a reduction for late reporting.
- In order to receive early delivery premiums, written authorization to expedite specific jobs must be provided by the consultant at the direction of NYSDEC.

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION STATE SUPERFUND STANDBY CONTRACT ANALYTICAL SERVICES

NYSDEC ANALYTICAL SERVICES PROTOCOL (Superfund CLP Methods)

Type of Analysis	Analytical Method	COST PER SAMPLE			
		Category A Reporting	Superfund Category Reporting	Category A Reporting	Superfund Category Reporting
1) TCL Volatiles + 10	95-1	\$ 100	\$ 100	\$ 100	\$ 100
2) TCL Semi-Volatile + 20	95-2	\$ 200	\$ 200	\$ 200	\$ 200
3) TCL Pesticides/PCBs	95-3	\$ 100	\$ 100	\$ 100	\$ 100
4) TAL Metals*					
i) ICAP	200.7 CLP-M	\$ 10	\$ 10	\$ 12	\$ 12
ii) AA (furnace)	202.2-239.2 CLP-M	\$ 12	\$ 12	\$ 15	\$ 15
iii) AA (flame)	202.1-239.1 CLP-M	\$ 12	\$ 12	\$ 15	\$ 15
5) Arsenic	206.2 CLP-M	\$ 12	\$ 12	\$ 15	\$ 15
6) Lead	239.2 CLP-M	\$ 15	\$ 15	\$ 15	\$ 15
7) Selenium	270.2 CLP-M	\$ 15	\$ 15	\$ 15	\$ 15
8) Thallium	279.2 CLP-M	\$ 15	\$ 15	\$ 15	\$ 15
9) Mercury	245.1/245.2/245.5 CLP-M	\$ 25	\$ 25	\$ 30	\$ 30
10) Cyanide	335.2 CLP-M	\$ 30	\$ 30	\$ 35	\$ 35
11) TCL Volatiles (low conc.)	95-4	\$ 125	\$ 125	\$ N/A	\$ N/A

*NYSDEC-ASP 10/95 pages D-V-1 through D-V-182 including costs of digestion.

Indicate, as a percentage of the above quoted costs, the cost for expedited testing and turnaround time for:

24 hour turnaround	200 %
48 hour turnaround	150 %
1 week turnaround	50 %
2 week turnaround	10 %

Cost increase if contract is extended for second 12-month period 3 %

Note: Full TAL Metals (23) price = \$125 aqueous; \$135 for non-aqueous, both reporting categories.
Revised 10/96

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE SUPERFUND STANDBY CONTRACT
ANALYTICAL SERVICES

AIR QUALITY ANALYSIS*

<u>Type of Analyses</u>	<u>Analytical Method</u>	<u>COST PER SAMPLE</u>	
		<u>Category A Reporting</u>	<u>Category B Reporting</u>
Volatiles Organics	TO1	\$ 220	\$ 260
	TO14	\$ 260	\$ 280

*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, USEPA 600/4-89/017 June 1988, reproduced National Technical Information Services, Springfield, VA 22161, PB90 - 127374

1010701
KING HUGHES-ROSE DE LING C

Subcontractor: York Analytical Laboratories
Stamford, CT

* Does not include pre-cleaned canisters. (\$ 60 per canister shipped to site)

FAX COVER SHEET

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RECRA
LabNet

a division of Recra Environmental, Inc.

208 Welsh Pool Road
Lionville, PA 19341-1333
Phone: (610) 280-3000
Fax: (610) 280-3041

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3/3/98

TIME:

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MESSAGE:

Additional Costing Info you requested.

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE SUPERFUND STANDBY CONTRACT
ANALYTICAL SERVICES

ADDITIONAL PRICING FROM RECRA

Volatile Organics	TO-14	Cost for providing precleaned canisters to the site: \$60 each.
Item 1) TCL VOA + 10	95-1	Cost for providing approx. 500 mL MeOH for rock core samples: \$25 per sample.

Comparison of Weighted Quotations
Laboratory Responses to January RFP
New York State Department of Environmental Conservation
3rd Round State Superfund Standby
February 1998
Page 1 of 1

Laboratory	Location	Phone Number and Contact	Weighted Quotation and Rank					Comments
			Normal TAT	24-Hour TAT	48-Hour TAT	1-Week TAT	2-Week TAT	
RECRA LabNet	Lionville, PA.	(610)280-3012 Orlette Johnson	161 1	483 5	402 5	241 4	177 1	responsive
MITKEM Corporation	Warwick, R.I.	(401)732-3400 Paul Senecal	167 2	334 1	292 2	208 1	192 2	responsive
CHEMTECH	Englewood, N.J.	(201)567-6868 Emanuel Hedvat	171 3	514 6	428 6	257 5	214 5	responsive
Galson Laboratories	Syracuse, N.Y.	(315)432-5227 Joseph Unangst	177 4	353 2	265 1	212 2	194 3	responsive
Envirotech Research	Edison, N.J.	(732)549-3900 Mark Haulenbeek	192 5	364 3	326 3	230 3	201 4	responsive
ACCUTEST	Dayton, N.J.	(732)329-0200 Matt Cordova	197 6	394 4	345 4	296 6	246 6	responsive
Columbia Analytical	Rochester, N.Y.	(716)288-5380 Barry Fry	227 7	682 7	625 7	568 7	284 7	responsive
AEN, Inc.	Monroe, CT.	(203)261-4458 Stephen Reduker	No Bid	No Bid	No Bid	No Bid	No Bid	"No Bid" 95-4, TCL VOC LDL
Quanterra	Pittsburgh, PA.	(412)820-8380 Barbara Hall	No Bid	No Bid	No Bid	No Bid	No Bid	"No Bid" 95-4, TCL VOC LDL

Notes: TAT - turn-around-time

Weighted Quotation for Sample Analysis
Laboratory Response to January 1998 RFP
New York State Department of Environmental Conservation
3rd Round State Superfund Standby
February 1998
Page 1 of 8

ACCUTEST

2235 Route 130, Building B Dayton, N.J. 08810
(732)329-0200 fax (732)329-3499

<u>Analytical Method</u>		<u>Aqueous-Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
1.	95-1	110	0.112	12.32
2.	95-2	295	0.104	30.68
3.	95-3	140	0.104	14.56
4.	TAL Metals plus Cyanide by CLP	170	0.108	18.36
5.	95-4	120	0.044	5.28

		<u>Non-Aqueous Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
6.	95-1	110	0.108	11.88
7.	95-2	295	0.098	28.91
8.	95-3	155	0.098	15.19
9.	TAL Metals plus Cyanide by CLP	200	0.088	17.6

		<u>Aqueous-Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
10.	524.2	175	0.065	11.375
11.	608	140	0.03	4.2

		<u>Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
12.	TCLP	650	0.041	26.65

TOTAL	<u>197.005</u>	
	<u>394.01</u>	24-hour TAT
	<u>344.76</u>	48-hour TAT
	<u>295.51</u>	1-week TAT
	<u>246.26</u>	2-week TAT

Weighted Quotation for Sample Analysis
Laboratory Response to January 1998 RFP
New York State Department of Environmental Conservation
3rd Round State Superfund Standby
February 1998
Page 2 of 8

American Environmental Network, Inc. (former IEA)
200 Monroe Turnpike Monroe, Connecticut 06468
(203)261-4458 fax (203)268-5346

<u>Analytical Method</u>		<u>Aqueous-Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
1.	95-1	110	0.112	12.32
2.	95-2	210	0.104	21.84
3.	95-3	140	0.104	14.56
4.	TAL Metals plus Cyanide by CLP	160	0.108	17.28
5.	95-4	NO BID	0.044	NO BID

		<u>Non-Aqueous Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
6.	95-1	110	0.108	11.88
7.	95-2	210	0.098	20.58
8.	95-3	140	0.098	13.72
9.	TAL Metals plus Cyanide by CLP	160	0.088	14.08

		<u>Aqueous-Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
10.	524.2	160	0.065	10.4
11.	608	140	0.03	4.2

		<u>Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
12.	TCLP	790	0.041	32.39

TOTAL 173.25 (1 "NO BID") Response

Weighted Quotation for Sample Analysis
Laboratory Response to January 1998 RFP
New York State Department of Environmental Conservation
3rd Round State Superfund Standby
February 1998
Page 3 of 8

CHEMTECH
110 Route 4 Englewood, N.J. 07631
(201)567-6868 fax (201)567-1333

<u>Analytical Method</u>		<u>Aqueous-Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
1.	95-1	110	0.112	12.32
2.	95-2	285	0.104	29.64
3.	95-3	110	0.104	11.44
4.	TAL Metals plus Cyanide by CLP	130	0.108	14.04
5.	95-4	140	0.044	6.16

		<u>Non-Aqueous Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
6.	95-1	110	0.108	11.88
7.	95-2	285	0.098	27.93
8.	95-3	110	0.098	10.78
9.	TAL Metals plus Cyanide by CLP	130	0.088	11.44

		<u>Aqueous-Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
10.	524.2	140	0.065	9.1
11.	608	110	0.03	3.3

		<u>Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
12.	TCLP	570	0.041	23.37

TOTAL	<u>171.4</u>
	<u>514.2</u> 24-hour TAT
	<u>428.5</u> 48-hour TAT
	<u>257.1</u> 1-week TAT
	<u>214.25</u> 2-week TAT

Weighted Quotation for Sample Analysis
Laboratory Response to January 1998 RFP
New York State Department of Environmental Conservation
3rd Round State Superfund Standby
February 1998
Page 4 of 8

Columbia Analytical Services

1 Mustard Street, Suite 250 P.O. Box 90859 Rochester, N.Y. 14609-0859
(716)288-5380 fax(716)288-8475

<u>Analytical Method</u>		<u>Aqueous-Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
1.	95-1	145	0.112	16.24
2.	95-2	295	0.104	30.68
3.	95-3	195	0.104	20.28
4.	TAL Metals plus Cyanide by CLP	190	0.108	20.52
5.	95-4	155	0.044	6.82

		<u>Non-Aqueous Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
6.	95-1	155	0.108	16.74
7.	95-2	305	0.098	29.89
8.	95-3	205	0.098	20.09
9.	TAL Metals plus Cyanide by CLP	200	0.088	17.6

		<u>Aqueous-Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
10.	524.2	145	0.065	9.425
11.	608	170	0.03	5.1

		<u>Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
12.	TCLP	825	0.041	33.825

TOTAL	<u>227.21</u>	
	<u>681.63</u>	24-hour TAT
	<u>624.83</u>	48-hour TAT
	<u>568.02</u>	1-week TAT
	<u>284</u>	2-week TAT

Weighted Quotation for Sample Analysis
Laboratory Response to January 1998 RFP
New York State Department of Environmental Conservation
3rd Round State Superfund Standby
February 1998
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Envirotech Research, Inc.
777 New Durham Road Edison, N.J. 08817
(732)549-3900 fax(732)549-3679

<u>Analytical Method</u>		<u>Aqueous-Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
1.	95-1	125	0.112	14
2.	95-2	240	0.104	24.96
3.	95-3	145	0.104	15.08
4.	TAL Metals plus Cyanide by CLP	185	0.108	19.98
5.	95-4	190	0.044	8.36
		<u>Non-Aqueous Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
6.	95-1	125	0.108	13.5
7.	95-2	240	0.098	23.52
8.	95-3	145	0.098	14.21
9.	TAL Metals plus Cyanide by CLP	155	0.088	13.64
		<u>Aqueous-Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
10.	524.2	175	0.065	11.375
11.	608	145	0.03	4.35
		<u>Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
12.	TCLP	700	0.041	28.7
TOTAL		<u>191.675</u>		
		<u>364.19</u> 24-hour TAT		
		<u>325.86</u> 48-hour TAT		
		<u>230.02</u> 1-week TAT		
		<u>201.26</u> 2-week TAT		

Weighted Quotation for Sample Analysis
Laboratory Response to January 1998 RFP
New York State Department of Environmental Conservation
3rd Round State Superfund Standby
February 1998
Page 6 of 8

Galson Laboratories
6601 Kirkville Road Syracuse, N.Y. 13057-0369
(315)432-5227 fax(315)437-0571

<u>Analytical Method</u>		<u>Aqueous-Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
1.	95-1	127	0.112	14.224
2.	95-2	209	0.104	21.736
3.	95-3	138	0.104	14.352
4.	TAL Metals plus Cyanide by CLP	116	0.108	12.528
5.	95-4	185	0.044	8.14

		<u>Non-Aqueous Superfund Category Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
6.	95-1	138	0.108	14.904
7.	95-2	226	0.098	22.148
8.	95-3	149	0.098	14.602
9.	TAL Metals plus Cyanide by CLP	127	0.088	11.176

		<u>Aqueous-Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
10.	524.2	160	0.065	10.4
11.	608	125	0.03	3.75

		<u>Category B Reporting</u>		
		Quote (\$/sample)	Factor	Weighted Result
12.	TCLP	698	0.041	28.618

TOTAL	<u>176.578</u>	
	<u>353.16</u>	24-hour TAT
	<u>264.87</u>	48-hour TAT
	<u>211.9</u>	1-week TAT
	<u>194.24</u>	2-week TAT

**Weighted Quotation for Sample Analysis
Laboratory Response to January 1998 RFP**

New York State Department of Environmental Conservation
3rd Round State Superfund Standby

February 1998

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MITKEM Corporation

175 Metro Center Blvd. Warwick, R.I. 02886-1755

(401)732-3400 fax(401)732-3499

Analytical Method

Aqueous-Superfund Category Reporting

		Quote (\$/sample)	Factor	Weighted Result
1.	95-1	110	0.112	12.32
2.	95-2	200	0.104	20.8
3.	95-3	140	0.104	14.56
4.	TAL Metals plus Cyanide by CLP	110	0.108	11.88
5.	95-4	120	0.044	5.28

Non-Aqueous Superfund Category Reporting

		Quote (\$/sample)	Factor	Weighted Result
6.	95-1	110	0.108	11.88
7.	95-2	225	0.098	22.05
8.	95-3	150	0.098	14.7
9.	TAL Metals plus Cyanide by CLP	120	0.088	10.56

Aqueous-Category B Reporting

		Quote (\$/sample)	Factor	Weighted Result
10.	524.2	120	0.065	7.8
11.	608	140	0.03	4.2

Category B Reporting

		Quote (\$/sample)	Factor	Weighted Result
12.	TCLP	750	0.041	30.75

TOTAL

166.78

333.56 24-hour TAT

291.86 48-hour TAT

208.48 1-week TAT

191.8 2-week TAT

**Weighted Quotation for Sample Analysis
Laboratory Response to January 1998 RFP**

New York State Department of Environmental Conservation
3rd Round State Superfund Standby

February 1998

Page 8 of 8

RECRA LabNet

208 Welsh Pool Road Lionville, PA 19341-1313

(610)280-3012 fax(610)280-3039

Analytical Method

Aqueous-Superfund Category Reporting

		Quote (\$/sample)	Factor	Weighted Result
1.	95-1	100	0.112	11.2
2.	95-2	200	0.104	20.8
3.	95-3	100	0.104	10.4
4.	TAL Metals plus Cyanide by CLP	155	0.108	16.74
5.	95-4	125	0.044	5.5

Non-Aqueous Superfund Category Reporting

		Quote (\$/sample)	Factor	Weighted Result
6.	95-1	100	0.108	10.8
7.	95-2	200	0.098	19.6
8.	95-3	100	0.098	9.8
9.	TAL Metals plus Cyanide by CLP	170	0.088	14.96

Aqueous-Category B Reporting

		Quote (\$/sample)	Factor	Weighted Result
10.	524.2	125	0.065	8.125
11.	608	110	0.03	3.3

Category B Reporting

		Quote (\$/sample)	Factor	Weighted Result
12.	TCLP	730	0.041	29.93

TOTAL

161.155

483.46 24-hour TAT

402.8 48-hour TAT

241.7 1-week TAT

177.27 2-week TAT

FROM :

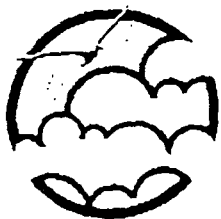
TO :

9032251691

1998.02-02

10:51

#317 P.01/14



AAA Environmental, Inc.

FAX COVER PAGE

FAX #: (716) 458-0451

TO: PRABOL N. AHIN, P.E. 11:00

COMPANY: IT

FAX #: (732) 469-7275

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Corporate Offices

Rochester Office
1249 Ridgeway Ave.
P.O. Box 15520
Rochester, NY 14615
716-458-3950

Syracuse (Headquarters)
6375 Moore Rd.
P.O. Box 370
Syracuse, NY 13211
315-454-2000

Raleigh-Durham Office
4020 Stirrup Creek Drive
Suite 111
Durham, NC 27709
919-941-0117

Regional Offices

Albany, NY Buffalo, NY Corning, NY Binghamton, NY Kingston, NY Poughkeepsie, NY Bridgewater, NJ Boca Raton, FL

FROM :

TO :

9082251691

1996-02-02

10:51

#317 P.02/14

REQUEST FOR QUOTATION

Date: January 23, 1998

OFFER MUST BE RECEIVED BY 01/30/97, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Prabal N. Amin, P.E.

IT Corporation

2200 Cottontail Lane

Somerset, New Jersey 08873

Telephone No. (732) 469-5599

Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by: D.G. SCHRIBER

Signature: *D.G. Schriber*

Title: VP WESTERN OPERATION

Date: 2/2/98 Telephone: (716) 458-3950

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Excavation/Pilot test soil pile construction/Disassembly and disposal	1	L.S.	6,850.00	6,850.00
2	Carbon skid w/associated fixtures	1	L.S.	1,650.00	1,650.00
Ship To: N/A		Subtotal		8,500.00	
		Tax			
		Freight			
		Grand Total		\$ 8,500.00	
Method of Shipment:	F.O.B. Point/Ship Terms:	Terms of Payment:		Shipment can be made in 15 days	
		2% to N30		from receipt of order	

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.



Environmental
PRODUCTS & SERVICES, INC.

P.O. Box 369, Liverpool, NY 13088 (315) 451-6666, FAX (315) 457-6652, (800) THE-TANK

February 3, 1998

Mr. Prabal N. Amin, P.E.
IT Corporation
2200 Cottontail Lane
Somerset, NJ 08873

Tel: (732) 469-5599
Fax: (732) 469-7275

RE: ENVIRONMENTAL REMEDIATION PILOT TEST
NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION
LEHIGH VALLEY RAILROAD SITE
LEROY, NEW YORK

Dear Mr. Amin:

Environmental Products & Services, Inc. is pleased to provide you with our lump sum price for the above referenced project on your form provided. If Environmental Products & Services, Inc. is the successful bidder, we will keep all of the gauges and fittings used and not dispose of them.

All work will be accomplished in accordance with your scope of work dated January 1998.

There could be a savings of \$100.00/carbon unit if the test results verify the carbon to be non-hazardous for disposal.

Work will conform to local, state, and federal regulations. This quotation is valid for 30 days from the above date and subject to verification thereafter. Normal payment terms are cash in advance, Visa/MasterCard, or charge with credit approval on net ten days. Service charges may be imposed at 1.5 percent on all balances over 30 days.

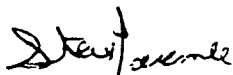
The customer agrees to indemnify, exonerate, and hold Environmental Products & Services, Inc. harmless against loss, damage, or expense, by reasons of suits, claims, demands, judgements, and causes of action for personal injury, death, or property damage rising out of or in any way in consequence of the performance of all work undertaken by Environmental Products & Services, Inc. except that in no instance shall the customer be held responsible for any liability claim demand or cause of action attributable solely to the negligence of Environmental Products & Services, Inc.

- Emergency Response
- Remediation
- Geoscience Services
- Waste Mgmt.
- Training Svcs.
- Industrial Maintenance
- Products
- Analytical Services

Thank you for the opportunity to quote on the project and we look forward to being of service.

Very truly yours,

ENVIRONMENTAL PRODUCTS & SERVICES, INC.



Steve J. Laramée, CWD, Drilling Manager
Syracuse Branch

SJL/lb
1362.306

If you are in agreement with this proposal, please sign below and return a copy for our files.

This proposal is understood and accepted:

By: _____

Title: _____

Date: _____

Purchase Order Number: _____
(fax/mail hard copy)



REQUEST FOR QUOTATION

Date: January 23, 1998OFFER MUST BE RECEIVED BY 01/30/98, 12 Noon

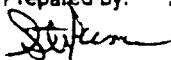
THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Prabal N. Amin, P.E.
IT Corporation
2200 Cottontail Lane
Somerset, New Jersey 08873
Telephone No. (732) 469-5599
Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by: Steve J. Laramee

Signature: 

Title: Drilling Manager - Syracuse Branch

Date: 1/30/98 Telephone: (315) 451-6666

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Excavation/Pilot test soil pile construction/Disassembly and disposal	1	L.S.	9,850.	9,850.
2	Carbon skid w/associated fixtures	1	L.S.	1,900.	1,900.
Ship To: N/A		Subtotal			11,750.
		Tax			0.
		Freight			0.
		Grand Total			11,750.
Method of Shipment: N/A	F.O.B. Point/Ship Terms: N/A	Terms of Payment: See Work Agreement		Shipment can be made in from receipt of order	

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

**INTERNATIONAL
TECHNOLOGY
CORPORATION****REPRESENTATIONS & CERTIFICATIONS**

Read each section and complete or check each blank and/or box as appropriate.

1. Type of organization

Officer represents and certifies that it operates as:

- ☒ A corporation incorporated under the laws of the state of New York
☐ An individual
☐ A partnership
☐ A non-profit organization
☐ A joint venture
☐ A corporation registered for business in the country of _____

2. Taxpayer IdentificationBusiness Entity - Tax Identification No. (TIN): 16-1299642

Individuals - Social Security No.: _____

Officer further represents that:

- ☒ It is incorporated and therefore exempt from backup withholding; or
☐ It is an organization exempt from backup withholding (i.e., agency or instrumentality of a local, state or foreign government).

Commodity(ies) provided:

- ☐ Materials only
☒ Materials and Services
☐ Services only

3. Small Business and Small Disadvantaged Business Status Certification (FAR 52.219-8)

SIC Code 8744

The officer hereby represents and certifies that it is a: (check applicable boxes)

- 1) ☒ Small Business
 ☐ Large Business
 ☐ Nonprofit Business
 ☐ Foreign Business (non U.S.)
2) ☐ Disadvantaged Business
3) ☐ Woman-Owned Business
4) ☐ Labor Surplus Area Business
5) ☐ Historically Black College & Univ. / Minority Institution
6) ☐ Nonprofit Agency for the Blind and Other Severely Handicapped
7) ☐ Economically Disadvantaged Indian Tribe or Native Hawaiian Organization

SIGNATURE/CERTIFICATION

By signing below, the contractor hereby certifies and represents that the information provided is correct, accurate, and complete. The contractor further certifies that it will notify IT of any changes to said information provided.

Authorized Signature: Michael T. MeliaPrinted Name: Michael T. MeliaTitle: Vice PresidentDate: 1/27/98

REQUEST FOR QUOTATION

Date: January 23, 1998

OFFER MUST BE RECEIVED BY 12 Noon

2/3/98

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Attn: ⇒ Pravin N. Amin, P.E.

IT Corporation

2200 Cottontail Lane

Somerset, New Jersey 08873

Telephone No. (732) 489-5599

Fax No. (732) 489-7275

AMERICAN AUGER

Quotation Valid for: 180 Days

Quotation Prepared by: Rocky Baye

Signature: Rocky Baye

Title: DRILL Supervisor

Date: 1-30-98 Telephone: 315 623 7496

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Excavation/Paint test soil pile construction/Disassembly and disposal	1	L.S.	-	7000.
2	Carbon skid w/associated fixtures	1	L.S.	-	5600.
Ship To: N/A		Subtotal			
		Tax			
		Freight			
		Grand Total			12,600.
Method of Shipment:		F.O.B. Point of Ship Terms.		Terms of Payment:	Shipment can be made in days from receipt of order

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.



Applied Earth Technologies

Environmental and Geotechnical Services

800-607-6883

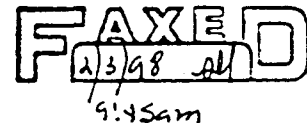
335-15-1000
Carmel, New York 12026
315-265-5036 • FAX 315-265-5037
email: aet@aet.com

One Rappahannock Plaza, Suite 100
Colchester, Vermont 05445
802-655-0211 • FAX 802-655-1249
email: aet@rappahannock.com

February 3, 1998

Proposal 9801001

Mr. Prabal N. Amin, P.E.
IT Corporation
2200 Cottontail Lane
Somerset, NJ 08873-1248
Phone: 732/469-5599
FAX: 732/469-7275



RE: Environmental Remediation Pilot Test for New York DEC at Lehigh Valley Railroad Site, LeRoy, Genesee County, New York

Dear Mr. Amin:

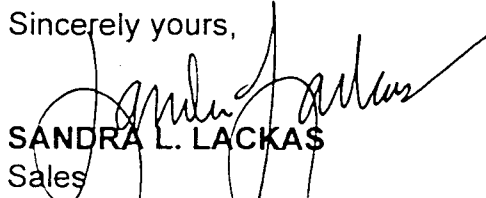
Applied Earth Technologies (AET) is pleased to present this proposal for your consideration as outlined in the following pages. We will perform all services in a professional manner in accordance with all applicable federal, state and local regulations.

The following may be of interest to you for this project.

- AET is a Certified Women-Owned Business Enterprise;
- AET carries Professional, Pollution & General Liability Insurance;
- AET provides 29 CFR 1910.120 OSHA HAZWOPER Trained Personnel.

Thank you for considering this proposal which will remain in effect for (180) days. If you would like us to perform these services, please sign in the space provided and return one original to our office. This will serve as authorization to proceed. Please don't hesitate to call me at 800/607-6883 or 315/265-5036 with any questions regarding this project or any other that we may assist you with.

Sincerely yours,


SANDRA L. LACKAS

Sales

(Signing for Antonia L. Bouchard, CEO)

*Environmental Remediation Pilot Test for New York DEC at Lehigh Valley Railroad Site, LeRoy,
Genesee County, New York*

The undersigned agrees to accept the scope of services and unit fees outlined in this proposal. Any scope of work changes or additional services will be approved in writing by the client prior to performance of the work.

Billing and payment will be in accordance with the IT Corporation Work Agreement.

Authorized Signature for IT Corporation

Date

Please list any other personnel immediately available at or near the work site who are authorized to act as an agent for IT Corporation for the purposes of signing or receiving, giving or obtaining any notices required by this agreement.

Alternate Contact Person

Telephone Number

Please check the appropriate box:

☐ Tax Exempt (certificate enclosed)

☐ Not Tax Exempt

List of Enclosures:

1. Scope of Services
2. Schedule
3. Notices
4. Request For Quotation
5. Representations & Certifications
6. AET Certificate of Insurance

SCOPE OF SERVICES

1. Excavation / Pilot test soil pile construction / Disassembly / and Disposal will be conducted by an experienced crew in accordance with the specifications provided with the RFQ.

SCHEDULE

1. The anticipated start date is June 1998.
2. Approximately (1) week after pilot test completion, AET will disassemble the construction unless otherwise directed by IT.

NOTICES

This quotation is submitted with the following assumptions:

1. The client will clear the location to be excavated for public & private underground utilities.
2. There are no obstructions that will restrict the free movement of personnel and/or equipment.
3. The client will:
 - clear access to the site;
 - assure that the site is accessible;
 - provide a clean water source & location for steam cleaning.
4. Standby time (time delays uncontrolled by AET) will be invoiced based on the personnel and equipment on site at the time of the delay.
5. Level C Personal Protection Equipment is required.
6. Prevailing wages for Genesee County apply.
7. AET's invoice will be based on the unit fees and the actual time and materials utilized. Sales tax will be added to invoices when applicable. For tax exempt clients, please include a resale or capital improvement certificate with the signed contract.

All current federal and state laws and regulations take precedence over this contract.

REQUEST FOR QUOTATION

Date: January 23, 1998OFFER MUST BE RECEIVED BY 01/28/98, 12 Noon2/3/98, 12 Noon
THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Prabal N. Amin, P.E.

IT Corporation

2200 Cottontail Lane

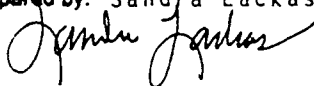
Somerset, New Jersey 08873

Telephone No. (732) 469-5599

Fax No. (732) 469-7275

Quotation Valid for: 180 Days

Quotation Prepared by: Sandra Lackas / Applied Earth Technologies

Signature: 

Title: Sales

Date: 2/3/98 Telephone: 315/265-5036

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Material Specification	QTY.	Unit of Measure	Unit Price	Total
1	Excavation/Pilot test soil pile construction/Disassembly and disposal	1	L.S.	-	10480
2	Carbon skid w/associated fixtures	1	L.S.	-	3120
Ship To: N/A		Subtotal			
		Tax			
		Freight			
		Grand Total			\$13600
Method of Shipment:		F.O.B. Point/Ship Terms:		Terms of Payment:	Shipment can be made in days
-		-		-	from receipt of order -

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

NOTE: See certificate of insurance included. If \$5 million of Comprehensive General Liability is required, \$500 will be added for the additional coverage.

INTERNATIONAL
TECHNOLOGY
CORPORATION

REPRESENTATIONS & CERTIFICATIONS

Read each section and complete or check each blank and/or box as appropriate.

1. Type of organization

Offeror represents and certifies that it operates as:

- ☒ A corporation incorporated under the laws of the state of New York.
☐ As individual
☐ A partnership
☐ A non-profit organization
☐ A joint venture
☐ A corporation registered for business in the country of _____

2. Taxpayer Identification

Business Entity - Tax Identification No. (TIN): 16-1368385

Individuals - Social Security No.: _____

Offeror further represents that:

- ☒ It is incorporated and therefore exempt from backup withholding; or
☐ It is an organization exempt from backup withholding (i.e., agency or instrumentality of a local, state or foreign government).

Commodity(ies) provided: ☐ Materials only
☒ Materials and Services
☐ Services only

3. Small Business and Small Disadvantaged Business Status Certification (FAR 52.219-8)

The offeror hereby represents and certifies that it is a: (check applicable boxes)

- 1) ☒ Small Business
 ☐ Large Business
 ☐ Nonprofit Business
 ☐ Foreign Business (non U.S.)
2) ☐ Disadvantaged Business
3) ☒ Woman-Owned Business
4) ☐ Labor Surplus Area Business
5) ☐ Historically Black College & Univ. / Minority Institution
6) ☐ Nonprofit Agency for the Blind and Other Severely Handicapped
7) ☐ Economically Disadvantaged Indian Tribe or Native Hawaiian Organization

SIGNATURE/CERTIFICATION

By signing below, the contractor hereby certifies and represents that the information provided is current, accurate, and complete. The contractor further certifies that it will notify IT of any changes to said information provided.

Authorized Signature: _____

Printed Name: Sandra LackeyTitle: SalesDate: 2/3/98

ACORD.**CERTIFICATE OF INSURANCE**

ISSUE DATE (MM/DD/YY)

11/10/97

PRODUCER

Mack and Parker, Inc.
55 East Jackson Boulevard
Suite 600
Chicago, IL 60604-4187

TAM

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

COMPANY LETTER	A	RELiance NATIONAL COMPANIES
COMPANY LETTER	B	FEDERAL INSURANCE COMPANY (CHUBB)
COMPANY LETTER	C	
COMPANY LETTER	D	
COMPANY LETTER	E	

INSURED

Applied Earth Technologies
6589 U.S. Highway 11
Canton, NY 13617

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
A	GENERAL LIABILITY	NSA1114600	4/15/97	4/15/98	GENERAL AGGREGATE \$N/A
	☒ COMMERCIAL GENERAL LIABILITY				PRODUCTS-COMP/OP AGG. \$2,000,000
	☐ CLAIMS MADE ☒ OCCUR				PERSONAL & ADV. INJURY \$INCL OCC
	OWNERS & CONTRACTOR'S PROT.				EACH OCCURRENCE \$2,000,000
	☒ X, C, U				FIRE DAMAGE (Any one fire) \$ 250,000
A	AUTOMOBILE LIABILITY	NKA1114638	4/15/97	4/15/98	MED EXPENSE (Any one person) \$N/A
					COMBINED SINGLE LIMIT \$2,000,000
					BODILY INJURY (Per Person) \$
					BODILY INJURY (Per Accident) \$
					PROPERTY DAMAGE \$
B	EXCESS LIABILITY	000019912	4/15/97	4/15/98	EACH OCCURRENCE \$1,000,000
					AGGREGATE \$1,000,000
					PROD-COMP/OP \$1,000,000
A	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY	NWA1114639	4/15/97	4/15/98	☒ STATUTORY LIMITS
					EACH ACCIDENT \$2,000,000
					DISEASE-POLICY LIMIT \$2,000,000
					DISEASE-EACH EMPLOYEE \$2,000,000
A	OTHER	NSA1114600	4/15/97	4/15/98	\$3,000,000 BLANKET LMT
					\$1,000 deductible

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

CERTIFICATE HOLDER 00024

SAMPLE FOR
BIDDING PURPOSES
ONLY

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Signature

Initial

ABSCOPE
ENVIRONMENTAL, INC.

P.O. Box 487
Canastota, N.Y. 13032
(315) 697-8437
FAX (315) 697-9391

FAX TRANSMITTAL SHEET

DATE: 2/3/98

TIME: _____

TO: Prabal Amin
Name

Company

732-969-7275
Fax Number

FROM: Rob Gray

NUMBER OF PAGES INCLUDING COVER SHEET: 2

ORIGINAL TO FOLLOW VIA:

____ Regular Mail

____ Overnight Mail

____ UPS _____ Standard _____ Next Day

____ Federal Express

COMMENTS: Please call w/ any questions
Rob

REQUEST FOR QUOTATION

Date: January 23, 1998

OFFER MUST BE RECEIVED BY 01/30/97, 12 Noon

THIS IS NOT AN ORDER

ADDRESS OFFERS AND REFER QUESTIONS TO:

Prabal N. Amin, P.E.

IT Corporation

2200 Cottontail Lane

Somerset, New Jersey 08873

Telephone No. (732) 469-5599

Fax No. (732) 469-7275

Abscope Environmental, Inc.

PO Box 487

1 Commercial Drive

Canastota, NY 13032

Quotation Valid for: 180 Days

Quotation Prepared by: ABSCOPE ENVIRONMENTAL, INC.

Signature: ROBERT GRAY

Title: OPERATIONS MANAGER

Date: 2/03/98 Telephone: 315/697-8437

Quotation shall be submitted subject to IT's Purchase Order Terms and Proposal Instructions, attached hereto.

Item No.	Service/Manual Specification	QTY.	Unit of Measure	Unit Price	Total
1	Excavation/Pilot test soil pile construction/Disassembly and disposal	1	L.S.	-	15,000.00
2	Carbon skid w/associated fixtures	1	L.S.	-	3,500.00
Ship To: N/A		Subtotal			18,500.00
		Tax ADDITIONAL IF APPLICABLE			
		Freight			
		Grand Total			
Method of Shipment:	F.O.B. Point/Ship Terms:	Terms of Payment:	Shipment can be made in days from receipt of order		

- Bidder certifies that the prices quoted do not exceed the prices charged all other customers, including the U.S. Government for like or comparable quantities and conditions of sale.
- Bidder's quotation shall be in accordance with the specifications and drawings attached, if any.
- Bidder shall be deemed to have accepted all terms, conditions, and specifications unless bidder has noted SPECIFIC EXCEPTION thereto in Bidder's proposal.

JAN-23-98 FRI 5:26 PM

P. 4



241 W. Union Ave.

Bound Brook, NJ 08805

732/356-8355 • Fax 732/469-6766

Fax Cover SheetTo: J.T. - Attn. PrabalFrom: **Kathy**Page 1 of: 2 Time: 5:15 Date: 3-27-98

Fax Number Dialed: _____

Message: Please see the following quote★ *This quote is good for 30 days*

★ This quote is subject to change if quantity, or customer specifications change

Signed: _____ Date: _____

*If you are having trouble receiving this fax, please call
please call 732/356-8355.*

10. I-16

From Copies Now

Schedule 2.11(f)

Unit Price Subcontracts
Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
-----------------------	--------------------------	-------------------	----------------

Printing/Reproduction

Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
------	---	------------------	-----------------

- | | | | |
|--|-----------------------------------|---|-------------------|
| 1. Reproduction double-sided text pages | \$ <u>.064</u> /double-sided page | 23,000 pages (92 documents @ 250 pgs. ea.) | \$ <u>1472.00</u> |
| 2. Reproduction double-sided text pages | \$ <u>.066</u> /double-sided page | 13,800 pages (92 documents @ 150 pgs. ea.) | \$ <u>910.80</u> |
| 3. Blueline print of 24" x 36" drawings (folded into map pockets)
Copied BW on 20" | \$ <u>2.62</u> /drawing | 368 drawings (92 documents @ 4 drawings ea.) | \$ <u>982.56</u> |
| 4. Blueline print of 24" x 36" drawings (stapled and bound)
Copied BW on 20" | \$ <u>.738</u> /drawing | 3,680 drawings (92 documents @ 40 drawings ea.) | \$ <u>2715.84</u> |
| 5. Delivery | \$ <u> </u> /submission | 8 submissions | \$ <u> </u> |
| 6. Assembly of 92 three ring binders (includes insertion of 150 text pages and 4 folded maps into pockets) | \$ <u>1.15</u> /binder | 92 binders | \$ <u>10580</u> |
| 7. Assembly of 92 three ring binders (includes insertion of 250 text pages only) | \$ <u>.75</u> /binder | 92 binders | \$ <u>69.00</u> |

TOTAL (incl. 6% tax)

\$ 6631.36



GARDEN STATE REPROGRAPHICS, INC.
201 WOOD AVENUE
MIDDLESEX, NJ 08846

TEL: (732)356-8030 FAX: (732)805-9780

Facsimile

Date: 3-27-98

To: ITC

Attn: DANA BOYADJIAN \$1.00

@ Fax:

From: STEPHEN M. YESENKO

Re:

Pages: 3, including this cover sheet

Message: QUOTATION FOLLOWS THIS COVER SHEET.

Schedule 2.11(f)

Unit Price Subcontracts Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Printing/Reproduction			
Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1. Reproduction double-sided text pages	\$ <u>10.12</u> /double-sided page	25,000 pages (92 documents @ 250 pgs. ea.)	\$ <u>2530.00</u>
2. Reproduction double-sided text pages	\$ <u>10.12</u> /double-sided page	13,800 pages (92 documents @ 150 pgs. ea.)	\$ <u>931.04</u>
3. Blue-line print of 24" x 36" drawings (folded into map pockets) ✓	\$ <u>7.10</u> /drawing PER SET WITH POCKETS	368 drawings (92 documents @ 4 drawings ea.)	\$ <u>653.20</u>
4. Blue-line print of 24" x 36" drawings (stapled and bound)	\$ <u>8.4</u> /drawing	3,680 drawings (92 documents @ 40 drawings ea.)	\$ <u>309.12</u>
5. Delivery	\$ <u>7.50</u> /submission	8 submissions	\$ <u>60.00</u>
6. Assembly of 92 three ring binders ✓ (includes insertion of 150 text pages and 4 folded maps into pockets)	\$ <u>9.90</u> /binder	92 binders	\$ <u>910.80</u>
7. Assembly of 92 three ring binders (includes insertion of 150 text pages only)	\$ <u>9.65</u> /binder	92 binders	\$ <u>887.80</u>
TOTAL			\$ <u>6281.96</u>
Total (incl. tax)			\$ <u>6658.88</u>



 **New Jersey Bell**
A Bell Atlantic Company

YELLOW PAGES 

THE ONE THAT WORKS.



**GARDEN
STATE
REPROGRAPHICS**

FAST PICK UP & DELIVERY
Serving All Of New Jersey

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356-8030

201 WOOD AVE MIDDLESEX

Napco Copy/Graphics Center

280 Campus Plaza

Edison, N.J. 08837

Phone: (732) 225-4330

Fax: (732) 225-4349

FAX COVER LETTER

Attention: Prabal Amin ^{4:30} Date: 3/27/98

Company: IT Corporation

Location: _____

Fax #: _____

Subject: _____

We are transmitting 2 page(s), including this cover letter.

If you do not receive all pages, or if illegible, please contact us as soon as possible.

Thank You,

Sandi

MAR-26-1998 12:53

9082251691

SSX

P.02

TOTAL P.02

Schedule 2.11(f)

Unit Price Subcontracts
Work Assignment Number D-003666-6

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
	Printing/Reproduction		
Item	Max. Reimbursement Rate (Specify Unit)	Est. No of Units	Total Est. Cost
1. Reproduction double-sided text pages	\$.04 /double-sided page	23,000 pages (92 documents @ 250 pgs. ea.)	\$ 1840.00
2. Reproduction double-sided text pages	\$.04 /double-sided page	13,800 pages (92 documents @ 150 pgs. ea.)	\$ 1104.00
3. Blueline print of 24" x 36" drawings (folded into map pockets) \$400.00	\$.08 /drawing s.f.	368 drawings (92 documents @ 4 drawings ea.)	\$ 176.64 400.00
4. Blueline print of 24" x 36" drawings (stapled and bound)	\$.08 /drawing s.f.	3,680 drawings (92 documents @ 40 drawings ea.)	\$ 1766.40
5. Delivery	\$ 7.95 /submission	8 submissions	\$ 63.60
6. Assembly of 92 three ring binders (includes insertion of 150 text pages and 4 folded maps into pockets)	\$ 15.00 /binder	92 binders	\$ 1380.
7. Assembly of 92 three ring binders (includes insertion of 250 text pages only)	\$ 15.00 /binder	92 binders	\$ 1380.
TOTAL (inc! 6% tax)			\$ 8597.28

MAR-27-1998 16:05

FROM

NAPCO COPY/GRAPHIC-EDISON

TO

4697275

P.02



INTERNATIONAL
TECHNOLOGY
CORPORATION

SHEET ____ of ____

DATE 3/3/98 TIME ____

PROJECT NO. D-003666-6

PROJECT NAME Lehigh

RECORD OF TELEPHONE QUOTATION

☐ SERVICE

☐ SUPPLIER

☒ SUBCONTRACTOR

FROM Alliance Shortland Rept
COMPANY Joe Inguigato
ADDRESS _____

TO: Wagner
IT Corp

TELEPHONE (716) 546 4920

PROPOSAL:

prepare steno minutes during pre bid & public
meetings

$6.50/\text{page} \times 25 \text{ pg}/\text{hr} \times 4 \text{ HR} \times 4 = \$2,600$
1 c/ds 3 condensed version

3 copies of original transcript
 $\$125 \text{ attendance fee/meeting} \times 4 = \500

\$3,100

CONDITIONS:

SCHEDULE:

PAYMENT TERMS:

1. Quotation is in accordance with the applicable contract documents except for the conditions outlined above;
2. Prices quoted are F.O.B.
3. All applicable insurance and taxes are included
4. Bonding is included
5. Prices quoted are good for the duration of the project
6. Requested written confirmation



INTERNATIONAL
TECHNOLOGY
CORPORATION

SHEET 1 of 1

DATE 3/3/98 TIME _____

PROJECT NO. D-08666-6

PROJECT NAME Lehigh Valley
NYSDE

RECORD OF TELEPHONE QUOTATION

☐ SERVICE

☐ SUPPLIER

☒ SUBCONTRACTOR

FROM Midtown Reptng
COMPANY Deanis Hiebler
ADDRESS _____

TO: J. Wagner
IT Corp

TELEPHONE (716) 325 2130

PROPOSAL:

Prepare steno minutes During
Pie Bid & Public Meeting
EVE \$150/APP, 20 PS/Hr to 15 PS/Hr (AVG)
\$8/page Incl 3 transcripts
\$8/page x 25 pages x 4 Hrs x 4 mts = 3200
\$150 x 4 = \$600

CONDITIONS:

SCHEDULE:

PAYMENT TERMS:

1. Quotation is in accordance with the applicable contract documents except for the conditions outlined above;
2. Prices quoted are F.O.B.
3. All applicable insurance and taxes are included
4. Bonding is included
5. Prices quoted are good for the duration of the project
6. Requested written confirmation

Comparison of Weighted Quotations
Data Validation Service Responses to January RFP
 New York State Department of Environmental Conservation
 3rd Round State Superfund Standby
 March 1998
 Page 1 of 1

Data Validator	Location	Phone Number and Contact	Weighted Quotation and Rank			Comments
			Normal TAT	1-Week TAT	2-Week TAT	
EDV	Pittsburgh, PA	(412)341-5281 Maxine Walters	17.4 1	21.8 1	20 1	responsive
Lab Data Consultants	Carlsbad, CA.	(760)634-0437 Rich Amano	26 2	41.6 2	36.4 3	responsive
EcoChem	Seattle, WA.	(206)233-9332 Linda Bohannon	30.7 3	38.4 3	33.8 2	responsive
BALTEC	Armonk, N.Y.	(914)273-2626 Janis Giga	39.5 4	49.4 4	43.4 4	responsive
Griffin-Schruers	Lakewood, CO.	(303)987-2801 Roger Simon	43.4 5	56.4 5	49.9 6	responsive
NEH	Skillman, N.J.	(908)874-5686 Susan Chapnick	45.6 6	61.5 6	45.6 5	responsive
Inotek	Princeton, N.J	(609)779-1809 Eduard Eichen	No Bid	No Bid	No Bid	No Bid

Notes: TAT - turn-around-time

EDV, INC.

Certified DBE, MBE, WBE

Environmental Data Validation, Inc.
1509 Rockland Ave.,
Pittsburgh, PA. 15216
Phone (412) 341-5281
Fax (412) 571-1932
Homepage: <http://www.EDV-inc.com>

FAX COVER SHEET

FROM: MAXINE INALTERSTO: ESSECK A. MARTIN JR. 12:20

NO. OF PAGES 11
(INCLUDING COVER SHEET)

MESSAGE:

PRICE SCHEDULE FOR RFP # 77352497-002

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE SUPERFUND STANDBY CONTRACT
ANALYTICAL SERVICESNYSDEC ANALYTICAL SERVICES PROTOCOL
(Superfund CLP Methods)

Type of Analysis	Analytical Method	COST PER SAMPLE			
		Category A Reporting	Category A Reporting	Category A Reporting	Category A Reporting
1) TCL Volatiles + 10	95-1	S N/A	S 13	S N/A	S 14
2) TCL Semi-Volatile + 20	95-2	S N/A	S 14	S N/A	S 15
3) TCL Pesticides/PCBs	95-3	S N/A	S 12	S N/A	S 12
4) TAL Metals*					
+ i) ICAP (includes Hg)	200.7 CLP-M	S N/A	S 12	S N/A	S 12
ii) AA (furnace)	202.2-289.2 CLP-M	S N/A	S 10	S N/A	S 10
iii) AA (flame)	202.1-289.1 CLP-M	S N/A	S 10	S N/A	S 10
5) Arsenic	206.2 CLP-M	S N/A	S 5	S N/A	S 5
6) Lead	239.2 CLP-M	S N/A	S 5	S N/A	S 5
7) Selenium	270.2 CLP-M	S N/A	S 5	S N/A	S 5
8) Thallium	279.2 CLP-M	S N/A	S 5	S N/A	S 5
9) Mercury	245.1/245.2/245.5 CLP-M	S N/A	S 5	S N/A	S 5
10) Cyanide	335.2 CLP-M	S N/A	S 8	S N/A	S 8
11) TCL Volatiles (low conc.)	95-4	S N/A	S 12	S N/A	S N/A

*NYSDEC-ASP 10/95 pages D-V-1 through D-V-182 including costs of digestion.

Indicate, as a percentage of the above quoted costs, the cost for expedited testing and turnaround time for

* PROMPT PAYMENT DISCOUNT

7 DAYS TURNAROUND 25%
14 DAYS TURNAROUND 15%

+ includes Mercury

10 calendar days - 5%
20 Calendar days - 2%

COST INCREASE FOR SECOND 12-MONTH PERIOD 0%

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE SUPERFUND STANDBY CONTRACT
ANALYTICAL SERVICESNYSDEC ANALYTICAL SERVICES PROTOCOL
(non-CLP Methods)

<u>Type of Analysis</u>	<u>Analytical Method</u>	<u>COST PER SAMPLE</u>			
		<u>AQUEOUS SAMPLE</u>		<u>NON-AQUEOUS SAMPLE</u>	
		<u>Category A Reporting</u>	<u>Category B Reporting</u>	<u>Category A Reporting</u>	<u>Category B Reporting</u>
Volatile Organics	624	\$ <u>N/A</u>	\$ <u>11</u>	\$ <u>N/A</u>	\$ <u>N/A</u>
	8021	\$ <u>N/A</u>	\$ <u>11</u>	\$ <u>N/A</u>	\$ <u>11</u>
	8240	\$ <u>N/A</u>	\$ <u>11</u>	\$ <u>N/A</u>	\$ <u>11</u>
	8260	\$ <u>N/A</u>	\$ <u>11</u>	\$ <u>N/A</u>	\$ <u>11</u>
	524.2	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>N/A</u>
	502.2	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>N/A</u>
Halogenated Volatile Organics	601	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>N/A</u>
	8010	\$ <u>N/A</u>	\$ <u>11</u>	\$ <u>N/A</u>	\$ <u>11</u>
Volatile Aromatics	602	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>N/A</u>
	8020	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>10</u>
Non-Halogenated Volatile Organics	8015	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>10</u>
Semi-Volatile Organics	625	\$ <u>N/A</u>	\$ <u>11</u>	\$ <u>N/A</u>	\$ <u>N/A</u>
	8250	\$ <u>N/A</u>	\$ <u>12</u>	\$ <u>N/A</u>	\$ <u>12</u>
	8270	\$ <u>N/A</u>	\$ <u>12</u>	\$ <u>N/A</u>	\$ <u>12</u>
Phenols	604	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>N/A</u>
	8040	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>10</u>
Polynuclear Aromatic Hydrocarbons	610	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>N/A</u>
	8100	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>10</u>
Organochlorine Pesticides/PCBs	608	\$ <u>N/A</u>	\$ <u>10</u>	\$ <u>N/A</u>	\$ <u>N/A</u>

Revised 10/96

(2)

8080

S N/A S 11 S N/A S 12

COST PER SAMPLE

AQUEOUS SAMPLE NON-AQUEOUS SAMPL

<u>Type of Analysis</u>	<u>Analytical Method</u>	<u>Category A Reporting</u>	<u>Category B Reporting</u>	<u>Category A Reporting</u>	<u>Category B Reporting</u>
Organophosphorus Pesticides	8140	S <u>N/A</u>	S <u>10</u>	S <u>N/A</u>	S <u>10</u>
Chlorinated Herbicides	8150	S <u>N/A</u>	S <u>11</u>	S <u>N/A</u>	S <u>12</u>

Indicate, as a percentage of the above quoted costs, the cost for expedited testing and turnaround time for:

7 DAYS TURNAROUND 25 %
14 DAYS TURNAROUND 15 %

COST INCREASE FOR SECOND 12-MONTH PERIOD 0 %

* PROMPT PAYMENT DISCOUNT

10 Calendar days - 5 %
20 Calendar days - 2 %

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE SUPERFUND STANDBY CONTRACT
ANALYTICAL SERVICES

HAZARDOUS WASTE PARAMETERS

<u>Type of Analysis</u>	<u>Analytical Method</u>	<u>COST PER SAMPLE</u>	
		<u>Category A Reporting</u>	<u>Category B Reporting</u>
Cyanide	9010	\$ <u>N/A</u>	\$ <u>8</u>
pH	9040	\$ <u>N/A</u>	\$ <u>2</u>
Total Organic Halides (TOX)	9020	\$ <u>N/A</u>	\$ <u>5</u>
Corrosivity	*	\$ <u>N/A</u>	\$ <u>5</u>
Ignitability	*	\$ <u>N/A</u>	\$ <u>5</u>
Reactivity	*	\$ <u>N/A</u>	\$ <u>5</u>

Toxicity Characteristic Leaching Procedure * S N/A \$ 90
(TCLP) Includes extraction. Analysis of TCLP extract will use 8240/8260, 8250/8270, 8080, 8150 and TA Metals plus Cyanide by CLP analytical methods.

*NYSDEC - ASP Vol. 2, Part XV

Indicate, as a percentage of the above quoted costs, the cost for expedited testing and turnaround time for:

7 DAYS TURNAROUND
14 DAYS TURNAROUND

25 %
15 %

COST INCREASE FOR SECOND 12-MONTH PERIOD 0 %

* PROMPT PAYMENT DISCOUNT

10 calendar days - 5%
20 calendar days - 2%

(4)

Revised 10/96

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION STATE SUPERFUND STANDBY CONTRACT ANALYTICAL SERVICES

TREATABILITY STUDY AND LEACHATE PARAMETERS

		<u>COST PER SAMPLE</u>	
<u>* Type of Analysis</u>	<u>Analytical Method</u>	<u>Aqueous Sample Category A</u>	<u>Non-Aqueous Sample Category A</u>
Acidity	305.1	\$ N/A	\$ <u>5</u>
Ammonia	350.2	\$ N/A	\$ <u>5</u>
Total Organic Carbon	415.1	\$ N/A	\$ <u>5</u>
Total Dissolved Solids	160.1	\$ N/A	\$ <u>5</u>
Alkalinity	310.1	\$ N/A	\$ <u>5</u>
Chloride	325.3	\$ N/A	\$ <u>2</u>
Total Kjeldahl Nitrogen	351.2	\$ N/A	\$ <u>5</u>
Nitrate	352.1	\$ N/A	\$ <u>5</u>
Nitrite	354.1	\$ N/A	\$ <u>5</u>
BOD	405.1	\$ N/A	\$ <u>5</u>
COD	410.1	\$ N/A	\$ <u>2</u>
Sulfate	375.4	\$ N/A	\$ <u>5</u>
Hexavalent Chromium	218.5	\$ N/A	\$ <u>0</u>
MBAS	425.1	\$ N/A	\$ <u>5</u>
Color	110.2	\$ N/A	\$ <u>5</u>
Odor	140.1	\$ N/A	\$ <u>5</u>
Hardness	130.2	\$ N/A	\$ <u>5</u>
Total Volatile Solids	160.4	\$ N/A	\$ <u>5</u>
Phenols (total)	420.2	\$ N/A	\$ <u>5</u>
Boron	212.3	\$ N/A	\$ <u>5</u>
Total Halogens	*ASTM D1317	\$ N/A	\$ <u>5</u>
BTU Value/Lb	*ASTM D240	\$ N/A	\$ <u>5</u>
Sulfur Content	*ASTM D129 D1552, D622	\$ N/A	\$ <u>5</u>
Water Content	*ASTM E203	\$ N/A	\$ <u>5</u>
Density	*ASTM E213	\$ N/A	\$ <u>5</u>
Bromide	320.1	\$ N/A	\$ <u>5</u>
Chlorine (Total Residual)	330.1	\$ N/A	\$ <u>5</u>
Fluoride	340.2	\$ N/A	\$ <u>5</u>
Oil & Grease	413.1	\$ N/A	\$ <u>6</u>
Total Suspended Solids	160.2	\$ N/A	\$ <u>5</u>

(5)

Revised 10/96

Turbidity
Phosphorous

180.1
365.2

S N/A S 5
S N/A S 5

COST PER SAMPLE

<u>Type of Analysis</u>	<u>Analytical Method</u>	<u>Aqueous Sample Category A</u>	<u>Non-Aqueous Sample Category A</u>
Sulfide	376.2	S <u>N/A</u>	S <u>5</u>
Specific Conductance	120.1	S <u>N/A</u>	S <u>2</u>
pH	150.1	S <u>N/A</u>	S <u>2</u>

*Reference - American Society of Testing and Materials (ASTM), Revised 1984.

Indicate, as a percentage of the above quoted costs, the cost for expedited testing and turnaround time for:

7 DAYS TURNAROUND 25 %
14 DAYS TURNAROUND 15 %

COST INCREASE FOR SECOND 12-MONTH PERIOD 0 %

* These parameters reported of Category A are not usually validated since they are only summaries. However, if these samples were reported and validation needed, the above prices reflect our charge.

PROMPT PAYMENT DISCOUNT

10 Calendar days - 5 %
20 Calendar days - 2 %

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE SUPERFUND STANDBY CONTRACT
ANALYTICAL SERVICES

CLEANUP PROCEDURES

Fraction	Cleanup Method	COST PER SAMPLE*	
		Aqueous Sample	Non-Aqueous Sample
BNA	3640 - Gel Permeation Chromatography (GPC) Cleanup	\$ <u>0</u>	\$ <u>0</u>
	3630 - Silica Gel Column Cleanup	\$ <u>0</u>	\$ <u>0</u>
	3650 - Acid-Base Partition	\$ <u>0</u>	\$ <u>0</u>
	3610 - Alumina Cleanup		
Pesticides/PCBs	3620 - Florisil Column Cleanup	\$ <u>0</u>	\$ <u>0</u>
	3660 - Alumina/Sulfur Cleanup	\$ <u>0</u>	\$ <u>0</u>

*Cost is for cleanup only, reanalysis of sample after cleanup is not billable as per the 1989 NYSD C ASP update.

7 DAYS TURNAROUND
14 DAYS TURNAROUND

NA %
NA %

COST INCREASE FOR SECOND 12-MONTH PERIOD NA %

NO BID!
These costs are affiliated with samples and is included in the (1) Sample validation prices.

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION STATE SUPERFUND STANDBY CONTRACT ANALYTICAL SERVICES

SCREENING PROCEDURE

		<u>COST PER SAMPLE</u>	
<u>Fraction</u>	<u>Cleanup Method</u>	<u>Aqueous Sample</u>	<u>Non-Aqueous Sample</u>
Volatiles	3810 - Headspace	\$ <u>0</u>	\$ <u>0</u>
	3820 - Hexadecane Extraction	\$ <u>0</u>	\$ <u>0</u>

7 DAYS TURNAROUND
14 DAYS TURNAROUND

NA:
NA:

COST INCREASE FOR SECOND 12-MONTH PERIOD NA:

PLEASE SEE PAGE 7

PRICE QUOTATION SCHEDULE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE SUPERFUND STANDBY CONTRACT
ANALYTICAL SERVICES

AIR QUALITY ANALYSIS*

<u>Type of Analyses</u>	<u>Analytical Method</u>	<u>COST PER SAMPLE</u>	
		<u>Category A Reporting</u>	<u>Category B Reporting</u>
Volatiles Organics	TO1	\$ <u>N/A</u>	\$ <u>10</u>
	TO14	\$ <u>N/A</u>	\$ <u>10</u>

*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, USEPA/60
89/017 June 1988, reproduced National Technical Information Services, Springfield, VA 22161, PB90-121

7 DAYS TURNAROUND
14 DAYS TURNAROUND

25 %
15 %

COST INCREASE FOR SECOND 12-MONTH PERIOD 0 %

PROMPT PAYMENT DISCOUNT

10 Calendar days - 5 %
20 Calendar days - 2 %

RFP: 77352497-002

RFP ACKNOWLEDGEMENT FORM

REQUEST FOR PROPOSAL NO. 77352497-002
ISSUE DATE: January 16, 1998
TO PERFORM DATA VALIDATION SERVICES

1.) Offeror has included the following items with this offer.

Price Proposal Yes ☒ No ☐IT Work Agreement Yes ☒ No ☐Reps/Certs Yes ☒ No ☐Subcontract Agreement Yes ☒ No ☐Insurance Certificate Yes ☒ No ☐Rider to Appendix B Yes ☒ No ☐2.) Offeror agrees to perform all work in accordance
with the terms and conditions of the IT Corporation
Subcontract and Work Agreement and the IT/NYSDEC Prime
Contract Flow-Down Provisions/Clauses.

3.) Offeror acknowledges receipt of the following

RFP amendment(s).

Amendment No. One (01), issued 2/5/98 Yes ☒ No ☐Amendment No. Two (02), issued 2/29/98 Yes ☒ No ☐Amendment No. Three (03), issued _____ Yes ☐ No ☐Offeror Name: EDV INC.
Signed By: *[Signature]*
Print Name: MAXINE WALTERS
Print Title: PROJECT MANAGERAddress: 1509 ROCKLAND AVE
PITTSBURGH PA 15216
Phone No.: 412 341 5281
Date Signed: 3/5/98