**Final**

# MONROE ELECTRONICS SITE INVESTIGATION PROJECT WORK PLAN

Site ID# 837013
Village of Lyndonville, Orleans County

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## TABLE OF CONTENTS


| | | |
|---|---|---|
| 1.0 | SITE DESCRIPTION AND HISTORY | 1 |
| 2.0 | OBJECTIVES OF THE INVESTIGATION | 1 |
| 3.0 | PROJECT ORGANIZATION AND BUDGETS | 1 |
| 4.0 | SCOPE OF WORK | 2 |
| | 4.1 Direct Push Soil Borings | 2 |
| | 4.1.1 Soil Borings | 2 |
| | 4.1.1.1 Decontamination Procedures | 2 |
| | 4.1.1.2 Soil Sampling Procedures | 2 |
| | 4.1.1.3 Soil Sampling and Analysis | 3 |
| | 4.1.2 Ground Water Samples | 3 |
| | 4.1.2.2 Groundwater Sampling Procedures | 3 |
| | 4.1.2.3 Groundwater Sample Analysis | 4 |
| | 4.2 Surface Soil Sampling and Analysis | 4 |
| | 4.3 Waste Management | 4 |
| 5.0 | QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) | 4 |
| 6.0 | DOCUMENTATION AND REPORTING | 4 |
| | 6.1 Field Documentation | 4 |
| | 6.2 Reporting | 5 |
| 7.0 | SCHEDULE | 5 |
| 8.0 | HEALTH AND SAFETY | 5 |
| 9.0 | MINORITY AND WOMEN OWNED BUSINESS ENTERPRISE (M/WBE) PARTICIPATION | 5 |
| 10.0 | CITIZEN PARTICIPATION | 6 |


## FIGURES


Figure 1. Site Location (Area Map)
Figure 2. Original Lyndonville West Avenue Site Boundaries
Figure 3 1997 Sampling Results
Figure 4 Revised Site Boundaries
Figure 5 Planned Sample Locations


## APPENDICES


Appendix A - Budget
Appendix B - Right To Know Form

## 1.0 SITE DESCRIPTION AND HISTORY

Monroe Electronics has been located on Housel Avenue in the Village of Lyndonville, Orleans County since 1972 (see Figure 1). In September 1986, Monroe Electronics completed a Hazardous Waste Disposal Questionnaire, also known as a right to know (RTK) survey (Appendix B), provided by the New York State Department of Environmental Conservation (NYSDEC). In the RTK, Monroe Electronics stated they disposed of 1 to 4 tons of 1,1,1-trichloroethane (1,1,1 - TCA) at their Housel Avenue facility. 1,1,1-TCA is a volatile organic compound (VOC) used in cleaning and degreasing operations.

Until the 1950s, the Monroe Electronics Housel Avenue facility was the historic location of a former DuPont/Barre Lime & Sulfur pesticide spray and dust mixture manufacturing plant. The Lyndonville West Avenue inactive hazardous waste disposal site #837002 (which originally included the Monroe Electronics facility, see Figure 2) centers on pesticide and arsenic contamination which originated at this manufacturing plant. Pesticide and arsenic contamination has been identified in a nearby landfill and drainage ditch; however, 1997 investigations (see Figure 3) did not identify a consequential amount of pesticide and arsenic present at the former plant site (currently Monroe Electronics). Investigations were not sufficient, however, to alleviate concerns over the VOCs which may be at the property. In November, 1999 the NYSDEC removed the Monroe Electronics property from the Lyndonville West Avenue site description in order to address it as a separate site. See Figure 4 for the current site boundaries of the Lyndonville West Avenue site.

## 2.0 OBJECTIVES OF THE INVESTIGATION

The objectives of this SI project are:

- Further define the nature and extent of contamination at the Monroe Electronics plant site; and
- Determine if this site should be listed on the NYS Listing of Inactive Hazardous Waste Disposal Sites.

## 3.0 PROJECT ORGANIZATION AND BUDGETS

The work performed on this project will be completed by the following groups: NYSDEC, the direct push contractor (identified in this work plan as the Contractor), their subcontractors (if any), and the NYSDEC certified contract laboratory. The New York State Department of Health will also be involved.

The NYSDEC Project Manager will have overall responsibility for coordinating activities with all of these groups and ensuring this work plan is properly implemented. The division of work for each task is discussed in the following section and summarized in Appendix A. A budget is also presented in Appendix A.

## 4.0 SCOPE OF WORK

The scope of work for this project will include surface soil sampling, direct push soil sampling and direct push ground water sampling (see Figure 5).

Direct push soil samples

- 7 direct push borings will be installed at the site (see Figure 5)
- Up to 14 subsurface soil samples will be obtained from disposable macro core sleeves during drilling. One sample per boring will be obtained at the bottom of the overburden (immediately above the clay) and/or from sleeves with elevated head space or visibly contaminated soils. Samples will be analyzed for the full Target Compound List (TCL).

Direct push ground water sampling -

- 7 ground water samples will be obtained from each direct push boring and analyzed for the full TCL.

Surface soil samples (0-2")

- Up to 5 samples will be obtained by NYSDEC staff and analyzed for the full TCL (see Figure 5)

## 4.1 Direct Push Soil Borings

Prior to mobilization of the direct push rig, an Underground Facility Protection Organization (UFPO) underground utility stakeout will be obtained by the Contractor to document the position of utilities prior to initiation of drilling.

### 4.1.1 Soil Borings

4.1.1.1 Decontamination Procedures

Prior to drilling, the driller will decontaminate the direct push rig, rods and other pertinent equipment using a high pressure spray. This cleaning procedure will also be used on drilling and sampling tools between each boring. These decontamination activities will be performed in a designated on-site area. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will not be permitted. Tools will be decontaminated (if necessary) between every sample using a brush and Alconox solution. The driller will clean the rig and associated equipment upon completion of the investigation prior to leaving the property.

4.1.1.2 Soil Sampling Procedures

The direct push borings will intercept the top of the clay layer, estimated to be 12 ft. below the ground surface. Continuous macro core sleeve samples will be collected at each of the boring

locations. Each macro core sleeve will be screened with a PID or FID detector for the presence of volatile organic vapors. Specifically, portions of the samples will be collected and placed in sealed containers. The volatile organic vapors that accumulate within the head space of the sample containers will be screened for the presence of volatile organic vapors using a PID or FID detector. Soil samples will be visually inspected for physical indications of contamination such as staining, oils, fill material, etc.

Drill cuttings will be placed on plastic sheeting. If evidence of contamination is observed (elevated PID readings, a detectable odor, or visual contamination) the drill cuttings and decontamination water will be contained and stored on-site in secured 55-gallon drums, pending receipt of analytical data for possible future disposal. If soil contamination is not found, the drill cuttings may be replaced in the borehole and/or spread on the ground at the site and decontamination fluids allowed to infiltrate the ground surface. The NYSDEC representative will be responsible for deciding if the soil and/or water should be containerized.

4.1.1.3 Soil Sampling and Analysis

VOC, SVOC, and metal analysis will be performed on the soil samples. Soil samples will be submitted to an approved NYSDEC contract laboratory for analysis. The NYSDEC representative will be responsible for the coordination of all services related to the NYSDEC contract laboratory (as applicable) during this SI project.

The interval selected for volatile organic analysis will be based upon elevated PID/FID readings, visual evidence of contaminants and/or odors. For each borehole, samples from the sleeve exhibiting the highest head space reading will be submitted for analysis. In addition, if elevated head space readings are encountered, a second (and possibly a third) set of samples may be collected below the zone of elevated readings in an attempt to delineate the vertical extent of soil contamination. If no elevated head space readings are obtained, the soil sample will be obtained from the bottom of the boring, just above the clay layer.

### 4.1.2 Ground Water Samples

Ground water samples will be obtained using either the retractable direct push sampling mechanism or, if this method proves unsuccessful, by installing temporary 1 inch diameter PVC wells.

4.1.2.1 Groundwater Sampling Procedures

The groundwater will be collected for the applicable chemical analysis. Each temporary well (if applicable) will be sampled by using a new dedicated polyethylene bailer with dedicated nylon (or equivalent) cord.

4.1.2.2 Groundwater Sample Analysis

Monitoring well ground water samples will be collected from all direct push boring locations (7 total). Samples collected during this portion of the SI project will be submitted to an approved

NYSDEC contract laboratory for analysis. Ground water samples will be analyzed for volatile organics, semi-volatile organics and metals (in that order, based on ground water recovery). The NYSDEC representative will be responsible for the coordination of all services relative to the NYSDEC contract laboratory (as applicable) during this SI project.

### 4.2 Surface Soil Sampling and Analysis

Surface soil samples will be collected by the NYSDEC representative at up to five (5) locations around the site. The exact locations will be determined in the field by the NYSDEC representative based on visual evidence of staining and other factors. The samples will be collected from the first two inches of soil after sod/surface debris have been removed. Surface soil samples will be collected using new disposable plastic scoops (alternatively, a metal scoop may be used if it is cleaned prior to use at a sample location).

The surface soil samples will be submitted to an approved NYSDEC contract laboratory for analyses. Samples from each location will be analyzed for volatile organics, semi-volatile organics and metals. The NYSDEC representative will be responsible for the coordination of all services relative to this NYSDEC contract laboratory (as applicable) during this SI project.

### 4.3 Waste Management

The Contractor will be responsible for procuring and delivering drums upon NYSDEC request, and managing (including disposal of) miscellaneous wastes generated during this project including, drill cuttings, decontamination water, personal protective equipment and disposable sampling equipment.

## 5.0 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

In addition to the field samples identified above, samples may be collected for QA/QC purposes. QA/QC samples may include trip blanks, matrix spikes and matrix spike duplicates. The contract laboratory will supply the necessary containers for QA/QC samples. The contract laboratory will also be responsible for following approved analytical QA/QC procedures.

## 6.0 DOCUMENTATION AND REPORTING

Detailed documentation of site activities will be maintained during the field work. All data interpretations associated with this program (and its elements) will be conducted using NYSDEC equipment and staff.

### 6.1 Field Documentation

Documentation of the field activities will include the following:

- **Field Notebook-** Field personnel (DEC and contractors) will maintain a field notebook which will document dates, times, and duration of pertinent field occurrences.

- **Project Photographs-** NYSDEC personnel may take photographs of field activities.

- **Calibration Records-** Calibration records for field instrumentation will be maintained in a field notebook.

- **Geologic Logs-** Observations pertaining to site geology and hydrogeology made during subsurface drilling will be recorded in a field notebook. Construction logs of monitoring well installations (if applicable) will also be recorded.

- **Chain-of-Custody Forms-** Sample handling will be recorded on chain-of-custody forms with associated labels and custody seals.

## 6.2 Reporting

The Work Assignment Contractor shall deliver copies of all field documentation and subcontractor work products to the NYSDEC. The final report will be completed by NYSDEC personnel.

## 7.0 SCHEDULE

Fieldwork must begin within 30-days of awarding the work assignment(s). Fieldwork is not expected to exceed two days.

## 8.0 HEALTH AND SAFETY

A site specific Health and Safety plan will be prepared for this project. The Health and Safety plan will be followed by all DEC personnel on-site. Contractors and consultants (and their subcontractors) are expected to develop and adhere to their own Health and Safety Plan.

## 9.0 MINORITY AND WOMEN OWNED BUSINESS ENTERPRISE (M/WBE) PARTICIPATION

The following are the M/WBE goals and recommended strategies to assure meaningful M/WBE participation on these projects. The MBE goal is 15% of the project budget and the WBE goal is 5% of the project budget. The following are recommended strategies the Contractor may use to secure M/WBE participation:

1. Use pre-approved standby M/WBE subcontractors;
2. Negotiate and prearrange terms with M/WBE firms that have successfully performed some of the above mentioned tasks;
3. Subcontract specific work assignments to an M/WBE that has performed successfully

for your firm; and

4. Solicit M/WBE 's for the procurement of office and computer supplies, field trailer, office equipment, fencing, instrument and equipment rental, health and safety equipment, consumable supplies, sample containers, and other necessary items and services.

## 10.0 CITIZEN PARTICIPATION

A citizen participation program will be developed and implemented by NYSDEC as part of this investigation. Fact sheets describing the investigation will be mailed to nearby residents. If necessary, the NYSDEC Project Manager and Citizen Participation Specialist will establish a document repository and hold public meetings.

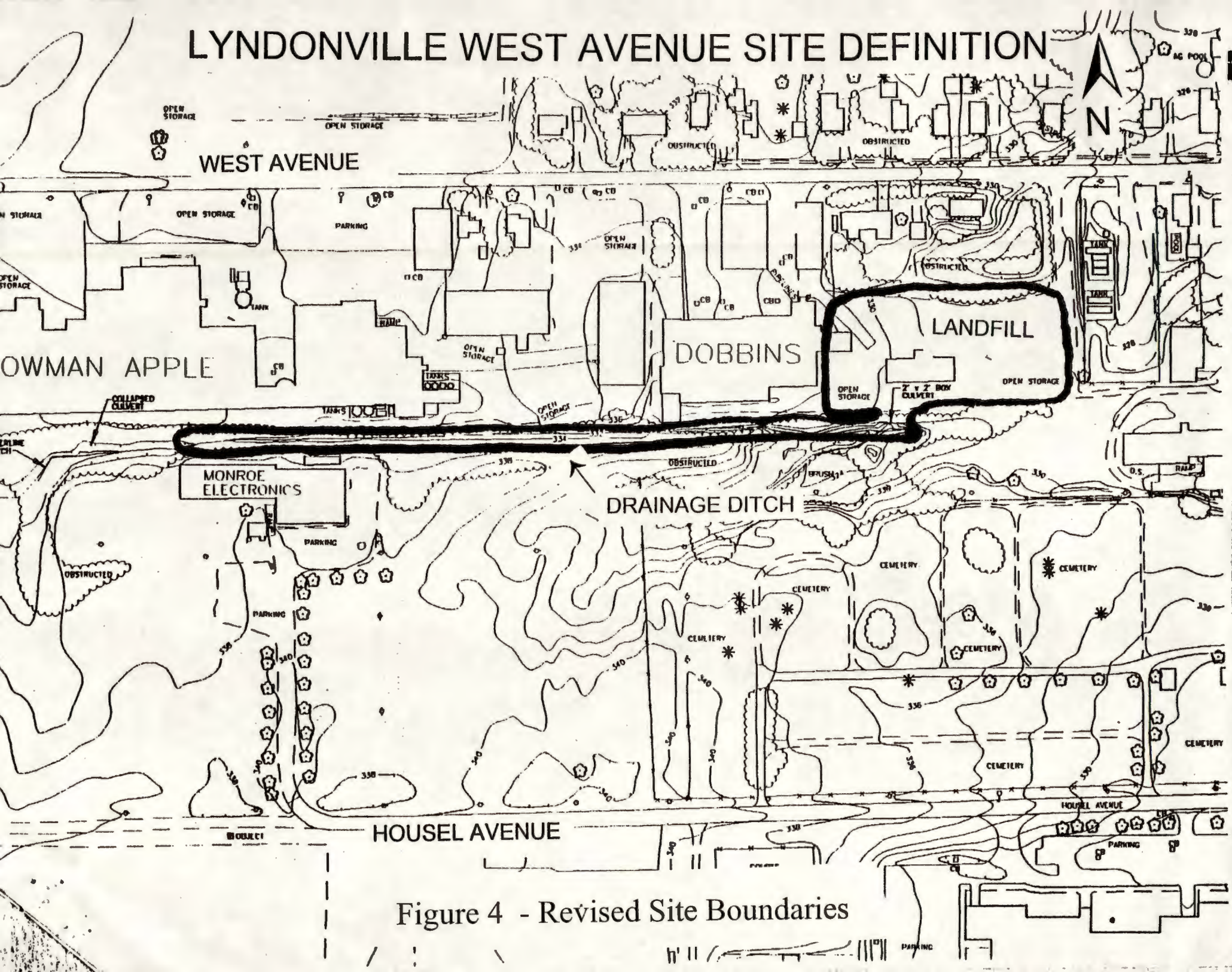


Figure 4 - Revised Site Boundaries

Appendix A - Budget

1. Surface soil samples (0-2")

This work will be performed in-house by NYSDEC staff and analyzed at a NYSDEC Contract Laboratory. Costs associated with this work are not reflected in the budget.

- Up to 5 samples will be obtained and analyzed for the full Target Compound List (TCL).

2. Geoprobe

The following work will be performed by the Work Assignment Contractor and/or a direct push subcontractor:

- Perform an underground utility clearance check.
- Install 7 Geoprobe borings (see Figure XXX) in order to obtain subsurface soil and ground water samples from each. All activities associated with the Geoprobe installation (other than obtaining sample bottles and procuring laboratory services) are the responsibility of the Work Assignment Contractor
- Disposal of investigation derived wastes (if necessary).

3. Other

- Site access will be obtained by NYSDEC staff.

## Estimated Geoprobe Costs

| Item # | Description | Rate | # units | | Total |
|---|---|---|---|---|---|
| 1 | Mobilization/Demobilization | $65 | /LS | 1 | $ 65 |
| 3 | Decon Pad | $50 | /day | 2 | $ 100 |
| 4 | Truck Geoprobe | $725 | /day | 2 | $ 1450 |
| 9 | Macro Core Sampling | $5 | /each | 21 | $ 105 |
| 13 | 1" PVC temp well installed | $2.50 | /FT | 100 | $ 250 |
| 23 | Containing / Staging Wastes | $40.00 | /each drum | 5 | $ 200 |
| 24 | Stand-By Time | $50.00 | /hour | 5 | $ 250 |
| 25 | Per Diem / per person | $75.00 | /person | 4 | $ 300 |
| 27 | Decon | $25.00 | /hour | 3 | $ 75 |
| Total cost | | | | | **$ 2795** |

Above estimate based on:

- 12 feet to top of clay layer
- 2 days to perform work
- 2 Person crew
- 2 drums for wastes

Other Potential Costs

| | | | | |
|---|---|---|---|---|
| Disposal of investigation derived wastes (if necessary) | ~$300 / drum | x | 5 drums = | ~$1500 |

**TOTAL:** **$ 4295**

Appendix B
Right To Know Forms

RECEIVED SEP 0 3 1986

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE

50 WOLF ROAD
ALBANY, NEW YORK 12233

GENERATOR FORM
PART - I

# HAZARDOUS WASTE DISPOSAL QUESTIONNAIRE

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: RTK PROCESSING UNIT, ROOM 525

| | | | |
|---|---|---|---|
| COMPANY NAME: MONROE ELECTRONICS INC | | ICS CODE / EPA ID NUMBER: GH801022 | |
| COMPANY MAI: | | STATE | ZIP CODE |
| PLANT NAME (I: HOUSEL AVENUE LYNDONVILLE | NY 14098 | CONTACT NAME: Donald S. Durow | TELEPHONE: (716) 765-223 |
| PLANT ADDRES STREET | CITY | STATE | ZIP CODE |

PRINCIPAL BUSINESS OF PLANT: Design and manufacture electronic instruments

**PLEASE ANSWER QUESTIONS 1 THRU 5**

1a) SINCE JANUARY 1, 1952 THRU DECEMBER 31, 1981, HAVE YOU OR ANY PREVIOUS OWNERS/OPERATORS OF THIS FACILITY GENERATED ANY HAZARDOUS WASTE (SEE INSTRUCTIONS) AT YOUR PRESENT LOCATION? YES X NO ____

DID YOU OPERATE AT ANY PREVIOUS LOCATION? IF YES, PLEASE LIST THE NAME, ADDRESS AND DATES OF OPERATION. YES X NO ____

| NAME AND ADDRESS | DATES |
|---|---|
| Monroe Electronics, Inc. 5 Vernon St. Middleport, N.Y. 14105 | July 1957-June 1972 |

**IF ANY HAZARDOUS WASTE HAS BEEN GENERATED AT ANY LOCATION, PLEASE COMPLETE GENERATOR FORM PART II FOR EACH LOCATION.**

1b) HAS ANY OF THE FACILITIES LISTED ABOVE CHANGED ITS NAME OR IDENTIFICATION BECAUSE THERE WAS A CHANGE IN OWNERSHIP, CORPORATE NAME OR OPERATOR NAME, ETC. IF YES, LIST THE NAMES BY WHICH THE FACILITY HAS BEEN IDENTIFIED SINCE JANUARY 1, 1952 TO THE PRESENT. INCLUDE NAMES AND ADDRESSES OF PREVIOUS OWNERS/OPERATORS. YES ____ NO X

| FACILITY NAME AND ADDRESS | OWNER/OPERATOR NAME AND ADDRESS | DATES |
|---|---|---|
| | | |

2) DOES YOUR COMPANY HAVE ANY OTHER FACILITIES IN NEW YORK STATE THAT GENERATE HAZARDOUS WASTE (SEE INSTRUCTIONS), OR HAVE GENERATED HAZARDOUS WASTE SINCE JANUARY 1, 1952 THRU DECEMBER 31, 1981? IF YES, LIST THE LOCATIONS THAT HAVE NOT ALREADY RECEIVED A SURVEY. YES ____ NO X

| FACILITY NAME AND ADDRESS | CONTACT NAME AND ADDRESS | DATES |
|---|---|---|
| | | |

3) DID YOUR COMPANY GENERATE ANY HAZARDOUS WASTE AT THIS LOCATION OR PREVIOUS LOCATION BEFORE 1952? YES ____ NO X

4) DESCRIBE THE DOCUMENTS FROM WHICH DATA IN PART II WAS OBTAINED (SEE INSTRUCTIONS).

| DOCUMENT DESCRIPTION | DATES |
|---|---|
| N/A | |

5) I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT INFORMATION SUPPLIED IS TRUE AND COMPLETE. FALSE STATEMENTS SUBMITTED ON THIS DOCUMENT ARE PUNISHABLE PURSUANT TO SECTION 210.45 OF THE PENAL LAW.

Robert T. Vosteen — Robert T. Vosteen — V.P., Operations — 8-25-86

NAME OF OWNER/OPERATOR, PARTNER OFFICER OR AUTHORIZED REPRESENTATIVE — TITLE — DATE

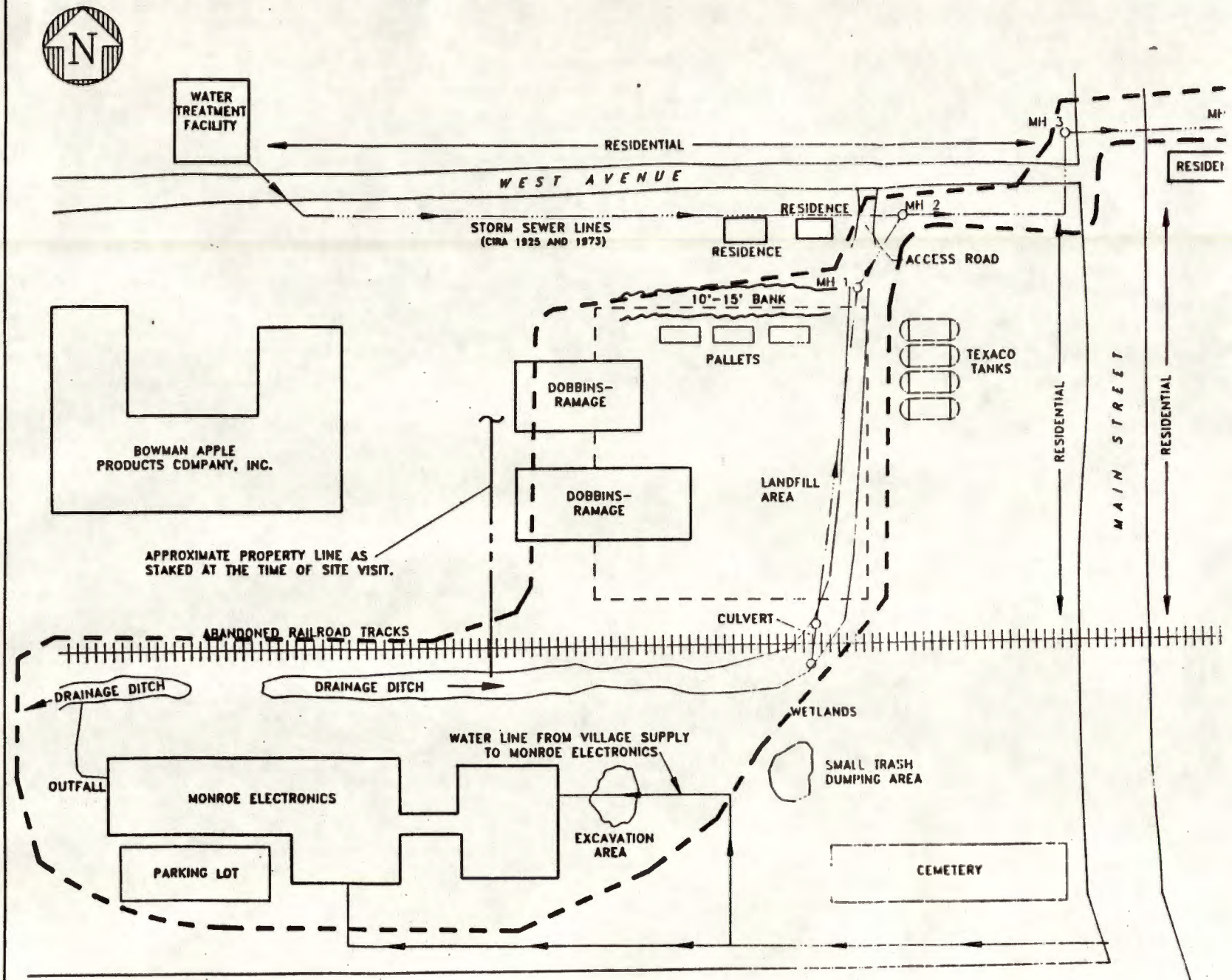


Figure 2 - Original Lyndonville West Avenue Site Boundaries

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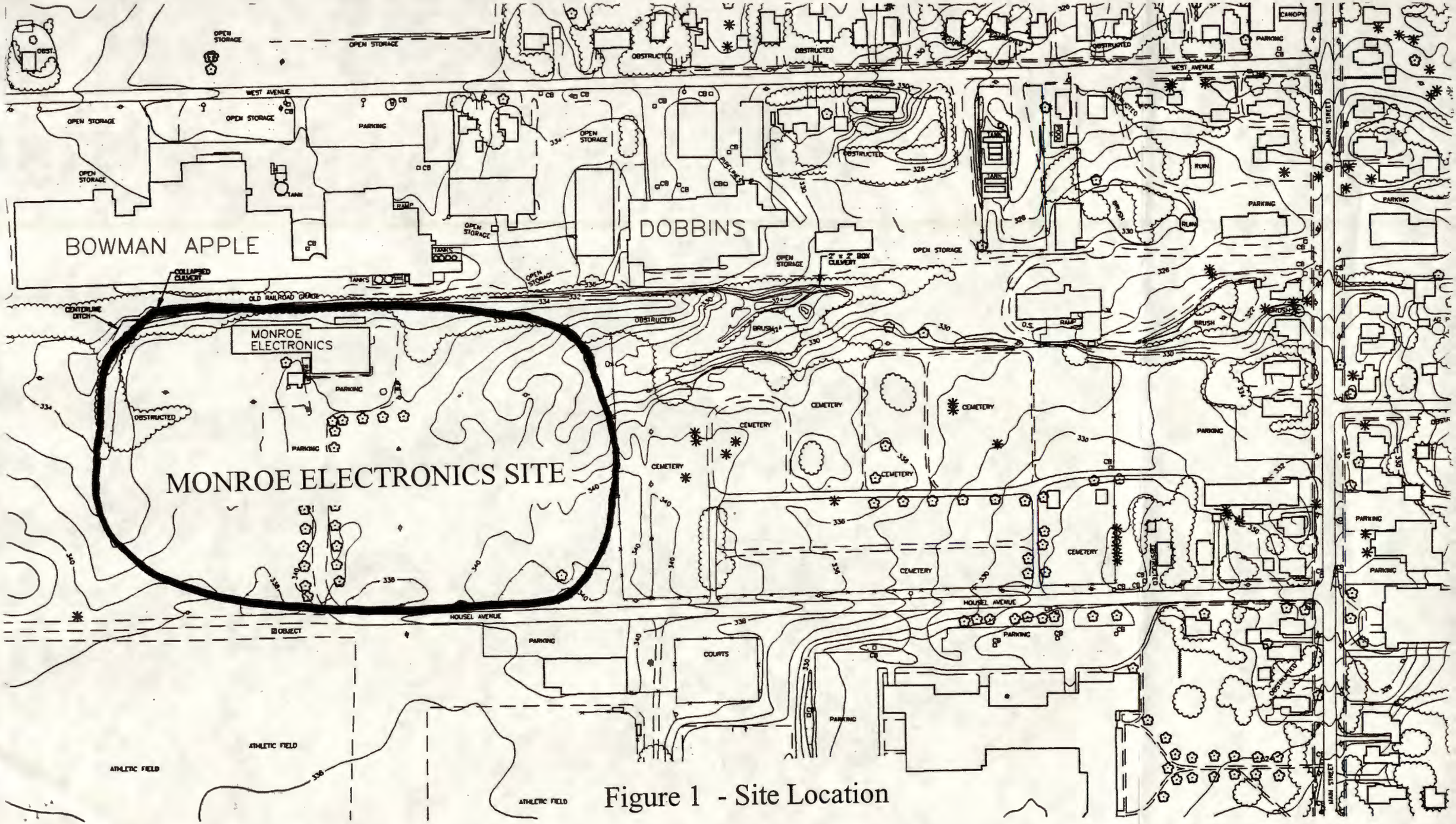
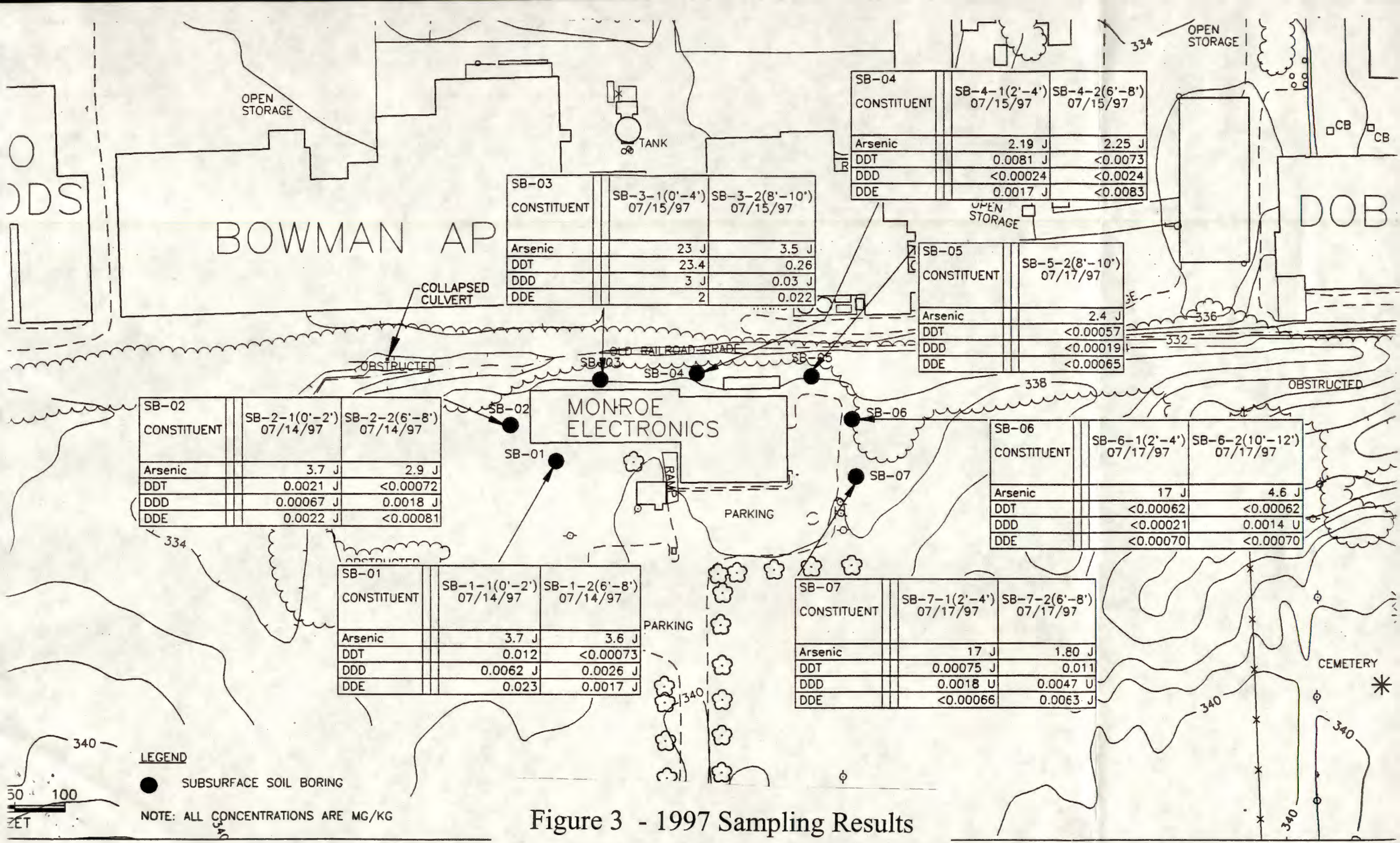



Figure 1 - Site Location




| SB-03 CONSTITUENT | SB-3-1(0'-4') 07/15/97 | SB-3-2(8'-10') 07/15/97 |
|---|---|---|
| Arsenic | 23 J | 3.5 J |
| DDT | 23.4 | 0.26 |
| DDD | 3 J | 0.03 J |
| DDE | 2 | 0.022 |

| SB-04 CONSTITUENT | SB-4-1(2'-4') 07/15/97 | SB-4-2(6'-8') 07/15/97 |
|---|---|---|
| Arsenic | 2.19 J | 2.25 J |
| DDT | 0.0081 J | <0.0073 |
| DDD | <0.00024 | <0.0024 |
| DDE | 0.0017 J | <0.0083 |

| SB-05 CONSTITUENT | SB-5-2(8'-10') 07/17/97 |
|---|---|
| Arsenic | 2.4 J |
| DDT | <0.00057 |
| DDD | <0.00019 |
| DDE | <0.00065 |

| SB-02 CONSTITUENT | SB-2-1(0'-2') 07/14/97 | SB-2-2(6'-8') 07/14/97 |
|---|---|---|
| Arsenic | 3.7 J | 2.9 J |
| DDT | 0.0021 J | <0.00072 |
| DDD | 0.00067 J | 0.0018 J |
| DDE | 0.0022 J | <0.00081 |

| SB-06 CONSTITUENT | SB-6-1(2'-4') 07/17/97 | SB-6-2(10'-12') 07/17/97 |
|---|---|---|
| Arsenic | 17 J | 4.6 J |
| DDT | <0.00062 | <0.00062 |
| DDD | <0.00021 | 0.0014 U |
| DDE | <0.00070 | <0.00070 |

| SB-01 CONSTITUENT | SB-1-1(0'-2') 07/14/97 | SB-1-2(6'-8') 07/14/97 |
|---|---|---|
| Arsenic | 3.7 J | 3.6 J |
| DDT | 0.012 | <0.00073 |
| DDD | 0.0062 J | 0.0026 J |
| DDE | 0.023 | 0.0017 J |

| SB-07 CONSTITUENT | SB-7-1(2'-4') 07/17/97 | SB-7-2(6'-8') 07/17/97 |
|---|---|---|
| Arsenic | 17 J | 1.80 J |
| DDT | 0.00075 J | 0.011 |
| DDD | 0.0018 U | 0.0047 U |
| DDE | <0.00066 | 0.0063 J |

Figure 3 - 1997 Sampling Results