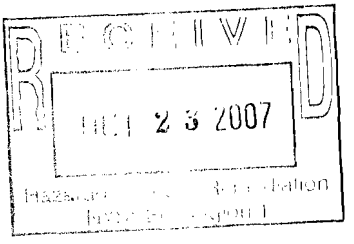
Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

U.S. Electroplating Site
Town of Babylon, Suffolk County
Site Number 152027



December 2001

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* ERIN CROTTY, *Commissioner*

New York State Department of Environmental Conservation
Division of Environmental Remediation

NOTICE OF AVAILABILITY

RECORD OF DECISION

U. S. Electroplating
Inactive Hazardous Waste Disposal Site
ID # 152027
Town of Babylon, Suffolk County

The New York State Department of Environmental Conservation (NYSDEC) announces that the printed Record of Decision (ROD) for the U. S. Electroplating Hazardous Waste Site No. 152027, located in the Town of Babylon, Suffolk County is available. The ROD presents the selected remedy for this site and the rationale for the chosen remedy.

A public meeting for this ROD was held on October 24, 2001, presenting the Proposed Remedial Action Plan (PRAP) for this site. No comments were received during the comment period which ended November 8, 2001. No written comments were received during the public comment period. Therefore no Responsiveness Summary is contained in the ROD. The chosen remedial action plan described in the ROD is summarized as follows:

- No further Remedial Action with sampling and analysis of groundwater quality and flow direction from six existing monitoring wells on a semi-annual basis for a minimum of two years to confirm the decreasing concentration of groundwater contamination. After two years, the NYSDEC will reevaluate the groundwater monitoring requirements.

The U. S. Electroplating ROD, with the Responsiveness Summary and other site-related documents, can be reviewed at the following locations:

Document Repositories

NYSDEC Reg. 1
SUNY Campus, Loop Rd. - Building 40
Stony Brook, NY
(631) 444-0240
Hours: M - F 8:30 AM - 4:45 PM

West Babylon Public Library
211 Rt. 109
West Babylon, NY 11704 (631) 669-5445
Hours: M - T 10:00 AM - 9:00 PM
F - S 10:00 AM - 5:00 PM

For Additional Information

The Site Investigation:

Joseph I. Peck
Project Manager
NYSDEC
625 Broadway
Albany, NY 12233-7015
(518) 402-9622

Health Related Concerns:

William Gilday
NYSDOH
547 River Street
Troy, NY 12180
1(800)458-1158 ext. 402 or (518)402-7880

Bureau of Eastern Remedial Action
NYS Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7015

Attn: Joseph I. Peck

DECLARATION STATEMENT - RECORD OF DECISION

U.S. Electroplating Inactive Hazardous Waste Disposal Site
Town of Babylon, Suffolk County, New York
Site No. 152027

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the U. S. Electroplating Class 2 inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law. The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the U. S. Electroplating inactive hazardous waste disposal site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents which is a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site has been addressed by implementing the interim remedial measure identified in this ROD, therefore the site no longer represents a current or potential significant threat to public health and the environment.

Description of Selected Remedy

Based on the results of the Remedial Investigation/Feasibility Study (RI/FS) for the U. S. Electroplating site and the criteria identified for evaluation of alternatives, the NYSDEC has selected No Further Remedial Action with continued groundwater monitoring. The remedy consists of the following:

Sampling and analysis of groundwater quality and measurement of flow direction from nine monitoring wells on a semi-annual basis for a minimum of two years to confirm the decreasing concentration of groundwater contamination. The remedy also includes institutional controls in the form of existing use and development restrictions limiting the use of groundwater as a potable or process water without necessary water treatment as determined by the Suffolk County Department of Health Services.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

12/10/2001
Date

Michael J. O'Toole, Jr., Director
Division of Environmental Remediation

TABLE OF CONTENTS

RECORD OF DECISION

U. S. Electroplating Site
Town of Babylon, Suffolk County
Site No. 152027
December 2001

SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC) in consultation with the New York State Department of Health (NYSDOH) has selected this remedy for the U. S. Electroplating (U.S.E.) Site, a Class 2, inactive hazardous waste disposal site. As more fully described in Sections 3 and 4 of this document, the operation of the U.S.E. facility resulted in the disposal of a number of hazardous wastes, including cadmium, chromium and cyanide at the site.

These disposal activities resulted in the following significant threats to the public health and/or the environment.

- A significant threat to public health associated with direct contact with contaminated soils in the parking lot of the facility.

- A significant environmental threat associated with the impacts of contaminants to the groundwater resource.

During the course of the investigation, an Interim Remedial Measure (IRM) was undertaken at the U.S.E. site in response to the threats identified above. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS. The IRM undertaken at this site was:

Excavation of contaminated soil from the parking lot storm drains, cesspools and sewer grates located in the front of the U.S.E. facility. The excavated areas were backfilled with clean material.

Based upon the success of the above IRM, the findings of the investigation of this site indicate that the site no longer poses a significant threat to human health or the environment, therefore No Further Remedial Action was selected as the remedy for this site. The remedy also includes institutional controls in the form of existing use and development restrictions limiting the use of groundwater as a potable or process water without necessary water treatment as determined by the Suffolk County Department of Health Services.

A deed notification will be placed on the property to notify individuals of the presence of slightly contaminated materials in storm drains and cesspools and the need to properly dispose of and handle

these materials during maintenance activities. Notification has been provided to the Town of Babylon concerning the presence of residual contamination in the two Field Street storm drains nearest to the site and the need for proper handling and disposal of these materials during maintenance activities.

The Remedial Investigation (RI) and Feasibility Study (FS) are contained in two separate documents. The RI Report is dated May 2001 and the FS Report is dated July 2001.

Once the Operation, Maintenance, and Monitoring Plan is in place, the Department will also reclassify the site from a Class 2 to a Class 4 site (which means the site has been remediated but requires ongoing monitoring) on the New York State Registry of Inactive Hazardous Waste Disposal Sites.

SECTION 2: SITE LOCATION AND DESCRIPTION

The U.S. Electroplating (U.S.E.) Site is located in Babylon, Suffolk County at 100 Field Street (see Figure 1). The site is approximately one acre in size and is located in a heavy industrial area of West Babylon. The site is surrounded by buildings that are used for light and heavy industrial activities, and is located within 1000 feet of the Town of Babylon Municipal Landfill (See Figure 1). The site is located in the south central area of Long Island. Five public water supply wells are located approximately one to two miles south (downgradient) of the site. The groundwater beneath the site flows toward the south/southeast. There are no up gradient public water supply wells (See Figure 2 for location of supply wells and Figure 3 for groundwater flow direction).

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The U.S.E. Site is located at 100 Field Street and is currently owned by Mr. Robert Birnbaum. U.S. Electroplating Corporation began operations at the site in 1971. The site consists of a one-story concrete block building and includes a parking lot on the north parcel that is underlain by three storm drains and a septic system. An illustration of these drains is shown in Figure 4. Roof leaders and gutters are connected to the storm drains in the parking lot. U.S.E. is an active electroplating and anodizing facility. Another one story, concrete block building is immediately adjacent to the south of U.S.E. but is not part of the U.S.E. Site.

U.S.E. is a "job shop" metal plater. It receives parts from metal parts fabricators and either electroplates the parts or anodizes them. The facility conducts most plating operations in tanks or barrels. Anodizing is the process in which the surface of the metal, typically aluminum, is dyed black.

In the electroplating process, parts are either placed in baskets or hung on racks. They are then dipped into various tanks of alkaline cleaners, acid etch, plating solutions, stripping solutions and rinses. Plating operations generate a significant quantity of wastewater. Based on the data, it is believed that some of this wastewater entered the onsite cesspools and storm drains, as well as the sewer grates on Field Street, through spills or careless operations.

Currently, U.S.E. minimizes waste generation by careful water conservation, recycling, and process adaptations. The waste generated on-site is stored in a tank and is periodically hauled off site by a licensed waste transporter for recycling and treatment. NYSDEC has been advised by representatives of U.S.E. that copper, tin, cadmium, and nickel have been the most common plating operations.

3.2: Remedial History

Originally, U.S.E. discharged spent electroplating wastewater to three subsurface concrete underground storage tanks (USTs) east of the U.S.E. facility until February 1981. In early 1980, the Suffolk County Department of Health Services collected samples from these tanks which indicated heavy metals contamination. The industrial wastewater held in the USTs was pumped out and taken to a licensed disposal facility and the tanks were properly abandoned in February of 1981. The USTs were subsequently sealed with gunite, a concrete mixture (see Figure 4).

As part of a Phase II (preliminary) investigation conducted in 1990, three ground water monitoring wells (MW-1, MW-2 and MW-3) were installed and sampled. Sediment and soil samples were also collected and tested (see Figure 4). The primary contaminants of concern found in these samples were the heavy metals, cadmium and chromium.

In 1993, water used in fighting a fire caused contaminated water runoff to the storm drains. Sediments were removed from storm drains SD-2, SD-3 and SD-5. A post fire inspection at the site revealed that dry chemical waste was visible around the shed located on the west side of the U.S.E. facility (see Figure 4).

SECTION 4: SITE CONTAMINATION

To evaluate the contamination present at the site and to evaluate alternatives to address the significant threat to human health and the environment posed by the presence of hazardous waste, the PRP has recently conducted a Remedial Investigation/Feasibility Study (RI/FS).

4.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site.

The RI was conducted in 2 phases. The first phase was conducted between June 1995 and October 1995 and the second phase between November 1998 and October 2000. The IRM, described in Section 4.2, was completed in March 1998. A report entitled Remedial Investigation Report U.S.E. site # 1-52-027, dated May 2001 has been prepared which describes the field activities and findings of the RI in detail.

The RI included the following activities:

- Survey of the site

- Soil borings and sampling in the parking lot on the north side of the facility.

- Installation and sampling of groundwater monitoring wells.

To determine which media (soil, groundwater, etc.) contain contamination at levels of concern, the RI analytical data was compared to environmental Standards, Criteria, and Guidance values (SCGs). Groundwater, drinking water and surface water SCGs identified for the U.S.E. site are based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part 5 of NYS Sanitary Code. For soils, NYSDEC TAGM 4046 provides soil cleanup guidelines for the protection of groundwater, background conditions, and health-based exposure scenarios. In addition, for soils, site specific background concentration levels can be considered for certain classes of contaminants.
Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site required remediation. These are summarized below. More complete information can be found in the RI Report.

Chemical concentrations are reported in parts per billion (ppb) for groundwater and parts per million (ppm) for soil. For comparison purposes, where applicable, SCGs are provided for each medium.

4.1.1: Site Geology and Hydrogeology

The U.S.E. site is situated upon the glacial outwash soil deposits of Long Island at an elevation of approximately 61 feet above Mean Sea Level (MSL). The elevation of the water table occurring within the underlying upper glacial aquifer is approximately 19 feet below the land surface. Measurements indicate that the direction of groundwater flow is to the south-southeast (see Figure 3).

The Upper Glacial Formation is approximately 100 feet thick and is underlain by the Magothy Formation, the principal water supply aquifer for most of Western Suffolk County. The property is located on the northern boundary of the Gardiners Clay. The Magothy Aquifer consists of material deposited in marine and fluvial or deltaic environments during the Cretaceous Period. These deposits consist of beds and lenses of sandy clay, clayey sand, silt, sand and gravel. The Magothy Formation is underlain by the Raritan Formation. The Raritan Formation is composed of the upper Raritan Clay, a regional confining layer, followed by the permeable Lloyd Sand. The Lloyd Sand lies directly upon crystalline bedrock.

4.1.2 Nature of Contamination

As described in the RI report, many soil and groundwater samples were collected at the site to characterize the nature and extent of contamination. The main categories of contaminants which exceed their SCGs are inorganics (metals). The inorganic contaminants of concern are primarily cadmium and chromium.

4.1.3 Extent of Contamination

Table 1 summarizes the extent of contamination for the contaminants of concern in soil and groundwater and compares the data with the SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Groundwater

Based on chemicals used in the process and previous data, arsenic, cadmium, chromium, copper, iron, mercury, nickel, zinc and cyanide were selected for analysis at the 20, 40, and 60 foot depths for all geoprobe (discrete groundwater samples using direct push technique) locations and at the 20 foot depth for the existing monitoring well locations (see Figure 5).

The groundwater analytical results show that cadmium was detected above its standard at locations MW-1 (182 ppb), MW-2 (91 ppb), MW-3 (2,000 ppb), GP-2 (186 ppb), GP-3 (59 ppb) and GP-4 (46 ppb). Chromium was detected above its standard at MW-3 (485 ppb) as was nickel (1,740 ppb). The groundwater standards for cadmium, chromium, and nickel are 5 ppb, 50 ppb, and 100 ppb respectively. While nickel was found above standards in MW-3, it was not found in any of the subsequent downgradient geoprobe groundwater samples (see Figure 5 for geoprobe locations). Groundwater samples from all six newly installed downgradient monitoring wells MW-4a&b, MW-5a&b, and MW-6a&b (see Figure 6) met standards for cadmium and chromium, indicating that groundwater contamination from this site has not migrated very far from the site. Groundwater samples from all locations were analyzed for cyanide and it was not detected in any of the samples.

Soil

Prior to the IRM, the highest level of cadmium in the soil was found in storm drain 1 (SD-1) at a concentration of 1,230 ppm and the highest level of chromium in the soil was found in cesspool 1 (CP-1) at a concentration of 1,660 ppm. Storm drains 1, 2, 5, & 6 (SD-1,2,5,&6), storm sewer grates east & west (SG-E&W) and cesspools 1 & 2 (CP-1&2) all had cadmium and chromium contamination above the recommended soil cleanup objectives (SCOs) for cadmium (10 ppm) and chromium (50 ppm) (see Figure 7). Cyanide was tested for at all locations and was not detected in any of the soil samples.

Shallow soil samples were collected immediately beneath the paved area around the storage shed located on the west side of the U.S.E. facility. Analysis of the samples revealed detectable concentrations of cadmium, chromium and zinc, with only zinc (at a maximum concentration of 21.8 ppm)slightly exceeding its SCO value of 20 ppm (see Figure 4 for locations and Table 1 for results).

4.2 Interim Remedial Measures:

Interim Remedial Measures (IRMs) are conducted at sites when a source of contamination or exposure pathway can be effectively addressed during the RI/FS.

The NYSDEC concluded that since the main source of heavy metals contamination had been identified and the technology for removing this type of source was well established, it was appropriate to excavate the contaminated soil through an IRM at the U.S.E site.

Previous remedial work, as described in section 3.2, included: cleaning, sealing and abandoning storage tanks located east of the facility and, after a 1993 fire, excavating contaminated sediments from storm drains.

During March of 1998, an IRM was performed at the site as described below:

Clean out of Storm Drains 1, 2, 5, & 6, Cesspools 1 & 2, and Sewer Grates E & W

The wastewater and storm water from each storm drain, sewer grate and cesspool were pumped out and transported to an appropriate disposal facility in March, 1998. The bottom of storm drains SD-1, SD-2, SD-6 and Cesspools CP-1 and CP-2 were excavated using a rubber tired backhoe. The soil that was excavated from the bottom of these structures was screened using a HNU Photo Ionization Detection (PID) meter.

The excavation of SD-1, SD-2, SD-6 and CP-2 continued until the water table was reached. Once the interface of the visible contamination and the groundwater was reached, an end-point sample was collected using a precleaned, stainless steel hand-operated, soil auger.

The excavation of storm sewer grate west SG-W, storm sewer grate east SG-E and SD-5 were performed using a truck mounted crane with an "orange peel" bucket. All excavated soil was removed and transported to an off-site disposal facility using a manifest. A total of 498 tons of metals-contaminated soil was excavated and disposed of during the IRM.

In order to determine the effectiveness of the IRM, end-point soils and additional groundwater testing was performed. In addition to testing for metals, DEC requested that volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) also be tested for. The results of these end-point soil samples indicate that there were no VOCs detected above the soil cleanup objectives (SCOs), very slight exceedances of the SCOs for SVOCs in two samples, and the soil concentrations of the contaminants of concern (cadmium and chromium) had been significantly reduced. At SD-1, metal concentrations for cadmium and chromium in the soil dropped from 1,230 & 798 ppm to 17.5 & 94.2 ppm respectively. At CP-1, metal concentration for cadmium and chromium in the soil dropped from 1,220 & 1,660 ppm to 15.1 & 38.7 ppm respectively (see Table 1).

While the SCOs of 10 ppm for cadmium and 50 ppm for chromium were not always reached, all locations except SG-W were less than 20 ppm cadmium and 100 ppm chromium, and many of these areas were excavated to a depth at which it became unsafe to dig any further. For example, SG-W was excavated to the bottom of the storm sewer structure's base, at which point further excavation could have caused this structure to collapse. The end point sample from SG-W contained 63.6 ppm of cadmium, above the SCO of 10 ppm cadmium, but additional excavation was not considered to be technically feasible. Groundwater monitoring results suggest the residual cadmium in soil is not contributing to groundwater contamination.

In October 2000, a second round of groundwater sampling indicated that groundwater standards were only slightly exceeded in all wells except MW-3. Cadmium concentrations in MW-3 had dropped from 2,000 ppb to 131 ppb (groundwater standard for cadmium is 5 ppb), while chromium concentrations in MW-3 had increased from 82.6 ppb to 485 ppb (groundwater standard for chromium is 50 ppb). While some of the samples were slightly above the groundwater standards (with the exception of MW-3 which was significantly above standards), the contaminant concentrations in the groundwater were generally much lower than those analyzed prior to the IRM. Monitoring well 3 was the only groundwater sampling location which showed an increase in contaminant concentration (for chromium) after the IRM was completed. This is expected to be a short term deviation from the overall downward trend in contaminant concentrations.

The sources of groundwater contamination have been removed as an IRM. Since then, groundwater contaminant concentrations have dropped in almost every well. NYSDEC expects this decline in groundwater concentrations to continue since the sources of groundwater contamination have been removed.

4.3 Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site.

An exposure pathway is how an individual may come into contact with a contaminant. The five elements of an exposure pathway are 1) the source of contamination; 2) the environmental media and transport mechanisms; 3) the point of exposure; 4) the route of exposure; and 5) the receptor population. A completed exposure pathway may be based on past, present, or future events.

With the completion of the IRM, there are no completed exposure pathways at the site.

Potential exposure pathways include use of contaminated groundwater, though this appears unlikely given the apparently limited size of the contaminant plume and lack of groundwater use in the immediate vicinity of the site. Potential exposure pathways also include contact with residual contaminated soil during future storm drain clean-out or maintenance activities.

4.4 Summary of Environmental Exposure Pathways:

This section describes the types of environmental exposures and ecological risks which may be presented by the site. The following pathway for environmental exposure and/or ecological risks has been identified:

- impact to the groundwater resource above standards.

Although the groundwater in the immediate vicinity of the site is impacted above standards, with the source area now remediated, NYSDEC expects groundwater standards will be achieved through natural attenuation. Continued monitoring of the groundwater is expected to confirm this.

The O, M, &M activities outlined in the subject report will be implemented after the NYSDEC issues a Record of Decision.

SECTION 7: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken in an effort to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- A repository for documents pertaining to the site was established.
- A site mailing list was established which included nearby property owners, local political officials, local media and other interested parties.
- A fact sheet summarizing the RI results and describing the Proposed Remedial Action Plan was mailed to those on the mailing list in October 2001.
- A public meeting was held on October 24, 2001 to present the RI results, describe the proposed remedy and solicit public comment on that remedy.

No comments were received at the public meeting, nor were any written comments received during the 30 day comment period which ended on November 8, 2001.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The NYSDEC and the owner of the site entered into a Consent Order on June 19, 1995. The order obligated the responsible party to implement a Remedial Investigation/ Feasibility Study and any appropriate Interim Remedial Measures.

SECTION 6: SUMMARY OF THE REMEDIAL GOALS AND SELECTED ACTION

The selected remedy for any site should, at a minimum, eliminate or mitigate all significant threats to the public health or the environment presented by the hazardous waste present at the site. The State believes that the IRM completed at the site which is described in Section 4.2 accomplished this objective, provided that groundwater monitoring continues to show decreasing contaminant concentrations in groundwater.

The groundwater quality data collected during this remedial investigation demonstrates that there is a very localized plume of cadmium and chromium contamination near the site.

Based upon the results of the investigations, which have shown a significant decrease in metals concentration in groundwater, and the IRM that has been performed at the site, the NYSDEC has selected No Further Remedial Action with continued groundwater monitoring as the remedy for the site. Semi-annual groundwater monitoring will continue for a minimum of two years, after which the NYSDEC will reevaluate the groundwater monitoring requirements.

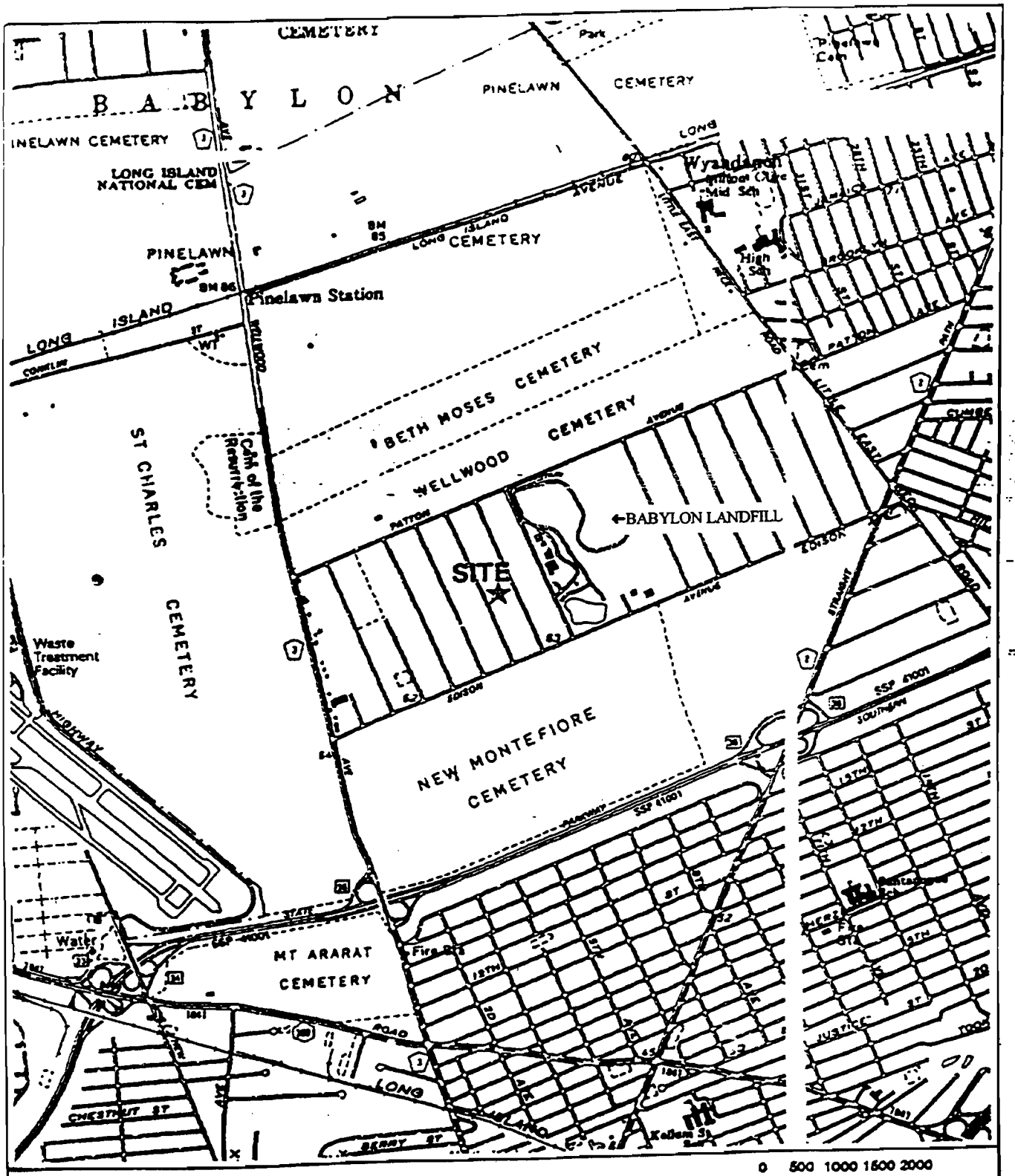
The metals concentrations in the groundwater in the immediate vicinity of the site do not pose a significant threat to public health or the environment. There are no known drinking water supply wells in the immediate vicinity of the U.S.E. site. The location of the U.S.E. site is such that groundwater impacts from this site do not reach any surface water body.

A deed notification will be placed on the property to notify individuals of the presence of slightly contaminated materials in storm drains and cesspools and the need to properly dispose of and handle these materials during maintenance activities. Notification has been provided to the Town of Babylon concerning the presence of residual contamination in the two Field Street storm drains nearest the site and the need for proper handling and disposal of these materials during maintenance activities.

The remedy also includes institutional controls in the form of existing use and development restrictions limiting the use of groundwater as a potable or process water without necessary water treatment as determined by the Suffolk County Department of Health Services.

Once the Operation, Maintenance, and Monitoring (O, M, & M) Plan is in place, the NYSDEC will also reclassify the site from a Class 2 to a Class 4 (which means the site has been remediated but requires ongoing monitoring) on the New York State Registry of Inactive Hazardous Waste Disposal Sites. The annual cost to monitor all the wells on a semi-annual basis is approximately $1,000.

FIGURE 1

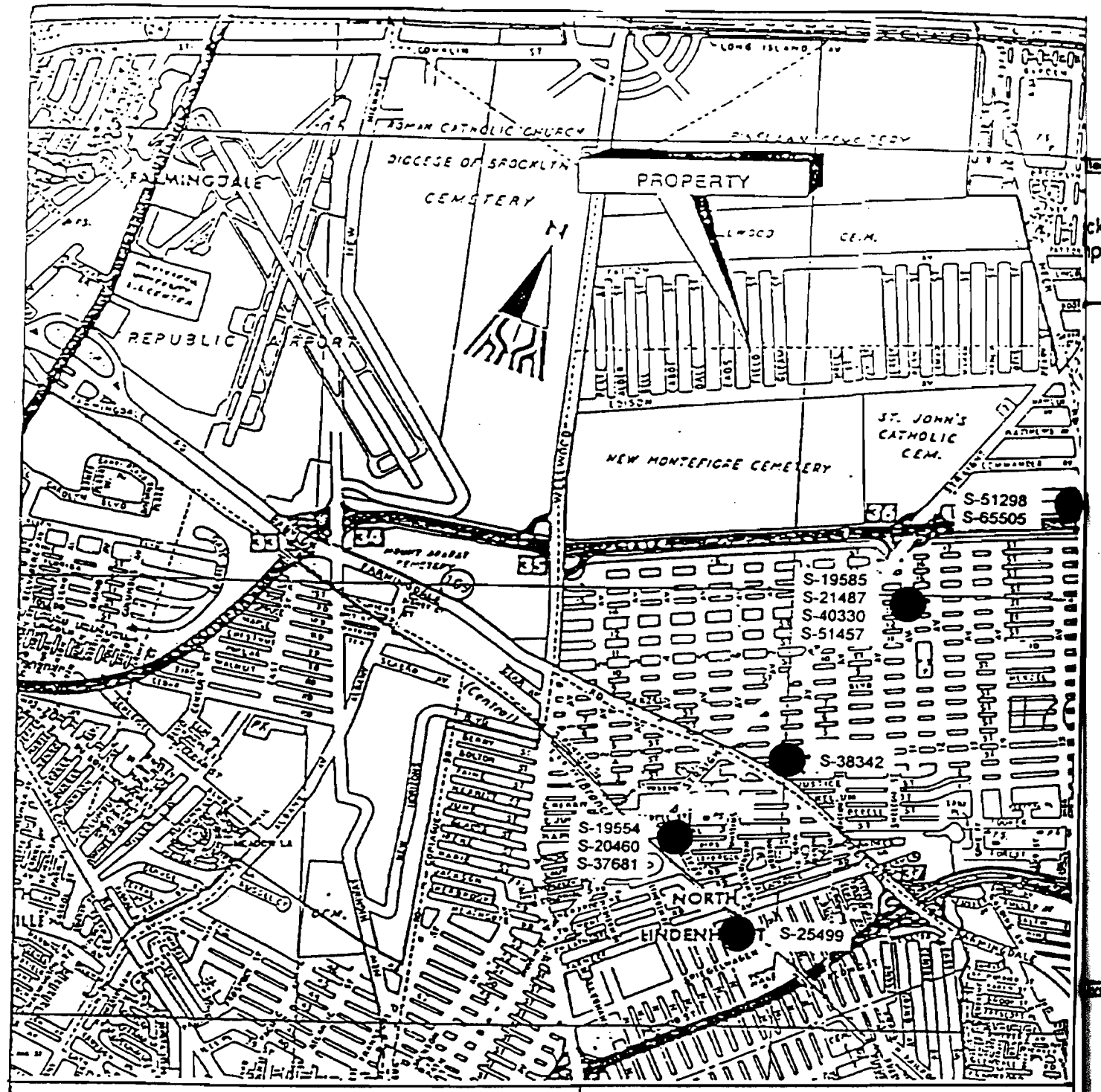


Site Location Map

152027 U.S. Electroplating Corporation

NYSDOT Planimetric Quadrangle(s):
GREENLAWN, HUNTINGTON, BAY SHORE WEST, AMITYVILLE

FIGURE 2



CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists

Location of Pumping Wells Downgradient of U. S. Electroplating

DATE: 3/19/93

SCALE: As Shown

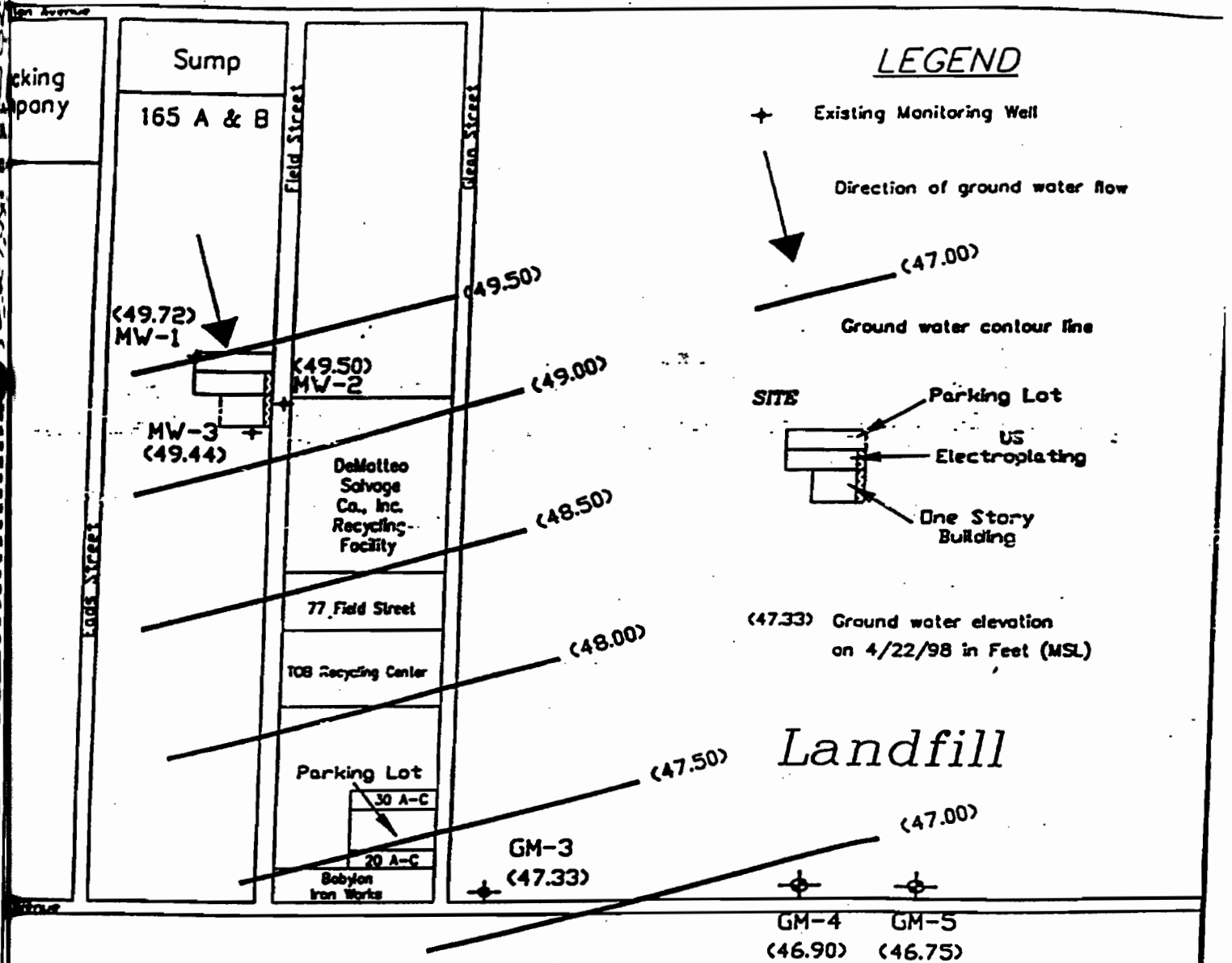
100 FIELD STREET
WEST BABYLON, NEW YORK

S.T.M.

E.A.W.

FIGURE 3

Wellwood Cemetery



New Montefiore Cemetery

Approximate Scale (in Feet)

400 600 800 1000

N

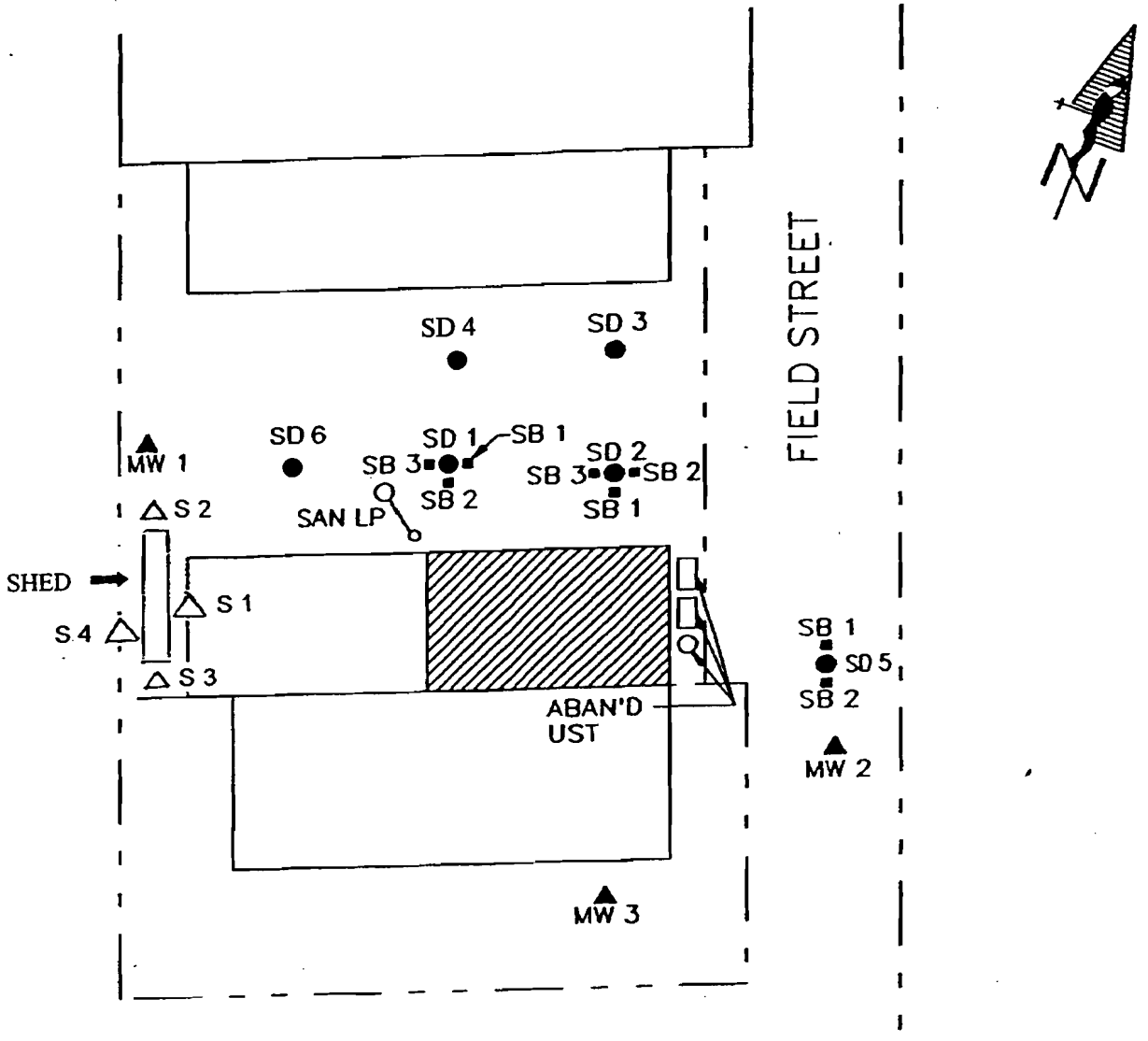
CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists

17 Dupont Street, Plainview, New York 11803

TITLE: Groundwater Elevation Contour Map		DATE: 10/20/99
		SCALE: As Shown
FIGURE: 3	U.S. ELECTROPLATING 100 FIELD STREET WEST BABYLON, NEW YORK	DRAWN BY: S.T.M.
DRAWING No: 1050-1AM		APPR. BY: C.W.

FIGURE 4



NOTE: Although SD 4 is shown, it was not sampled but was part of the original numbering sequence

LEGEND:

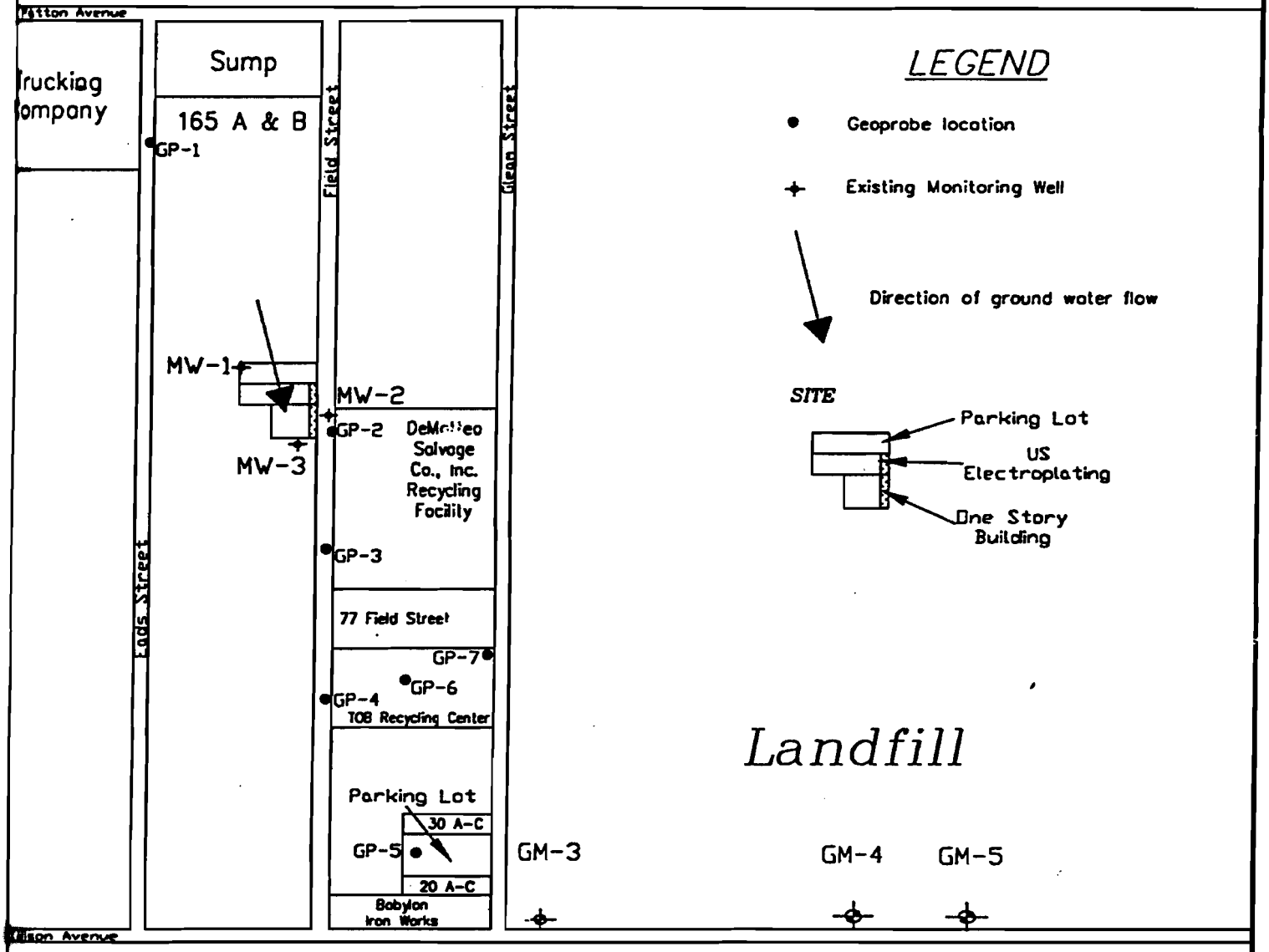
- ■ : SOIL BORING WITH SAMPLE (SB)
- ▲ : MONITORING WELL (MW)
- O : SANITARY LEACHING PIT (SAN LP)
- ● : STORM DRAIN (SD)
- ▭ : UST
- ▨ : LOCATION OF MANUFACTURING ACTIVITIES
- △ : SHALLOW SOIL SAMPLE (S) LOCATION AT STORAGE SHED

SOIL SAMPLING LOCATIO

U.S. ELECTROPLATIN

FIGURE 5

Wellwood Cemetery



was

New Montefiore Cemetery

Approximate Scale (in Feet)

0 200 400 600 800 1000

N

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

TITLE: Geoprobe and Monitoring Well Location Map	DATE: 10/19/99
	SCALE: As Shown
FIGURE:	DRAWN BY: S.T.M./J.H.
DRAWING NO: 1050-1AA	U.S. ELECTROPLATING 100 FIELD STREET WEST BABYLON, NEW YORK

FIGURE 6

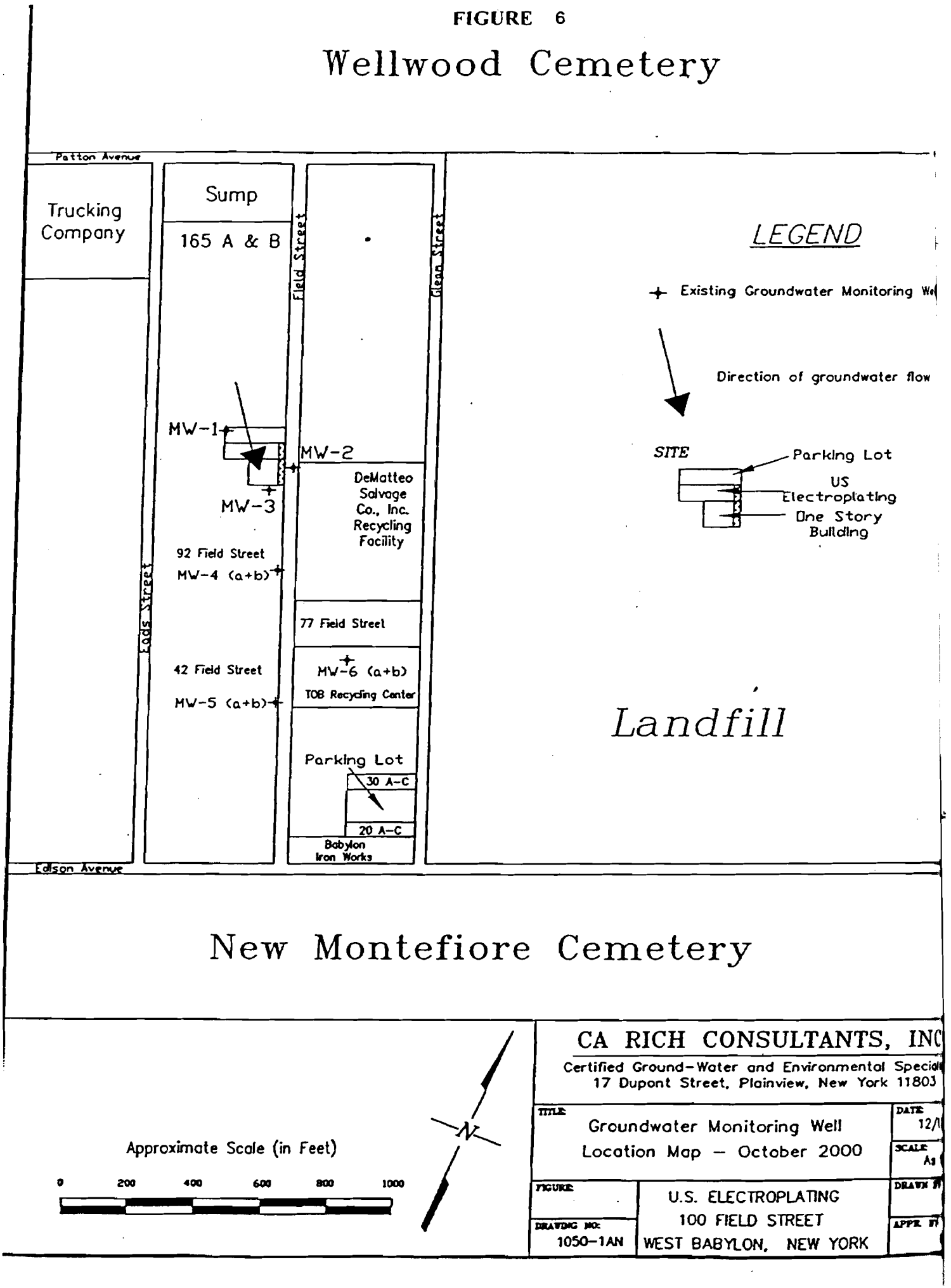

Wellwood Cemetery
Patton Avenue
Trucking Company
Sump
165 A & B
Field Street
Glenn Street
Eads Street
MW-1
MW-2
MW-3
DeMatteo Salvage Co., Inc. Recycling Facility
92 Field Street
MW-4 (a+b)
77 Field Street
42 Field Street
MW-5 (a+b)
MW-6 (a+b)
TOB Recycling Center
Parking Lot
30 A-C
20 A-C
Babylon Iron Works
Edison Avenue
LEGEND
Existing Groundwater Monitoring We
Direction of groundwater flow
SITE
Parking Lot
US Electroplating
One Story Building
Landfill
New Montefiore Cemetery
Approximate Scale (in Feet)
0
200
400
600
800
1000
N
CA RICH CONSULTANTS, INC
Certified Ground-Water and Environmental Specia
17 Dupont Street, Plainview, New York 11803
TITLE:
Groundwater Monitoring Well
Location Map – October 2000
DATE:
12/
SCALE:
As
FIGURE:
DRAWING NO:
1050-1AN
U.S. ELECTROPLATING
100 FIELD STREET
WEST BABYLON, NEW YORK
DRAWN BY
APPR. BY

FIGURE 7

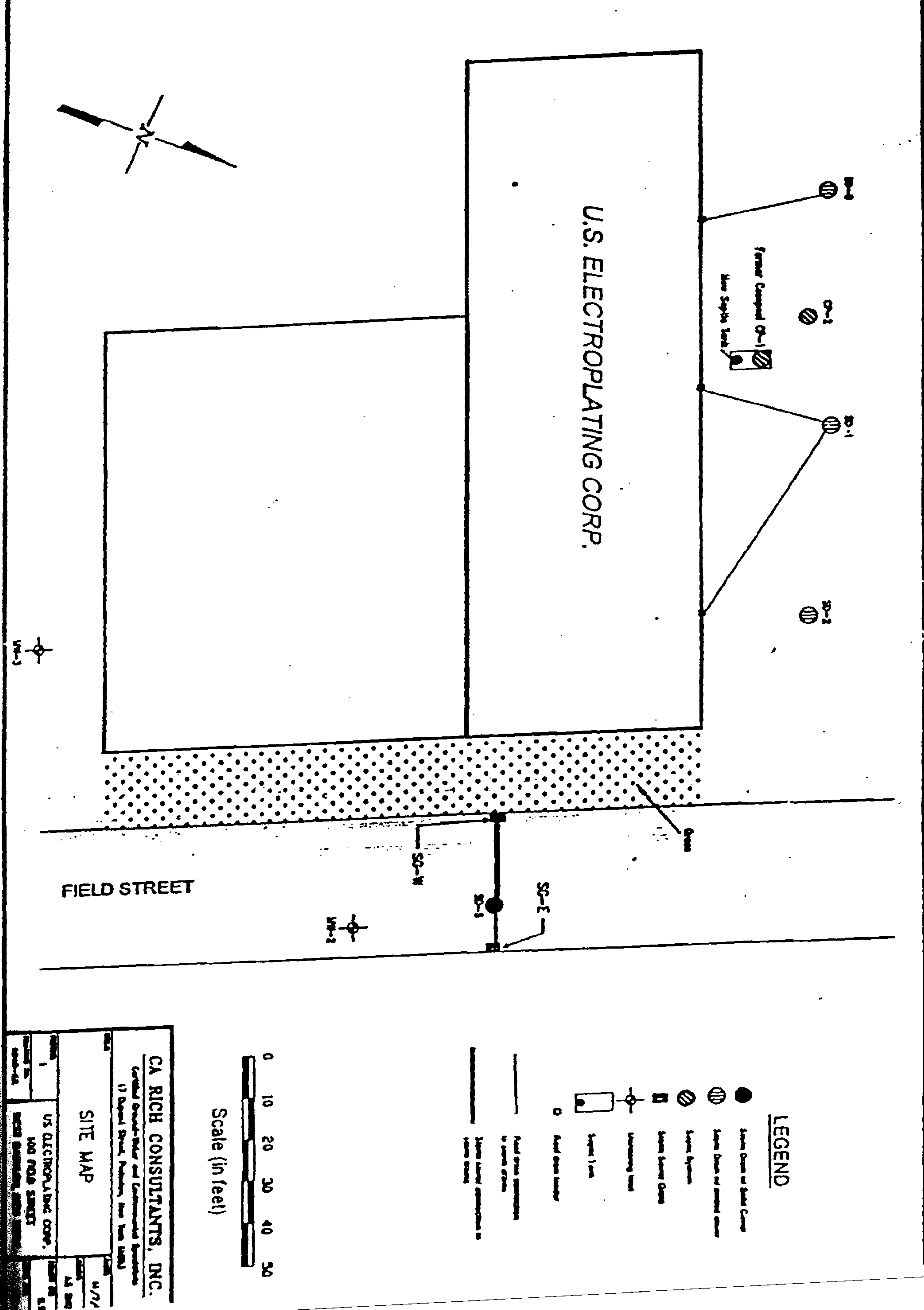

N
U.S. ELECTROPLATING CORP.
FIELD STREET
LEGEND
Scale (in feet)
0
10
20
30
40
50
CA RICH CONSULTANTS, INC.
SITE MAP
US ELECTROPLATING CORP.
100 FIELD STREET

Table 1
Nature and Extent of Contamination

MEDIA	CLASS	CONTAMINANT OF CONCERN	CONCENTRATION RANGE	FREQUENCY of EXCEEDING SCGs	SCG
Groundwater **(ppb)**	Metals	Cadmium	ND to 2,000	9 out of 33	5
		Chromium	ND to 485	2 out of 33	50
		Nickel	ND to 1,740	1 out of 24	100
Subsurface Soils **(ppm)**	Metals Before IRM	Cadmium	84.5 to 1,230	8 out of 8	10*
		Chromium	53.9 to 1,660	8 out of 8	50*
	Metals After IRM	Cadmium	1.9 to 63.6	6 out of 8	10*
		Chromium	6.95 to 94.2	3 out of 8	50*
Near Surface Soils (Below pavement around Storage Shed) **(ppm)**	Metals	Cadmium	0.23-9.3	0 out of 5	10*
		Chromium	5.6-21.3	0 out of 5	50*
		Zinc	11.9-21.8	2 out of 5	20

* Recommended SCG for soil

RESPONSIVENESS SUMMARY

to the
U. S. Electroplating Site
Proposed Remedial Action Plan
Town of Babylon, Suffolk County
Site No. 152027

The Proposed Remedial Action Plan (PRAP) for the U. S. Electroplating Site was prepared by the New York State Department of Environmental Conservation (NYSDEC) and issued to the local document repository on October 9, 2001. This Plan outlined the preferred remedial measure proposed for the remediation of the contaminated soil and sediment at the U. S. Electroplating site. The NYSDEC proposed No Further Remedial Action with continued groundwater monitoring as the preferred remedial alternative for the site.

The release of the PRAP was announced via a notice to the mailing list, informing the public of the PRAP's availability.

A public meeting was held on October 24, 2001 which included a presentation of the Remedial Investigation (RI) and the Feasibility Study (FS) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. No comments were received at the public meeting, nor were any written comments received during the comment period which ended on November 8, 2001.

APPENDIX B

Administrative Record

1. Phase II Investigation, U.S. Electroplating Corp., April, 1990, including the October, 1990 addendum, by LeRoy Callender, P.C.

2. Remedial Investigation Report, U.S. Electroplating Corp., May 2001, by C. A. Rich Consultants, Inc.

3. Proposed Remedial Action Plan, dated October 2001, by the New York State Department of Environmental Conservation