

Holzmacher, McLendon & Murrell, P.C. ▸ H2M Associates, Inc.
H2M Labs, Inc. ▸ H2M Architects & Engineers, Inc.

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August 4, 2006

Steven M. Scharf, P.E.
Project Engineer
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233 7015

Re: Town of Oyster Bay
Interim Remedial Measure at Bethpage Community Park
Sampling Plan for Potential Backfill from Borella Field
H2M Project No. TOBY 04-02

Dear Mr. Scharf:

On behalf of the Town of Oyster Bay (TOB), Holzmacher, McLendon & Murrell, P.C. (H2M) provides herein a revised environmental sampling work plan for soil stockpiled at the Town of Oyster Bay Department of Public Works (DPW) facility at 150 Miller Place, Syosset, New York. The purpose of the sampling work plan is to confirm the environmental quality of the TOB DPW soil stockpile.

H2M submitted a proposed sampling plan in a letter dated July 6, 2006. The proposed sampling plan has been revised, as provided herein, to address your July 26, 2006 comments. Specific comments within your letter are addressed below:

Comment 1. Page 1 Second Paragraph and Figure 1: Pile two indicates a substantial amount of asphalt and construction and demolition debris. Are all these materials from Borella field, or is there an additional source, or sources, such as Town highway work, etc.? If so, what significance does this have on using this material for backfill?

Response to Comment 1: All materials within the two stockpiles were sourced from Borella Field. The noted asphalt and concrete was limited to a discrete area of stockpile 2 and was derived from parking, curb and sidewalk areas adjacent to baseball and soccer fields at Borella Field. These materials were removed from Borella Field last year during renovation of the site. The asphalt and concrete materials will not be utilized or considered as potential backfill for Bethpage Community Park. The portion of stockpile 2 with asphalt and concrete will be visually segregated.

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Any material associated with Town highway operations is maintained in a separate area and has not contacted or been intermingled with the stockpiles from Borella Field.

Comment 2. Page 2, Second Paragraph, Quality Assurance:

Comment 2a. The work plan will include a table that references proposed locations and approximate depth, analytical methods, and number of quality assurance samples. Also, the letter work plan does not list all the analytical methods, for example, 8081, no longer includes PCB analysis. Please revise the plan accordingly.

Response to Comment 2a: The work plan provided herein includes a table with all sampling and analysis details, as identified.

Comment 2b. The work plan needs to reference the approved IRM Work Plan Quality Assurance Project Plan.

Response to Comment 2b: The environmental sampling for the Borella Field soil stockpiles will be performed in accordance with the NYSDEC approved IRM Work Plan Quality Assurance Project Plan (IRM QAPP).

Comment 2c. The report generated by this work plan will be used in support of using these materials as clean back fill for the Bethpage Community Park. As such, the final report needs to include the Data Usability Summary Report (DUSR). The work plan also needs to state that this report will be submitted to NYSDEC for review and approval.

Response to Comment 2c: In accordance with the approved IRM QAPP, all soil analytical results and QA/QC sample results will be subjected to independent data validation. The report for sampling of the stockpiles will include a DUSR prepared by the independent data validator. Furthermore, the sampling report will be submitted to NYSDEC for review and approval.

Stockpiled Soil Sampling Work Plan

The NYSDEC-approved Remedial Action Plan for the Bethpage Community Park located in Bethpage, New York includes the excavation and off-site disposal of approximately 100,000 cubic yards of contaminated soil. Site restoration will therefore necessitate a nearly equivalent volume of clean backfill. The Town of Oyster Bay currently has two stockpiles of approximately 40,000-60,000 cubic yards of soil at their DPW yard in Syosset, NY. The Town desires to utilize



Mr. Steven M Scharf
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a portion of this stockpile, estimated at 20,000 cubic yards, as backfill for the Bethpage Community Park.

The stockpiled material was sourced from a redevelopment project at an approximately 11-acre Town park known as Borella Field, located on Plainview Road in Bethpage, New York. The excess soil resulted from leveling an elevated area at the Borella Field to increase the useful Park area for ballfields. Some asphalt and concrete was also removed from parking, sidewalk and curb areas during the Borella Field redevelopment. This material is primarily segregated to a distinct area of one of the stockpiles. The portion of the stockpile with asphalt and concrete will not be used or considered for use as backfill for Bethpage Community Park. Any soil with asphalt or concrete will be visually segregated.

Historically, Borella Field has been utilized as agricultural land and recreational ballfields (i.e., baseball and soccer). Based on aerial photographs, included in a Phase I Environmental Site Assessment (ESA) for the subject property, performed by Cashin Associates, P.C., prior to 1953 the subject property was agricultural land. Between 1953 and 1966, baseball fields were constructed on the subject property. The Phase I ESA, dated October 28, 2002, was authorized by the Town prior to the Borella Field redevelopment. The Phase I ESA did not identify any recognized environmental conditions at Borella Field.

On behalf of the Town, the stockpiled soils have been sampled and analyzed by Soil Mechanics (Seaford, NY) to determine whether the soil is geotechnically suitable for use as fill. Although significant fines were identified within some areas of the stockpiled soil, a protocol has been identified that would permit blending of this soil with bankrun sand. If the soil stockpiles are deemed acceptable for use with regards to environmental quality, the Town anticipates contracting with Soil Mechanics to direct the selection of geotechnically suitable soil during loading for transport to Bethpage Community Park.

In order to confirm the environmental quality of the soils removed from Borella Field, a sampling plan is proposed consisting of the collection of eleven (11) composite samples from the stockpiled soils. Each composite sample will be comprised of five (5) grab samples and analyzed for PCBs (method 8082), priority pollutant metals (method 6010, and 245.5 for mercury), VOCs (method 8260, target compound list), SVOCs (method 8270, target compound list), chlorinated pesticides (method 8081), organophosphate pesticides (method 8141) and herbicides (8151). An excavator will be utilized to assist with the collection of the grab samples from within the stockpiles. The stockpiles are estimated to be as high as 15 feet or more in some locations. For areas accessible to the excavator, (i.e., typically around the perimeter) samples will be collected from depths of one to four feet beneath the surface of the stockpile. For areas

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that are not accessible to the excavator, soil grab samples will be collected manually with a decontaminated hand auger from depths of approximately 6” to 2 feet beneath the surface.

The sampling will be performed following the protocols established in the approved IRM QAPP. A set of QA/QC samples will be collected in addition to the eleven composite samples including a trip blank, field blank, blind duplicate, and matrix spike/matrix spike duplicate. Analytical reporting will follow the NYSDEC ASP Category B data package.

Sampling Location ⁽¹⁾	Composite Samples	Sampling Depth	Analysis	Analytical Method
1	1(a) – 1(e)	6” – 4’	PCBs	8082
2	2(a) – 2(e)		Metals (Priority Pollutant)	6010 (Hg – 245.5)
3	3(a) – 3(e)		VOCs (Target Compound List)	8260
4	4(a) – 4(e)		SVOCs (Target Compound List)	8270
5	5(a) – 5(e)		Chlorinated Pesticides	8081
6	6(a) – 6(e)		Organophosphate Pesticides	8141
7	7(a) – 7(e)		Herbicides	8151
8	8(a) – 8(e)			
9	9(a) – 9(e)			
10	10(a) – 10(e)			
11	11(a) – 11(e)			

⁽¹⁾ Reference Figure 1. Soil Pile Schematic

Analytical sampling results will be compared with TAGM #4046 Recommended Soil Cleanup Objectives. All soil results including QA/QC sample results will be subjected to independent data validation. Independent data validation findings will be presented in a Data Usability Summary Report (DUSR) that will be included as part of the final soil sampling report. The sampling report will be prepared to summarize the sampling activity, analytical results and conclusions regarding the environmental quality of the soil stockpiles. The sampling report will be submitted to the NYSDEC for review and comment.

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As mentioned, following confirmation of environmental quality of the stockpiled soil, the plan is to have a representative from Soil Mechanics direct the loading and segregation of the stockpile so as to identify and avoid the use of geotechnically inferior fill as well as any asphalt, concrete, debris or organic matter that may be present. Questionable or inferior materials will be immediately segregated and not considered as potential fill for Bethpage Community Park.

Previously submitted to you in our letter dated July 6, 2006, were copies of the Phase I ESA for Borella Field with aerial photographs and Borella Field site photographs. Attached herein, please find Figure 1, which is a revised schematic of the two soil stockpiles at the Town yard in Syosset.

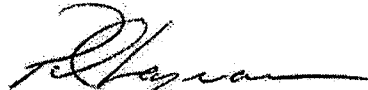
If you should you have any questions regarding this submittal, please feel free to contact Phil Schade at (631) 756-8000 extension 1623 or Paul Lageraen at extension 1483.

Very truly yours,

HOLZMACHER, McLENDON & MURRELL, P.C.



Philip J. Schade, P.E.



Paul R. Lageraen, P.E.

cc: James Byrne, P.E., Commissioner of Public Works/Town of Oyster Bay
Richard Betz, Commissioner of Parks/Town of Oyster Bay
Matt Russo/Town of Oyster Bay
Phyllis Barry/Town of Oyster Bay
Theodore W. Firetog, Esq.
John Molloy, P.E./H2M
Richard Humann, P.E./H2M

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July 6, 2006

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Project Engineer
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233 7015

Re: Town of Oyster Bay
Interim Remedial Measure at Bethpage Community Park
Borella Field – Alternate Source of Backfill
H2M Project No. TOBY 04-02

Dear Mr. Scharf:

On behalf of the Town of Oyster Bay, Holzmacher, McLendon & Murrell, P.C. (H2M) provides herein a proposed environmental sampling plan for soil stockpiled at the Town of Oyster Bay Department of Public Works (DPW) facility at 150 Miller Place, Syosset, New York.

As you are aware, the NYSDEC-approved Remedial Action Plan for the Bethpage Community Park located in Bethpage, New York includes the excavation and off-site disposal of approximately 100,000 cubic yards of contaminated soil. Site restoration will therefore necessitate a nearly equivalent volume of clean backfill. The Town of Oyster Bay currently has two stockpiles of approximately 40,000-60,000 cubic yards of soil at their DPW yard in Syosset, NY. The Town desires to utilize a portion (approx. 20,000 cubic yards) of this stockpile as backfill for the Bethpage Community Park.

The stockpiled soil was sourced from a redevelopment project at an approximately 11-acre Town park known as Borella Field, located on Plainview Road in Bethpage, New York. The excess soil resulted from leveling an elevated area at the Borella Field to increase the useful Park area for ballfields. Historically, Borella Field has been utilized as agricultural land and recreational ballfields (i.e., baseball and soccer). Based on aerial photographs, included in a Phase I Environmental Site Assessment (ESA) for the subject property, performed by Cashin Associates, P.C., prior to 1953 the subject property was agricultural land. Between 1953 and 1966, baseball fields were constructed on the subject property. The Phase I ESA, dated October 28, 2002, was authorized by the Town prior to the Borella Field redevelopment. The Phase I ESA did not identify any recognized environmental conditions at Borella Field.

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Borella Field – Alternate Source of Backfill
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On behalf of the Town, the stockpiled soils have been sampled and analyzed by Soil Mechanics (Seaford, NY) to determine whether the soil is geotechnically suitable for use as fill. Although significant fines were identified within some areas of the stockpiled soil, a protocol has been identified that would permit blending of this soil with bankrun sand.

To confirm the environmental quality of the soils removed from Borella Field, a sampling plan is proposed consisting of the collection of eleven (11) composite samples from the stockpiled soils. Each composite sample will be comprised of five (5) grab samples and analyzed for PCBs, metals (priority pollutant), VOCs, SVOCs, pesticides (8081, 8141) and herbicides (8151). An excavator will be utilized to collect the random grab samples from within the stockpiles.

Analytical sampling results will be compared with TAGM #4046 Recommended Soil Cleanup Objectives. Only stockpiled soil meeting the cleanup objectives will be considered for use as potential fill. Following confirmation of environmental quality of the stockpiled soil, the plan would be to have a representative from Soil Mechanics direct the loading and segregation of the stockpile so as to identify and avoid the use of geotechnically inferior fill as well as any asphalt, concrete, debris or organic matter that may be present. A portion of one stockpile was noted to contain some asphalt and concrete. This area will be immediately segregated and not used as potential fill for Bethpage Community Park.

For your review, included herein is a copy of the Phase I ESA with aerial photographs and Borella Field site photographs. In addition, a schematic is provided of the two soil stockpiles at the Town yard in Syosset with the proposed sampling plan.

In order to make a final determination on the potential use of the stockpiled soils, it is requested that an accelerated review of the proposed sampling plan be performed. A response by July 14, 2006 would be appreciated.

If you should you have any questions, please feel free to contact me at (631) 756-8000 extension 1623.

Very truly yours,

HOLZMACHER, McLENDON & MURRELL, P.C.



Philip J. Schade, P.E.

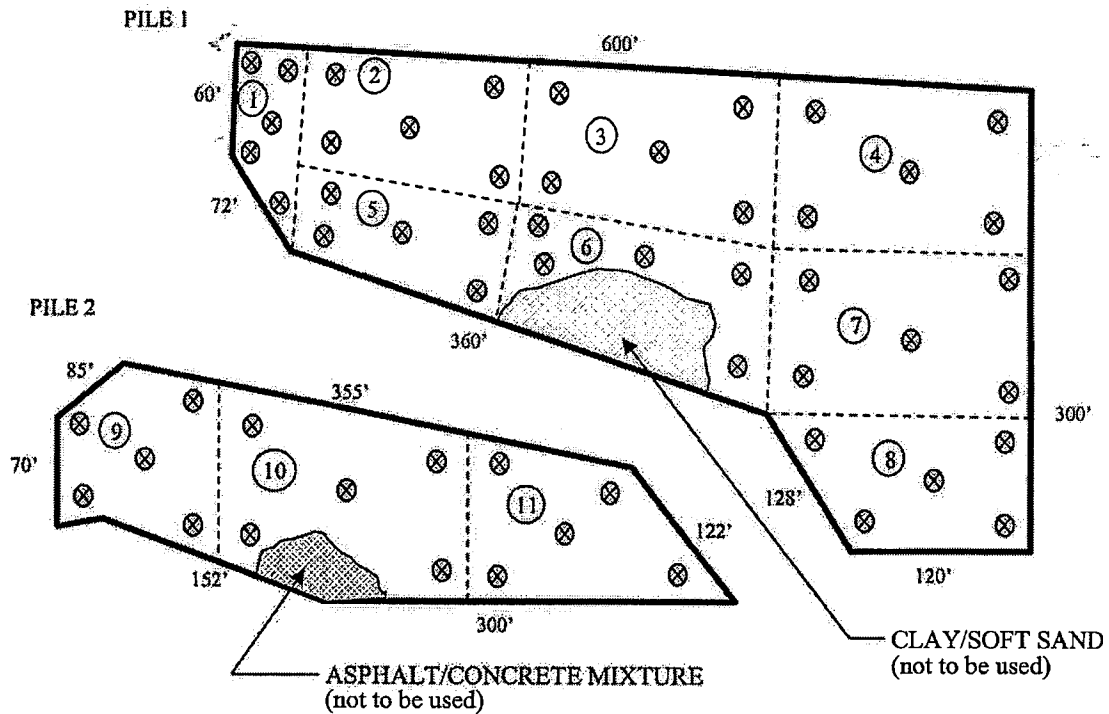


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Interim Remedial Measure – Bethpage Community Park
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cc: James Byrne, P.E., Commissioner of Public Works/Town of Oyster Bay
Richard Betz, Commissioner of Parks/Town of Oyster Bay
Matt Russo/Town of Oyster Bay
Phyllis Barry/Town of Oyster Bay
Theodore W. Firetog, Esq.
John Molloy, P.E./H2M
Richard Humann, P.E./H2M

Proposed Environmental Sampling Plan of Town of Oyster Bay Soil Stockpiles at Syosset DPW Yard

- Two stockpiles total approx. 40-60,000 cubic yards.
- Stockpiles subdivided into (11) areas, each measuring approx. 3,500 – 5,500 cubic yards.
- (11) Composite samples for PCBs, Metals, VOCs, SVOCs, Pesticides and Herbicides.
- *Each composite to comprise (5) grab samples.
- **Any visible asphalt/concrete or organic matter (i.e., tree roots) to be segregated and excluded as potential fill.



LEGEND:

- ② Subdivided Soil Stockpile Area and Sample Number
- ⊗ Approximate Grab Sample Location

NOTES:

Dimensions are approximate.

FIGURE 1. SCHEMATIC OF SOIL PILES AT TOWN OF OYSTER BAY DPW YARD
 (Source of soil: Regrading at Borella Field, Plainview Road, Bethpage, NY)

TOWN OF OYSTER BAY
 150 MILLER PLACE
 SYOSSET, NEW YORK

H2M GROUP
 ENGINEERS • ARCHITECTS • SCIENTISTS • PLANNERS • SURVEYORS

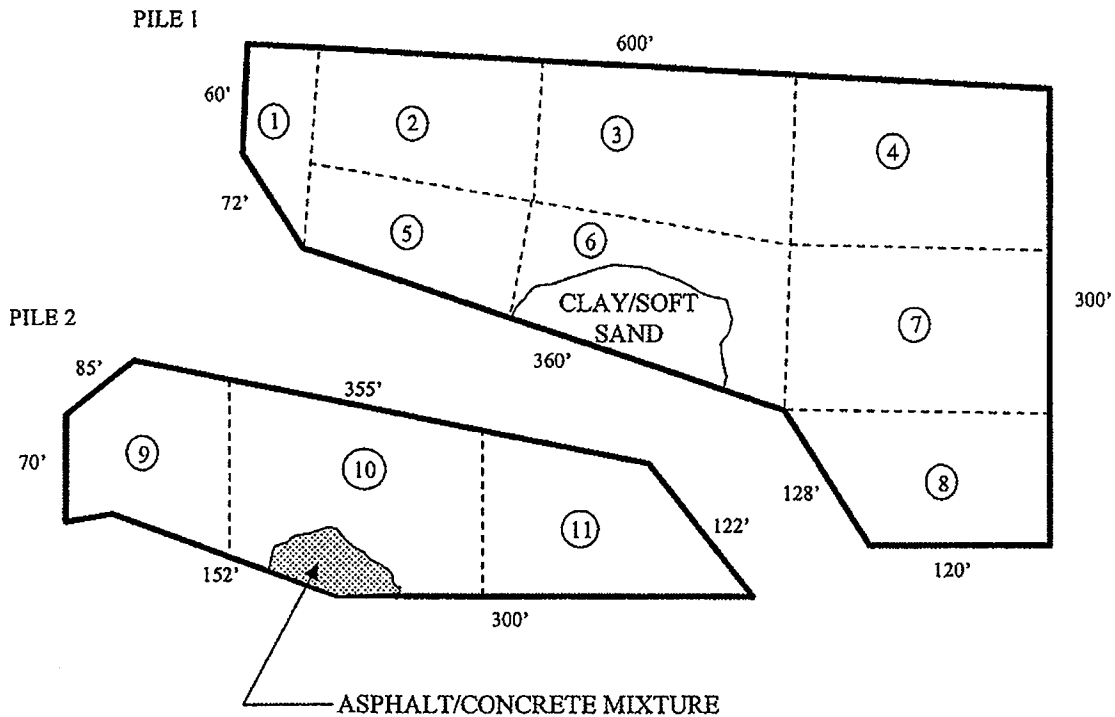
Effects of Environmental Factors on Corrosion of Steel in Soils (1)			
Typical Resistivities of Some Waters and Soil Materials (ohm-cm) (1)			
Seawater = 40-80 ohm-cm			
Estuary water = 400-1,000 ohm-cm			
Potable water = 500-10,000 ohm-cm			
Loam = 750-8,000 ohm-cm			
Chalk = 4,000-20,000 ohm-cm			
Clay = 3,500-50,000 ohm-cm			
Sandstone = 10,000-100,000 ohm-cm			
Limestone = 10,000-100,000 ohm-cm			
Sand & Gravel = 100,000-900,000 ohm-cm			
Granite = 100,000-2,500,000 ohm-cm			
Gneiss = 750,000-5,000,000 ohm-cm			
Environmental Factors		Pitting Rate Average (mm/yr) (1)	
Resistivity (ohm cm)			
<1000		0.2 mm/yr	
1,000-5,000		0.14 mm/yr	
5,000-12,000		0.14 mm/yr	
>12,000		0.11 mm/yr	
Drainage			
Very Poor		0.28 mm/yr	
Poor		0.14 mm/yr	
Fair		0.16 mm/yr	
Good		0.11 mm/yr	
Kirshoff Residence			
10 Lakeview Rd			
North Salem			
Installation of Tank = 1975			
SITE SPECIFIC PARAMETERS			
Thickness of tank (t) = 0.125inches			
Soil Composition(Clay)/ Resistivity = 50,000 ohm-cm			
Clay = Poor Drainage			
CALCULATIONS			
Corrosion Rate = (Average Pitting Rate + Drainage Rate)/2			
$(0.11 \text{ mm/yr} + 0.14 \text{ mm/yr}) / 2 = 0.195 \text{ mm/yr}$			
To Convert mm to inches			
(Z mm/yr x in./25.4mm (Standard))			
$0.125 \text{ mm/yr} \times \text{in./}25.4 \text{ mm} = 0.00492126 \text{ in/yr} = \text{Corrosion Rate (in/yr)}$			
Time of Failure In Years After Installation = Tank Thickness(t)/ Corrosion Rate			
$\text{Tank thickness (0.125 in)} / \text{Corrosion Rate}(0.00492126) = 25.4 \text{ years}$			
Date of Failure from 1976 Construction/Installation			
$1975 + 25.4 \text{ yrs} = 2000.4$			
Rounded Date (year) of Failure =2000			

(1)Original data are based on NBS field tests on open-hearth steel for 12 years at 44 locations in the United States.

Source: M. Romanoff, Underground Corrosion, NIST, 1957.

Proposed Environmental Sampling Plan of Town of Oyster Bay Soil Stockpiles at Syosset DPW Yard

- Two stockpiles total approx. 40-60,000 cubic yards.
- Stockpiles subdivided into (11) areas, each measuring approx. 3,500 – 5,500 cubic yards.
- (11) Composite samples for PCBs, Metals, VOCs, SVOCs, Pesticides (8081, 8141), and Herbicides (8151)
- *Each composite to comprise (5) grab samples collected from random areas within the pile using an excavator.
- **Any visible asphalt/concrete or organic matter (i.e., tree roots) to be segregated and excluded as potential fill.



Schematic of soil piles located at Town of Oyster Bay DPW facility in Syosset, NY.

Source of soil: Regrading at Borella Field (Former farm and baseball fields), Plainview Road, Bethpage, NY

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NEW YORK

H2M GROUP
ENGINEERS • ARCHITECTS • SCIENTISTS • PLANNERS • SURVEYORS

PHASE I ENVIRONMENTAL SITE ASSESSMENT

FOR THE PROPERTY LOCATED AT:

**BORELLA FIELD
PLAINVIEW ROAD
BETHPAGE, NEW YORK 11803**

PREPARED FOR:

**TOWN OF OYSTER BAY
OFFICE OF THE SUPERVISOR
TOWN HALL
OYSTER BAY, NEW YORK 11771-1592**

PREPARED BY:

**CASHIN ASSOCIATES, P.C.
1200 VETERANS MEMORIAL HIGHWAY
HAUPPAUGE, NEW YORK 11788**

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
FOR THE PROPERTY LOCATED AT:**

**BORELLA FIELD
PLAINVIEW ROAD
BETHPAGE, NEW YORK 11803**

CASHIN ASSOCIATES, P.C. REFERENCE NO. 4061.02

Project Manager:

_____ Date: 10/28/02
Robert Maltempo, P.E.

Inspector:

_____ Date: 10/28/02 **Inspection**
Robert Coryell Date: 10/4/02

Director of Environmental Programs:

_____ Date: 10/28/02
Gregory T. Greene

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

FOR THE PROPERTY LOCATED AT:

BORELLA FIELD
PLAINVIEW ROAD
BETHPAGE, NEW YORK 11803

1.0 INTRODUCTION & METHODOLOGY

1.1 Purpose of the Phase I Environmental Assessment

This report outlines the findings of a Phase I Environmental Assessment conducted by Cashin Associates, P.C. (CA) for the property located along Plainview Road, Borella Field, Bethpage, New York 11803. The subject property covers 11.11 acres of land consisting of ballfields, a small parking lot and woodlands, and it is presently owned by the Bethpage School District.

This report has been prepared in accordance with the recommended guidelines as presented in American Society for Testing Materials (ASTM) E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The goal of this assessment is to identify recognized environmental conditions on the site, as defined by ASTM E 1527-00. The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that

indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

1.2 Methodology

The methodology of this assessment consists of four basic components, as recommended in ASTM E 1527-00, plus the completion of several additional tasks provided by CA, as part of the evaluation of "Business Environmental Risk", as defined under ASTM. This methodology is summarized below.

1.2.1 Records Review

A search of available records is performed to obtain and review information that will help to identify recognized environmental conditions in connection with the property. Records are reviewed for the site itself as well as for the area around the site within a minimum search distance recommended by ASTM E 1527-00. This records review includes standard Federal and State environmental record sources such as the Federal National Priorities List (NPL), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), Resource Conservation and Recovery Act (RCRA) Generator, Emergency Response Notification System

(ERNS), and other lists, and State Solid Waste Facility, Petroleum and Chemical Bulk Storage, and State (and local) spills.

Additional records review includes the evaluation of current or historical recognized environmental concerns through the following sources:

- The current United States Geologic Survey (USGS) 7.5-Minute Topographic Map and other physical setting maps.
- Historical use maps, such as the Sanborn Fire Insurance maps, if available.
- Historical Aerial Photographs.
- Other historical land use records.
- Local municipal building department records.
- Other municipal agency records.

1.2.2 Site Reconnaissance

A site visit is performed to visually and physically observe the site and any associated structures, facilities, or materials on the site, to obtain information on the likelihood of identifying recognized environmental conditions, as recommended by ASTM E 1527-00 Section 8. A general reconnaissance of surrounding properties is also performed to determine the potential of off-site

conditions to affect the subject site. A list of references utilized for this assessment is provided in Section 6.

The site visit conducted by CA for this property was performed by a team of qualified environmental personnel, managed by a Professional Engineer licensed in the State of New York, and a New York State licensed asbestos inspector a New York State licensed asbestos inspector. The site visit includes inspection for potential recognized environmental concerns including: presence of hazardous substance and petroleum products; storage tanks; drums and other containers for hazardous materials; PCB-containing equipment; drains; sumps; stained soil and pavement; stressed vegetation; solid waste; liquid wastes; and on-site septic systems. The site visit was also conducted to obtain field information on general site geologic conditions, topography, utility supplies, and nature/condition of any on-site structures, facilities and equipment.

1.2.3 Interviews with Owners, Occupants and Other Knowledgeable Individuals

Interviews are conducted to obtain information relating to current and former site uses, site history, and possible environmental conditions associated with the site. In general, individuals interviewed as part of this work include:

current owner/owner's representative; key site manager; occupants/tenants for commercial uses on the site. A list of contacts made for this assessment is provided in Section 6.

1.2.4 Business Environmental Risk Investigations

Although not within the scope of ASTM E 1527-00 for recognized environmental concerns, the environmental assessment prepared by CA includes an evaluation of several additional environmental issues to provide an evaluation of Business Environmental Risk, as identified under the ASTM practice as warranted for consideration by parties to a commercial real estate transaction. This evaluation is not intended to provide a thorough or comprehensive analysis of the respective conditions, but instead provide a preliminary indication of the potential for conditions of concern. These additional tasks include:

- A preliminary visual inspection of the site and any building interiors to determine if friable asbestos-containing building materials (ACM) may be present. If appropriate, samples of suspected ACM are collected for laboratory analysis. (No buildings were present at this site).

- A preliminary inspection for major sources of electromagnetic fields (e.g. high tension wires, electrical sub-stations, etc.).
- Determination of the potential for existence of radon in soil at the subject site.
- A preliminary visual inspection of painted surfaces to determine if lead-based paint may be present. If appropriate, samples of suspected lead-based paint are collected for laboratory analysis. (No buildings were present at this site).
- Review of area maps to determine if wetlands, flood plains, and other environmentally sensitive areas are present on the site.

1.2.5 Evaluation and Report Preparation

The information obtained under the above tasks is evaluated to assess recognized environmental conditions associated with the subject site. This report represents the end product of this analysis, and contains a summary of findings and recommendations. Recommendations for Phase II work are also provided as appropriate. Documentation including references, test results, maps and other important materials are presented as appendices.

1.2.6 Exceptions to ASTM E 1527-00

This report complies with the recommendations of ASTM E 1527-00, with no exceptions.

1.2.7 Assessment Limitations

As specified in ASTM E 1527-00, Section 4.5.1, an environmental site assessment cannot wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of the assessment is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with the property, within reasonable limits of time and cost. The Phase I Environmental Site Assessment is a visual, non-intrusive assessment where investigation includes review of records, interviews with site personnel and inspection of visible conditions. The conclusions of the assessment are based upon readily accessible and visible areas. No conclusions are provided on items hidden behind construction or completely underground and without visible evidence.

2.0 SITE DESCRIPTION AND HISTORY

The following site description is based upon a field inspection that was conducted on October 4, 2002, by a CA inspection team of qualified environmental personnel. This description is also based on CA's review of the USGS 7.5-Minute Topographical Map and other physical setting sources including soil type maps, geological reports and road maps. The property representative, Mr. Joseph Marchesiello, Assistant Superintendent for Business (Bethpage Union Free School District), provided permission to CA for site access.

2.1 Site Location and Description

The subject parcel is located on the east side of Plainview Road, between Myron Road to the north, and Fams Drive to the south. The site is located in Bethpage, in the Town of Oyster Bay, Nassau County, New York. A site location map has been provided in Appendix I.

2.2 Present Use(s) of the Site

The subject property is approximately 11.11 acres, and is currently known as Borella Fields. The parcel primarily consists of grass areas which are set up for ballfields and soccer fields. The site also contains woodlands with vegetative growth and a small asphalt parking area. The subject property is currently owned by the Bethpage School

District, but is licensed to the Town of Oyster Bay for the use of the athletic fields. There are currently no retail, manufacturing or industrial operations, or buildings of any kind, located on the site.

2.3 Surrounding Land Use

The subject property is located in a developed suburban neighborhood. Land uses immediately adjacent to the site consist primarily of: multi-story residential dwellings to the north; multi-story residential dwellings to the east; multi-story residential dwellings to the south; and a recharge basin to the west across Plainview Road.

Development of the general neighborhood in the area of the site consists primarily of multi-story residential dwellings, parks, multi-story commercial/retail buildings, churches, and schools, typical for this developed suburban area. The Seaford Oyster Bay Expressway is located approximately 1/4 mile to the west of the subject site. The Bethpage Park is located approximately 1/2 mile to the south of the subject site. The Long Island Expressway is located approximately 1-1/2 miles to the northeast of the subject property.

2.4 Topography and Geological Setting

A review of the USGS topographic map (Huntington Quadrangle) reveals that the subject site is located approximately at an elevation of 140 feet above sea level, in an area that gradually slopes downward to the south. The subject area itself slopes to the east, with an approximate elevation change of 25 feet.

The geology of the subject site consists of a thick layer of loose and permeable glacial sediments, comprising layers of gravel, sand and clay, which overlays thick layers of Cretaceous-age unconsolidated deposits. These unconsolidated sediments lie atop metamorphic rocks of Precambrian Age. Several groundwater aquifers exist in the unconsolidated sediments, the most shallow of which is the Upper Glacial Aquifer. The water table at the subject site is approximately 40 feet below grade level. Review of the Nassau County Department of Health Services groundwater table contour map indicates that the horizontal flow of the upper groundwater aquifer in this area is to the southeast. Although the Upper Glacial Aquifer is not utilized by the local water supply company (Long Island Water Corporation) for drinking water due to regional pollution, the next lowest aquifer, the Magothy Aquifer, is the primary source of local domestic water supply.

2.5 Site History

History of the site was determined based on interviews with property representative, Mr. Joseph Marchesiello, Assistant Superintendent for Business (Bethpage School District). Mr. Marchesiello stated that to the best of his knowledge the subject site has been owned by the school district and leased to the Town of Oyster Bay as athletic fields for the past approximately 25 years. CA was forwarded documentation revealing a license agreement between the School District and the Town of Oyster Bay which was dated back to 1976. Mr. Marchesiello stated that he was unaware of the use of the property prior to the athletic fields.

Review of the historical aerial photographs obtained from Environmental Data Resources, Inc. (EDR), of Southport, Connecticut revealed the following.

2.5.1 Historical Aerial Photograph Review

A review of historical aerial photographs (dated 1953, 1966, 1974, 1980, and 1994) revealed:

1953 The subject property appears on this aerial photograph to have been developed sometime before 1953 with two residential dwellings and agricultural farmlands. The adjacent properties appear to have been

developed sometime before 1953 with agricultural farmland to the north, a multi-story residential dwelling and agricultural farmland to the west across Plainview Road, agricultural farmland to the south, and agricultural farmland to the east. The surrounding area appears to consist primarily of agricultural farmlands, woodlands, and residential dwellings.

1966 The subject property appears on this photograph to have been altered sometime between 1953 and 1966 with the removal of the two small residential dwellings and farmland, and developed with a park consisting of three baseball ballfields and a parking lot. The adjacent properties appear on this photograph to have been developed since 1953 with residential dwellings to the north, residential dwellings to the east, a recharge basin to the west across Plainview Road, and the removal of the farmlands to the south. The surrounding area has undergone significant development since 1953 with residential dwellings, commercial buildings, and Seaford Oyster Bay Expressway.

1974 The comparison of the 1966 photograph to the 1974 photograph shows no significant changes to the subject property. The surrounding

area has undergone further development since 1966 with residential dwellings, few scattered commercial buildings.

1980 The comparison of the 1974 photograph to the 1980 photograph appears to show no significant changes to the subject property. The surrounding area appears on this photograph to have undergone minimal development since 1974 with residential buildings

1994 The comparison of the 1980 photograph to the 1994 photograph appears to show no significant changes to the subject property. The adjacent property to the south appears on this photograph to have been developed since 1980 with residential dwellings. The surrounding area appears on this photograph to have undergone minimal development with residential buildings.

The review of the historical data for the past 41 years revealed that the surrounding area had been used primarily for residential purposes, with scattered commercial use. The subject site itself was in residential and agricultural use prior to the 1960's and has been utilized as athletic fields the last approximately 40 years. There was no evidence in the historical review to indicate that the site has ever been subjected to on-site dumping. CA's review of the historical information indicated no historical recognized environmental

concerns associated with the subject property. Copies of the historical aerial photographs have been included in Appendix V.

3.0 FINDINGS OF RECORDS REVIEW

A review of Federal, State and local records pertaining to potential recognized environmental conditions was performed based on an Environmental Data Resources, Inc. (Southport, Ct) database search acquired for the subject site and surrounding area. The search distances comply with those recommended by ASTM E 1527-00 Section 7. A brief description of the database review is provided below, and a copy of the search output is given in Appendix IV.

3.1 Federal Records Search

3.1.1 *National Priorities List (NPL) or Superfund*

The subject parcel is not a Federal Superfund site. There are no such sites located within a one-mile radius of the subject property.

The NPL Report, also known as the Superfund List, is an USEPA listing of uncontrolled or abandoned hazardous waste sites. This list is primarily based upon a score which the site receives from the USEPA's hazardous ranking system. These sites are targeted for possible long-term remedial action under the Superfund Act.

3.1.2 *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)*

The subject parcel is not listed on the CERCLIS database. There are no such sites located within a one-half mile radius of the subject property.

CERCLIS is a list of potential hazardous waste sites that the USEPA is investigating for hazardous substance releases. Each site is given a hazardous ranking score which determines its standing on the NPL and priorities for cleanup. The higher the score, the greater the threat to the environment, and the more rapidly the site will be addressed by the USEPA.

3.1.3 *Resource Conservation and Recovery Act (RCRA) Hazardous Waste Treatment, Storage, and Disposal Sites*

The subject site is not listed on the USEPA RCRA list. There are no such sites located within a one-quarter mile radius of the subject property.

RCRA facilities are permitted by the USEPA to generate hazardous waste and dispose of the waste legally. These facilities generally abide by USEPA regulations for storage, handling and disposal of hazardous materials.

3.1.4 *RCRA Hazardous Waste Generators and Transporters*

The subject site is not listed as a RCRA Hazardous Waste Generator and Transporter site. There are no such facilities located within a one-quarter mile radius of the subject property.

RCRA facilities are permitted by the USEPA to generate hazardous waste and dispose the waste legally. These facilities generally abide by USEPA regulations for storage, handling and disposal of hazardous materials.

3.1.5 *Emergency Response Notification System*

The subject site is not listed on the Federal database of spills compiled by the Emergency Response Notification System.

3.1.6 *Toxic Release Inventory Sites*

The subject property is not listed as a Toxic Release Inventory Site. Toxic release sites are manufacturing facilities that are required, pursuant to Section 313 of the Federal Emergency Planning and Community Right-To-Know Act, to report releases of any listed toxic chemical into the air or water, or onto the land.

3.1.7 CORRACTS (Corrective Action Report)

The subject property is not listed as a CORRACTS site. There are no such sites located within a one-mile radius of the subject property.

This database represents a list of RCRA hazardous waste generator, treatment, transporter and disposal facilities that have been identified by the USEPA for corrective action.

3.2 State and Local Records Search

3.2.1 *NYSDEC Inactive Hazardous Waste Disposal Sites (State Superfund)*

The subject parcel is not listed on the State Superfund list. There are no such sites located within a one-mile radius of the subject property.

The List of NYSDEC Inactive Hazardous Waste Disposal Sites contains summary information pertaining to those facilities that are deemed hazardous by NYSDEC.

3.2.2 *NYSDEC Hazardous Substance Waste Disposal Sites*

The subject property is not identified on this State list. There are no such sites located within a one-mile radius of the subject property.

NYSDEC maintains a database of waste disposal sites that may pose threats to public health or the environment, but cannot be remediated using monies from the Hazardous Waste Remediation Fund.

3.2.3 *NYSDEC Solid Waste Facilities*

The subject parcel is not on the NYSDEC Solid Waste Facilities List. There are no such sites located within a one-mile radius of the subject property.

3.2.4 *Local and State Petroleum Bulk Storage Sites*

The subject parcel is not listed as a petroleum bulk storage facility by the Nassau County Department of Health Services.

There are no bulk storage sites identified within a one-eighth mile radius of the subject property.

The fact that a facility is listed as a petroleum bulk storage site does not mean that it is an unsafe facility or that fuel spills will occur, but does indicate that there is a potential for spillage because there is a significant quantity of fuel stored on the site.

3.2.5 *Area Spills (NYSDEC and Suffolk County Active Toxic Spills, Leaking Underground Storage Tanks, Etc.)*

The NYSDEC Spill Logs dated October 2001 do not list the subject property as a spill site.

There are 5 spill sites listed within a one-half mile radius of the subject property. The closest spill site is listed with as 19 Ruth Place approximately 1/8 mile to the south of the subject site. On December 3, 1998, approximately 1 gallon of fuel spilled onto the concrete floor in the basement area due to a tank overfill. The spill was cleaned-up by the responsible party and was listed as closed on December 14, 1998. The next closest spill site is located at 24 Ruth Place approximately 1/8 mile to the south of the subject site. On March 29, 1988, approximately 5 gallons of fuel oil spilled onto the ground due to a tank overfill. This spill incident is listed as cleaned-up and closed on 4/18/1988.

The spill lists include relatively small incidents, such as equipment or human errors, tank overfills, and poor housekeeping. In general, the spill list records sites that were reported to the NYSDEC and are classified as “active”, “cleaned up”, or “unspecified”. The ultimate goal of the NYSDEC is to resolve all reported spill sites to a classification of “cleaned up” after investigation, monitoring or remediation activities. There is no evidence that any of the listed spills in the surrounding area have directly affected the subject property.

3.2.6 *NYSDEC Chemical Bulk Storage Sites*

The subject parcel is not listed as a chemical bulk storage facility. There are no such sites identified within a one quarter-mile radius of the subject property.

NYSDEC maintains a database of facilities that store regulated substances, as listed in 6 NYCRR Part 597, in aboveground tanks in amounts greater than 185 gallons or in underground tanks of any size.

3.2.7 *NYSDOH Radon Database*

Based on CA's experience in conducting Phase I Environmental Site Assessments throughout the region, and our knowledge of the area's hydrogeology, radon is not generally present or expected to be found at elevated levels on Long Island. This is corroborated by a Statewide testing program recently conducted by the New York State Department of Health's (NYSDOH) Bureau of Environmental Radiation. In Nassau County, the basements of 226 buildings were tested by charcoal screening for the presence of radon gas. The average quantity of radon present in these houses was 1.1 picocuries per liter (pCi/l). The USEPA has set 4 pCi/l as the acceptable level for homes. Based on this standard, the average quantity of radon gas is below the USEPA level.

A copy of the NYSDOH study results is provided in Appendix III of this report.

4.0 INFORMATION FROM SITE RECONNAISSANCE AND INTERVIEWS

4.1 On-Site Inspection of Hazardous Material Usage

The subject property is currently utilized as athletic fields, parking and open space; therefore, hazardous materials are not presently utilized at this location. CA's telephone conversation with Mr. Jim McCaffrey Town of Oyster Bay reveals that the Town of Oyster Bay maintains the fields (mowing grass) and that to the best of his knowledge they do not use any type of fertilizers or pesticides on the fields.

4.2 On-Site Storage Tanks

The subject property is currently occupied with athletic fields, parking and open space; therefore, there are currently no storage tanks utilized at this location.

4.3 On-Site PCB's

CA observed pole-mounted transformers along the north side property line of the subject property. CA observed that the transformer appeared in good condition, with no evidence of leaks or spills. This equipment reportedly is the property of the local electrical utility, the Long Island Power Authority (LIPA). LIPA is responsible for its equipment and the company reports that none of the utility-owned transformers

throughout Nassau County contain PCBs. Clean-up of any releases from these transformers would be the responsibility of LIPA.

The subject property is currently occupied with athletic fields, parking and open space; therefore, no electrical equipment or other potential sources of PCB-containing materials were observed at this location.

4.4 Asbestos Containing Material (ACM)

The subject property is currently occupied with athletic fields, parking and open space; therefore, no electrical equipment or other potential ACM was observed at this location.

4.5 Lead-Based Paint

The subject property is currently occupied with athletic fields, parking and open space; therefore, no construction treated with lead-based paint was observed at this location.

4.6 Solid Waste Handling

The subject property is occupied with athletic fields, parking and open space. Solid wastes (general trash) generated at the site are currently transferred to 55-gallon drums for regular collection by the Town of Oyster Bay for disposal.

4.7 Electromagnetic Fields

No sources of electromagnetic fields (EMFs), such as high tension wires and electrical substations, were observed in the vicinity of the subject property.

There currently are no regulations concerning the proximity of development to major sources of EMFs such as overhead high tension wires. However, high levels of EMFs are an unresolved public health issue. Some recent studies have linked the presence of elevated EMFs to increased risk of certain cancers and other illnesses. Although studies are ongoing and no definitive conclusions have been reached, the existing evidence indicates that a potential health risk may exist for individuals who are exposed to these fields. In any case, the general perception of a risk associated with major sources of EMFs can reduce the marketability and value of real estate.

4.8 Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were not observed on the subject property.

4.9 Drums

CA observed approximately six 55-gallon drums on the subject property. The drums are utilized for trash cans to collect solid waste on the site, and they are removed periodically by the Town of Oyster Bay.

4.10 Stained Soils or Pavement

No stained soils or pavement were observed by CA on the grounds of the subject property.

4.11 Stormwater and Sanitary Systems

The subject property is occupied with athletic fields, parking and open space; therefore, no sanitary waste disposal systems currently are in use at this location.

4.12 Floor Drains and Sumps

The subject property is occupied with athletic fields, parking and open space; therefore, no floor drains or sumps were observed on the subject site.

4.13 Water Supply

The subject property is occupied with athletic fields, parking and open space; therefore, the site is not served by an active water supply system.

4.14 Stressed Vegetation

CA's field observations did not reveal the presence of stressed vegetation.

4.15 Wetlands and Floodplains

There are no wetlands on or adjacent to the subject property. Review of Federal Emergency Management Agency (FEMA) maps indicate that the site is not within or adjacent to a designated floodplain. There is a recharge basin located to the west across Plainview Road of the subject property.

5.0 FINDINGS AND CONCLUSIONS

Cashin Associates, P.C. has performed a Phase I Environmental Site Assessment, in conformance with the scope and limitations of ASTM Practice E 1527-00. Any exceptions to, or deletions from, this practice are described in Section 1.2.6 of this report.

This Phase I Assessment found no evidence of recognized environmental conditions associated with the subject site. No further investigation is recommended.



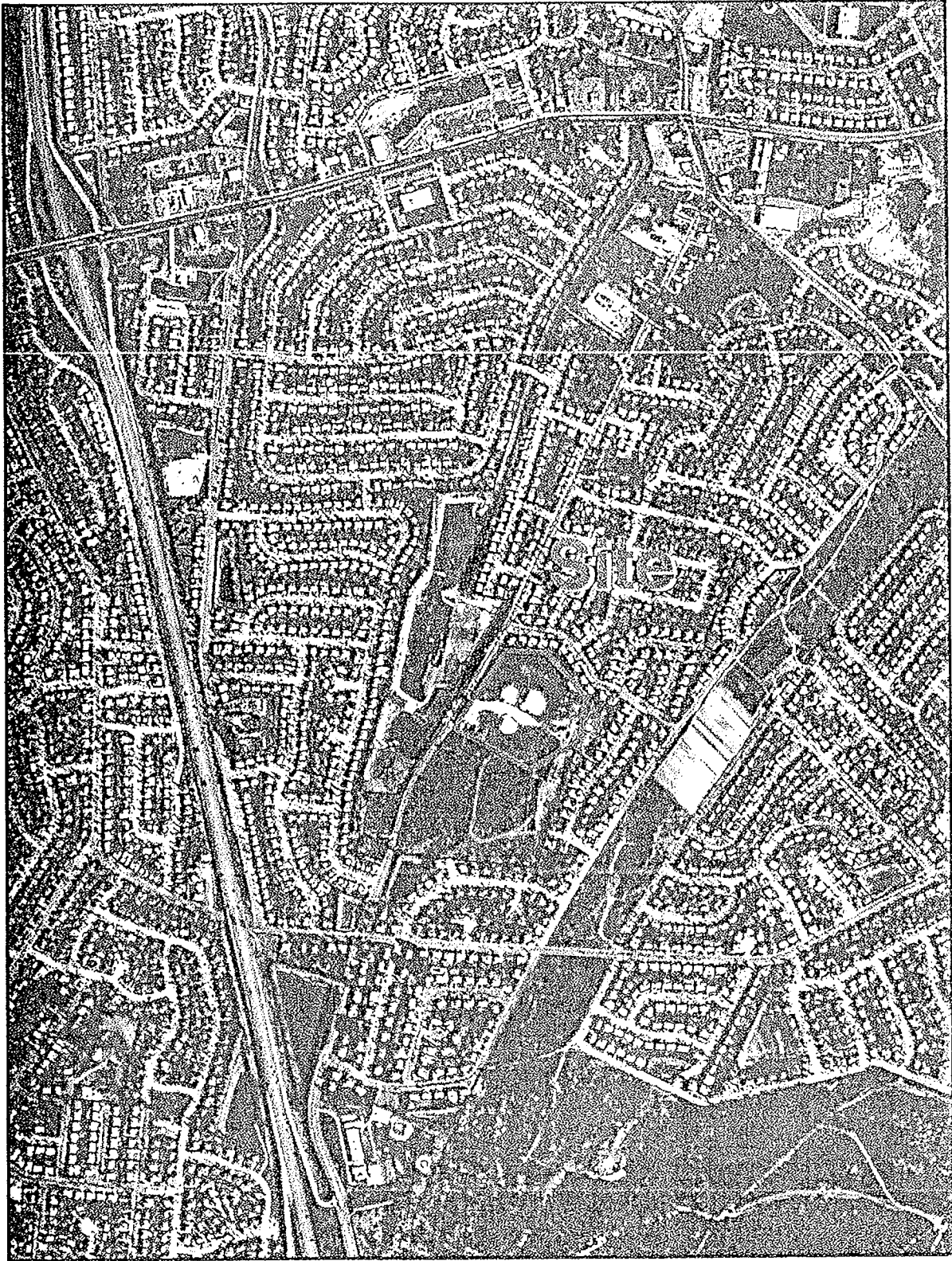
SITE: Borella Field, Plainview Road

Year: 1953
Scale: 1" = 750'



SITE: Borella Field, Plainview Road

Year: 1966
Scale: 1" = 750'



SITE: Borella Field, Plainview Road

Year: 1974
Scale: 1" = 750'



SITE: Borella Field, Plainview Road

Year: 1980

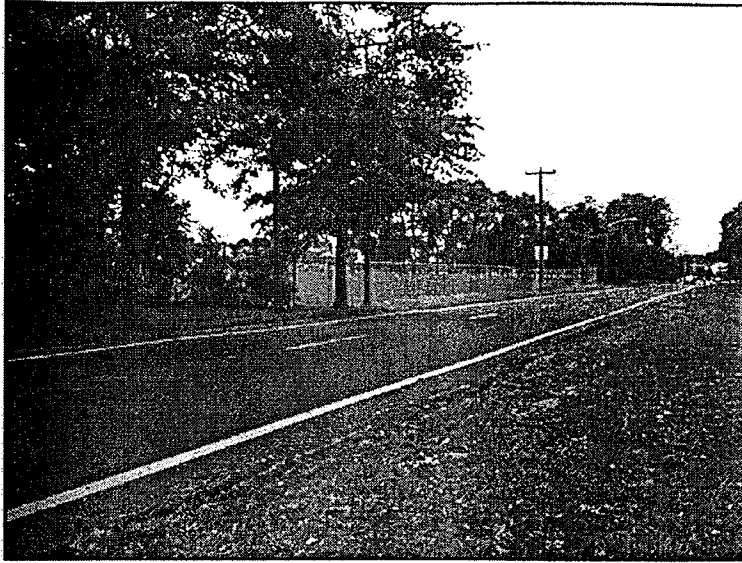
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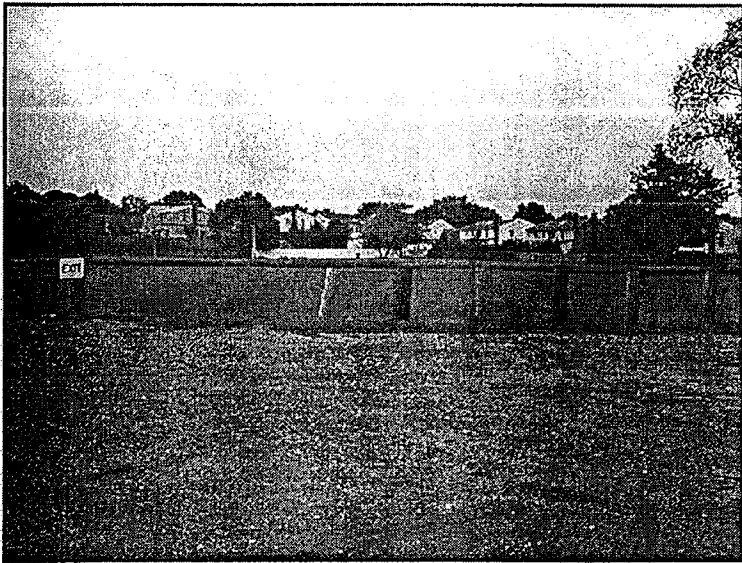
SITE: Borella Field, Plainview Road

Year: 1994

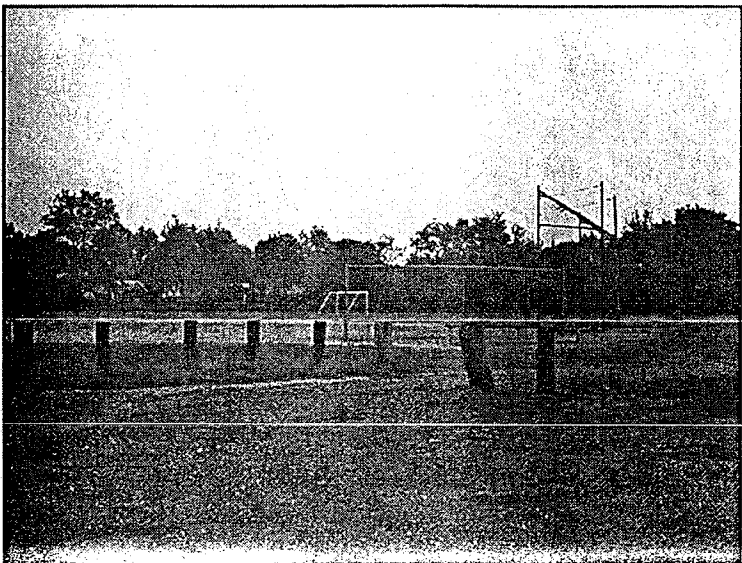
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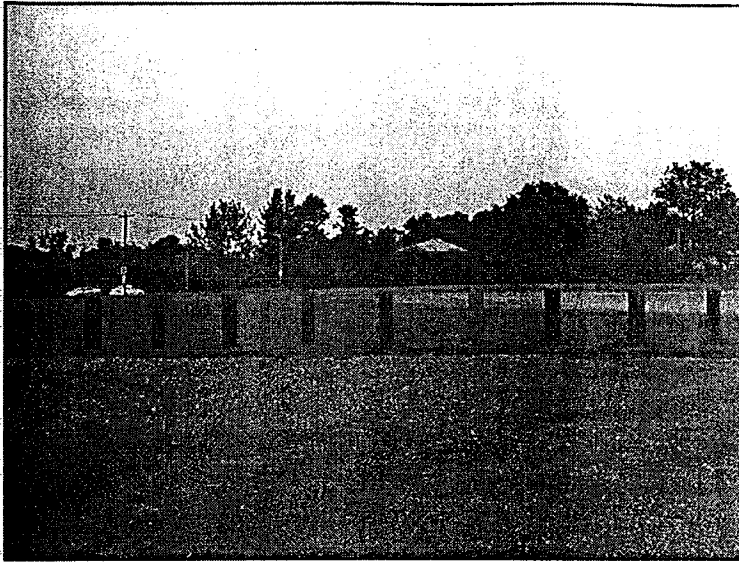
Photograph #1 - View of the subject property (Borella Field) located along Plainview Road, Bethpage, NY.



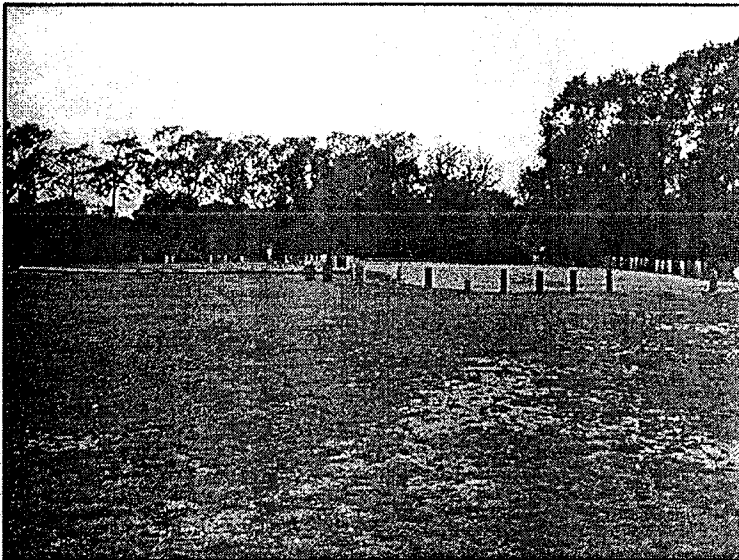
Photograph #2 - View of the southern portion of the subject property (looking east).



Photograph #3 - View of ball field located on the subject property (looking north).



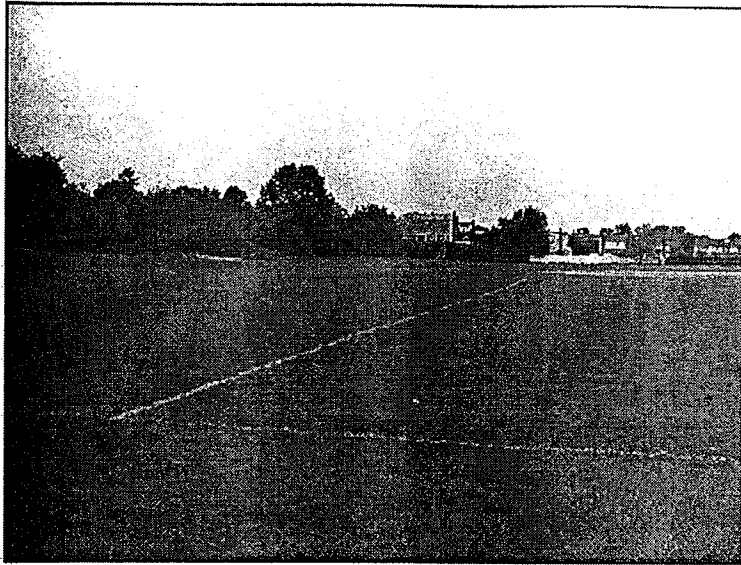
Photograph #4 - View of the subject property (looking northwest).



Photograph #5 - View of the parking lot located on the southern portion of the subject property.



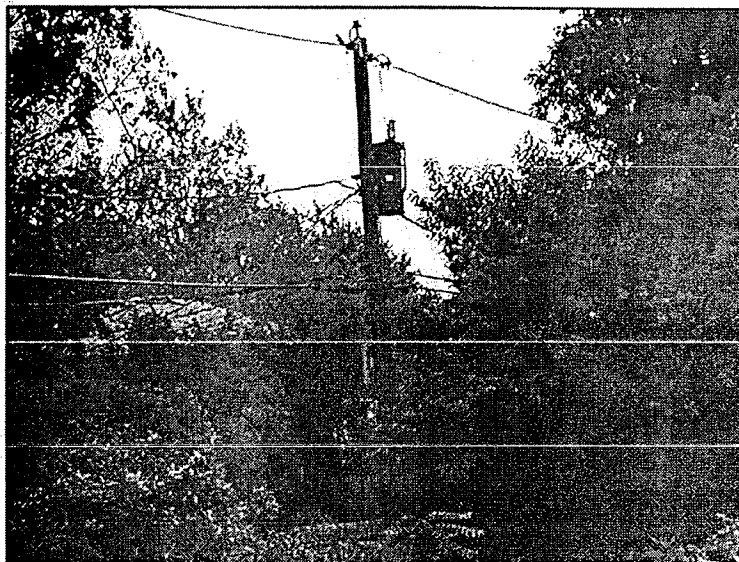
Photograph #6 - View of the northern portion of the subject property (looking east).



Photograph #7 - View of the subject property (looking south).



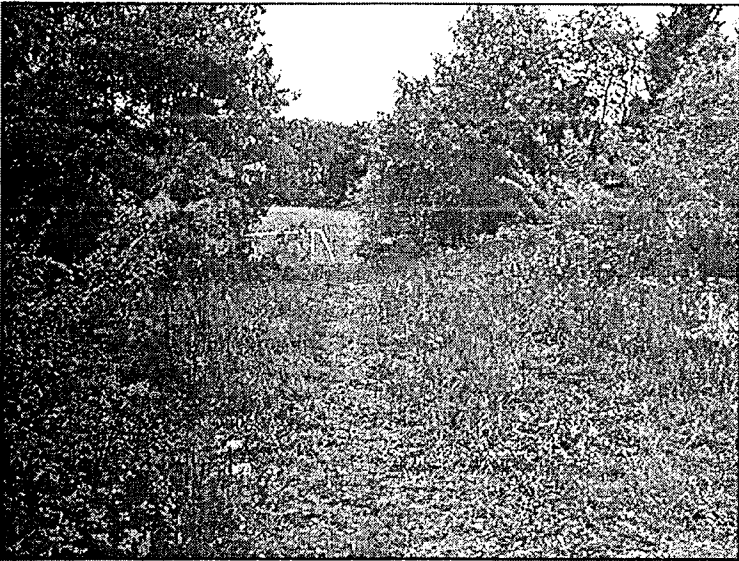
Photograph #8 - View of the subject property looking south.



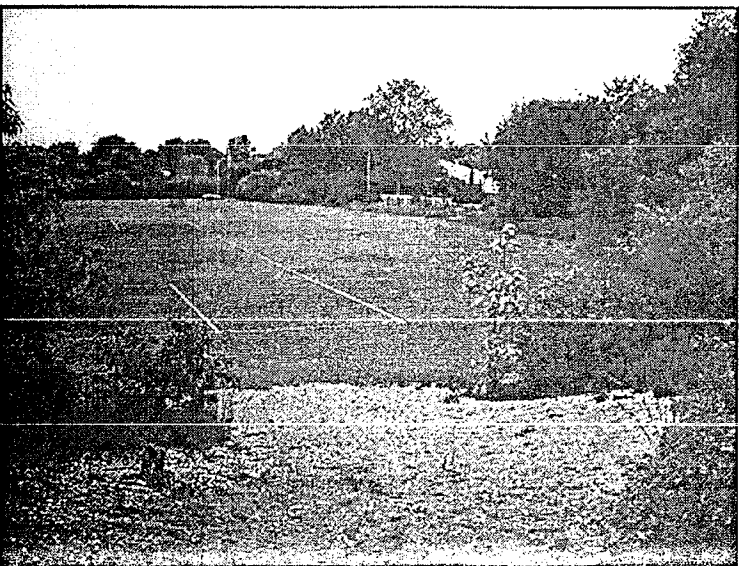
Photograph #9 - View of a pole-mounted transformer located on the northern property line.



Photograph #10 - View of woodlands located on the subject property.

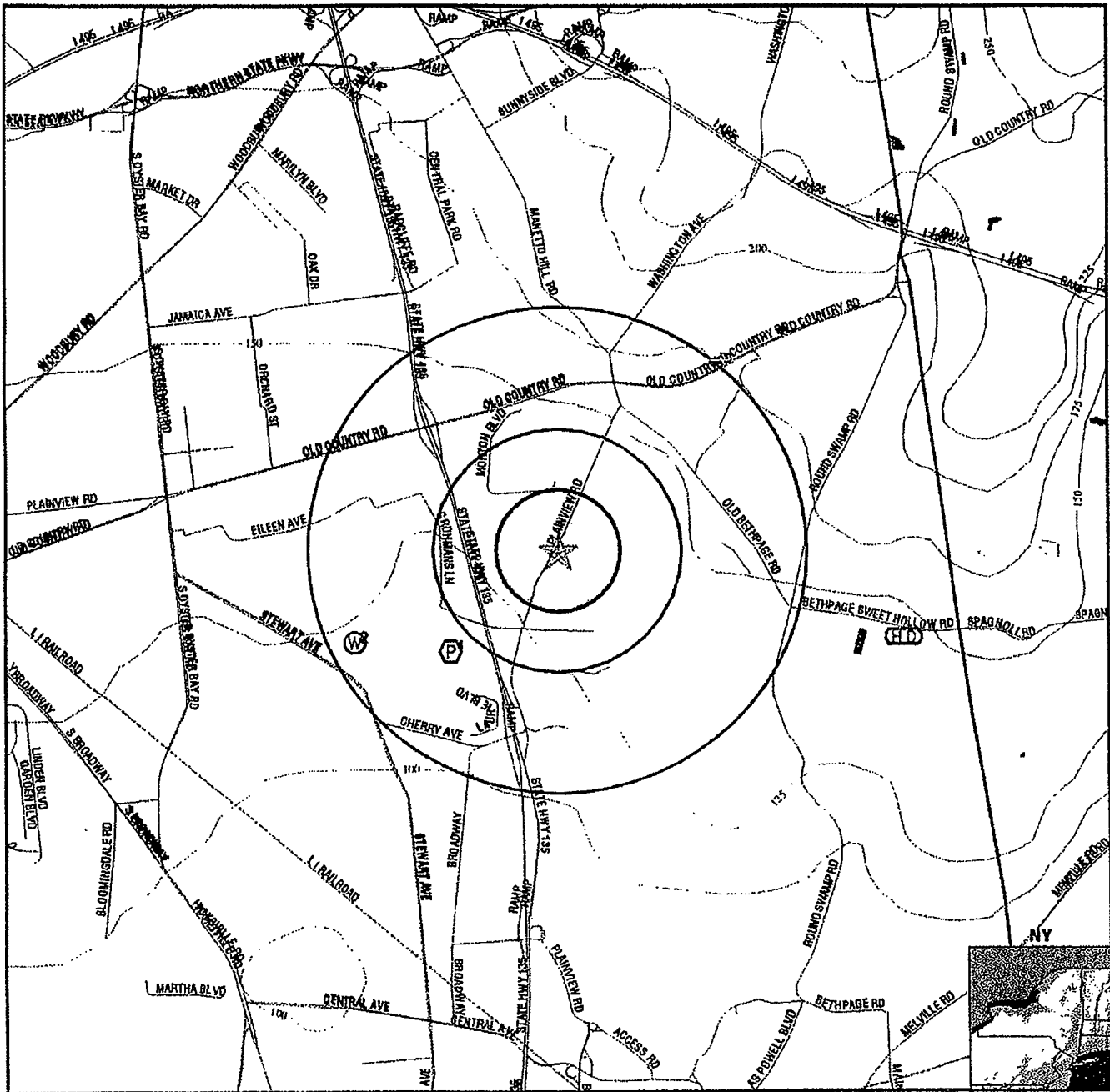


Photograph #11 - View of woodlands located on the subject property.



Photograph #12 - View of the northern portion of the subject property.

PHYSICAL SETTING SOURCE MAP - 858632.3s



- ↗ Major Roads
- ⋯ Contour Lines
- ⊙ Water Wells
- Ⓟ Public Water Supply Wells
- ↑ Groundwater Flow Direction
- Ⓛ Indeterminate Groundwater Flow at Location
- Ⓢ Groundwater Flow Varies at Location
- Cluster of Multiple Icons
- ⊙ Earthquake epicenter, Richter 5 or greater
- Ⓛ Hydrogeological Data

TARGET PROPERTY:	Plainview Road	CUSTOMER:	Cashin Assoc.
ADDRESS:	Plainview Road	CONTACT:	Robert Coryell
CITY/STATE/ZIP:	Bethpage NY 11803	INQUIRY #:	858632.3s
LAT/LONG:	40.7664 / 73.4713	DATE:	October 07, 2002 4:52 pm