02-9004-32-SI
REV. NO. 0

FINAL DRAFT
SITE INSPECTION REPORT
FRANN PAPER CORPORATION
GARDEN CITY, NEW YORK

PREPARED UNDER

TECHNICAL DIRECTIVE DOCUMENT NO. 02-9004-32
CONTRACT NO. 68-01-7346

FOR THE

ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

AUGUST 27, 1990

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY:

RICHARD L. FEINBERG
PROJECT MANAGER

JOSEPH G. FILOSA
SITE MANAGER

REVIEWED/APPROVED BY:

RONALD M. NAMAN
FIT OFFICE MANAGER

315074

SITE INSPECTION REPORT: LEVEL I

PART I: SITE INFORMATION

1. Site Name/Alias Frann Paper Corporation/Stahl Eye Associates

   Street 450 Endo Blvd.

   City Garden City State New York Zip 11530

2. County Nassau County Code 059 Cong. Dist. 5

3 EPA ID No. NYD062525043

4. Block No. F Lot No. 188

5. Latitude 40° 44' 10" N Longitude 73° 35' 30"W

   USGS Quad. Freeport, New York

6. Owner Stahl Eye Associates Tel. No. (516) 832-8000

   Street 450 Endo Blvd.

   City Garden City State New York Zip 11530

7. Operator Stahl Eye Associates Tel. No. (516) 832-8000

   Street 450 Endo Blvd.

   City Garden City State New York Zip 11530

8. Type of Ownership

   ☒ Private ☐ Federal ☐ State
   ☐ County ☐ Municipal ☐ Unknown ☐ Other _____

9. Owner/Operator Notification on File

   ☒ RCRA 3001 Date 8/13/80 ☒ CERCLA 103c Date 6/08/81
   ☐ None ☐ Unknown

10. Permit Information

Permit	Permit No.	Date Issued	Expiration Date	Comments
SPDES	Unknown	2/8/80	Unknown	NY State Pollution Discharge and Elimination System Application.

10. **Permit Information**

Permit	Permit No.	Date Issued	Expiration Date	Comments
NYSDEC	81-83	5/13/81	5/13/82	NewYork State Department of Environmental Conservation Part 360 solid waste management facility permit.

11. **Site Status**

☐ Active ☒ Inactive ☐ Unknown

12. **Years of Operation** 1958 to 1981

13. **Identify the types of waste sources (e.g., landfill, surface impoundment, piles, stained soil, above- or below-ground tanks or containers, land treatment, etc.) on site. Initiate as many waste unit numbers as needed to identify all waste sources on site.**

(a) **Waste Sources**

Waste Unit No.	Waste Unit Type	Facility Name for Unit
1	Drums	55-Gallon Drums

(b) **Other Areas of Concern**

Identify any miscellaneous spills, dumping, etc. on site; describe the materials and identify their locations on site.

Two storage sheds are located along the northeastern perimeter of the parking lot next to the former drum storage area. One shed contains medical supplies used by Stahl Eye Associates, and the other contains medical waste. The waste is regularly removed off site. This waste is not regulated under CERCLA/SARA and therefore will not be evaluated in this report.

14. **Information available from**

Contact Amy Brochu Agency U.S. EPA Tel. No. (201) 906-6802

Preparer Joseph G. Filosa Agency NUS Corp. Region 2 FIT Date 8/27/90

PART II: WASTE SOURCE INFORMATION

The only documented waste unit known to have been on site was 55-gallon drums. These drums were stored on blacktop in a fenced area located in the parking lot behind the building. The wastes were generated as a result of press wash-ups and color match failures and consisted of nitrocellulose and chlorinated rubber inks, alcohols, and ketone. When approximately 10 drums were filled they were reportedly removed off site within 90 days. The solvents used by Frann Paper consisted of an annual volume of 9,000 gallons of ethyl acetate, 1,500 gallons of toluene, 50 gallons of glycol ether, and 200 gallons of alcohols. These solvents were stored in the press area located within the building. In 1981, following an on-site inspection by the Nassau County Department of Health, it was recommended that a berm or diversion structure be placed around the drum corral. This berm was never constructed. Frann Paper left the site in 1981, and all drums were removed off site. From 1958 to 1981 the annual waste generated was approximately 4,000 gallons.

Ref. No. 1

PART III: PRE-EXISTENT ANALYTICAL DATA

No data are available.

PART IV: SITE INSPECTION SAMPLE RESULTS

No sampling was conducted by NUS Corporation Region 2 FIT.

PART V: HAZARD ASSESSMENT

GROUNDWATER ROUTE

1. **Describe the likelihood of a release of contaminant(s) to the groundwater as follows: observed, alleged, potential, or none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminant(s) to the facility.**

   Prior to 1981, the potential for a release of contaminants to the groundwater existed at the site. Since no berms or diversion structures were ever placed around the drum corral, in the event of a contaminant release, the chemicals would not have been properly contained. The drums were stored on an asphalt surface and surrounded by a fence. However, there has been no documented release of contaminants to the ground water resulting from operations on site.

   Ref. No. 1

2. **Describe the aquifer of concern; include information such as depth, thickness, geologic composition, permeability, overlying strata, confining layers, interconnections, discontinuities, depth to water table, groundwater flow direction.**

   The aquifer of concern is the Cretaceous age Magothy Formation. This formation consists of beds and lenses of light grey, fine-to coarse-grained sand with some interstitial silt and clay. The Magothy Formation has a maximum stratigraphic thickness of 1,100 feet. The permeability of the Magothy Formation is estimated to be 10^{-3} to 10^{-5} cm/sec. Beneath the Magothy lies the Raritan Clay,the uppermost unit of the Cretaceous age Raritan Formation, which has a maximum stratigraphic thickness of 200 feet and consists of clay and silt, interbedded with lenses of sand, lignite, and pyrite. This layer acts as a confining unit between the Magothy and Lloyd Aquifers. The permeability of the Raritan Clay is estimated to be $<10^{-7}$ cm/sec. Underlying the Raritan Clay is the Lloyd Aquifer. This aquifer has a maximum stratigraphic thickness of 500 feet, and consists of fine-to coarse-grained sand and gravel, interbedded with lenses of silty clay, lignite, and quartzose. The permeability of the Lloyd Aquifer is estimated to be 10^{-3} to 10^{-5} cm/sec.

   Overlying the Magothy are three unconfined Pleistocene age glacial deposits. The basal unit is the Jameco Gravel. This unit has a maximum stratigraphic thickness of 200 feet, and consists of fine to very coarse-grained sand and gravel, interbedded with layers of clay and silt. The permeability of the Jameco Gravel is estimated to be 10^{-3} to 10^{-5} cm/sec.

   The middle unit consists of the Gardiners Clay. This unit has a maximum stratigraphic thickness of 150 feet and consists of clay and silt interbedded with lenses of sand and glauconite. The permeability of the Gardiners Clay is estimated to be 10^{-5} to 10^{-7} cm/sec.

   The uppermost unit is the upper glacial aquifer. This unit has a maximum stratigraphic thickness of 700 feet, and consists of glacial till. The till is composed of clay, sand, gravel, and boulders which make up the Harbor Hill and Ronkonkoma Terminal Moraines, deposited as outwash from the melt waters of the retreating Wisconsin Glacier. The permeability of the till is estimated to be $<10^{-7}$ cm/sec. The extent of the confining units are not known; therefore, hydraulic conductivity between the beds may exist. Groundwater tends to follow the dip of the beds, generally in a south to southeasterly direction. The depth to groundwater is estimated to be approximately 25 feet beneath the ground surface.

   Ref. Nos. 2, 4

3. **Is a designated sole source aquifer within 3 miles of the site?**

   The Lloyd, Magothy, and the upper unconfined aquifers have been designated as sole source aquifers throughout the entire length of Long Island.

   Ref. No. 3

4. **What is the depth from the lowest point of waste disposal/storage to the highest seasonal level of the saturated zone of the aquifer of concern?**

The drums were placed on the ground surface. The depth to groundwater is estimated to be 25 feet beneath the surface. Therefore, the depth from the lowest point of waste storage to the aquifer of concern is 25 feet.

Ref. Nos. 1, 4

5. **What is the permeability value of the least permeable continuous intervening stratum between the ground surface and the aquifer of concern?**

The permeability of the Magothy Formation is estimated to be $< 10^{-3}$ to 10^{-5} cm/sec.

Ref. No. 5

6. **What is the net precipitation for the area?**

The net annual precipitation for the region is approximately 14 inches.

Ref. No. 5

7. **Identify uses of groundwater within 3 miles of the site (i.e., private drinking source, municipal source, commercial, industrial, irrigation, unusable).**

The uses of groundwater within a 3- mile radius of the site include municipal, commercial, and industrial water supplies.

Ref. Nos. 2, 7, 8

8. **What is the distance to and depth of the nearest well that is currently used for drinking or irrigation purposes?**

The distance to the nearest well that is used as a potable water source is approximately 4,500 feet. This well has a depth of 561 feet.

Ref. Nos. 6, 7

9. **Identify the population served by the aquifer of concern within a 3-mile radius of the site.**

Location of potable wells within a 3-mile radius of Frann Paper Corporation.

Well	State Well No.	Depth	Distance
Westbury WWD-11	N-5654	561 feet	4,500 feet
Westbury WWD-7	N-7785	400 feet	1.5 miles
Westbury WWD-9	N2602	805 feet	1.6 miles
Westbury WWD-16	N-8497	544 feet	1.6 miles
Westbury WWD-6	N-101	341 feet	1.6 miles
Recharge Well	N-373	60 feet	1.8 miles

Cont'd

Well	State Well No.	Depth	Distance
Hempstead HWD-1	N-8956	535 feet	2.08 miles
Hempstead HWD-2	N-8957	598 feet	2.08 miles
Westbury WWD-10	N-5007	560 feet	2.17 miles
Westbury WWD-12A	N-6819	270 feet	2.17 miles
Westbury WWD-14	N-7353	390 feet	2.36 miles
Westbury WWD-12	N-5655	260 feet	2.46 miles
Hicksville HWD-5-2	N-7561	551 feet	2.55 miles
Hicksville HWD-5-3	N-9212	610 feet	2.55 miles
Westbury WWD-16	N-8497	544 feet	2.79 miles
Westbury-WWD-7	N-7785	400 feet	2.79 miles
Hicksville HWD-2-2	N-5336	545 feet	2.90 miles

The entire population within a 3-mile radius of the site which draws water from the aquifer of concern is approximately 159,800 people.

Ref. Nos. 2, 7, 8, 12, 18, 20

SURFACE WATER ROUTE

10. **Describe the likelihood of a release of contaminant(s) to surface water as follows: observed, alleged, potential, or none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminants to the facility.**

Prior to 1981, the potential for a release of contaminants to surface water existed, as no berms or diversion structures were ever placed around the drum corral. In the event of a contaminant release, the chemicals would not have been properly contained. Contaminants would have entered the East Meadow Brook by way of the storm sewer system. However, there are no documented releases of contaminants to surface water resulting from operations on site. Presently there is no likelihood for a release to surface water. All drums were removed off site in 1981.

Ref. No. 1

11. **Identify and locate the nearest downslope surface water. If possible, include a description of possible surface drainage patterns from the site.**

The nearest downslope surface water is the East Meadow Brook. This brook flows into the Atlantic Ocean approximately 6.5 miles downstream. The brook is located approximately 1.5 miles southeast of the site. Contaminants would have been discharged into the East Meadow Brook through the storm sewer system.

Ref. Nos. 6, 21

12. **What is the facility slope in percent? (Facility slope is measured from the highest point of deposited hazardous waste to the most downhill point of the waste area or to where contamination is detected.)**

The facility slope is estimated to be less than 1 percent.

Ref. No. 9

13. **What is the slope of the intervening terrain in percent? (Intervening terrain slope is measured from the most downhill point of the waste area to the probable point of entry to surface water.)**

The slope of the intervening terrain is estimated to be less than 1 percent.

Ref. No. 6

14. **What is the 1-year 24-hour rainfall?**

The 1-year 24 hour rainfall for the region is approximately 2.5 inches.

Ref. No. 5

15. **What is the distance to the nearest downslope surface water? Measure the distance along a course that runoff can be expected to follow.**

The distance to the East Meadow Brook is approximately 1.5 miles by way of the storm sewer system. The point of discharge is located at the interchange of the Meadow Brook Parkway and Hempstead Turnpike.

Ref. Nos. 6, 21

16. **Identify uses of surface waters within 3 miles downstream of the site (i.e., drinking, irrigation, recreation, commercial, industrial, not used).**

The New York State surface water quality classification states that the East Meadow Brook may be used for noncontact recreation.

Ref. No. 10

17. **Describe any wetlands, greater than 5 acres in area, within 2 miles downstream of the site. Include whether it is a freshwater or coastal wetland.**

A palustrine forested freshwater wetland greater than 5 acres in size is located approximately 1.5 miles downstream from the site. This wetland is located at the discharge point of the storm sewer system.

Ref. No. 19

18. **Describe any critical habitats of federally listed endangered species within 2 miles of the site along the migration path.**

There are no critical habitats of federally listed endangered species within 2 miles of the site.

Ref. No. 11

19. **What is the distance to the nearest sensitive environment along or contiguous to the migration path (if any exist within 2 miles)?**

A freshwater wetland exists approximately 1.5 miles downstream from the site. This wetland is located at the discharge point of the storm sewer system.

Ref. No. 19

20. Identify the population served or acres of food crops irrigated by surface water intakes within 3 miles downstream of the site and the distance to the intake(s).

There are no surface water intakes located along the East Meadow Brook.

Ref. No. 10

21. What is the state water quality classification of the water body of concern?

New York State surface water quality standards classify the East Meadow Brook as Class C.

Ref. No. 10

22. Describe any apparent biota contamination that is attributable to the site.

During the on-site inspection conducted by NUS Corp Region 2 FIT, no biota contamination was observed.

Ref. No. 9

AIR ROUTE

23. Describe the likelihood of a release of contaminant(s) to the air as follows: observed, alleged, potential, none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminant(s) to the facility.

Presently, there is no potential for a release of contaminants to the air. All wastes were stored in 55-gallon drums. These drums were removed off site on a regular basis. By 1981, all wastes had been removed.

Ref. Nos. 1, 9

24. What is the population within a 4-mile radius of the site?

The population within a 4-mile radius of the site is approximately 283,700 people.

Ref. No. 12

FIRE AND EXPLOSION

25. Describe the potential for a fire or explosion to occur with respect to the hazardous substance(s) known or suspected to be present on site. Identify the hazardous substance(s) and the method of storage or containment associated with each.

Presently, there is no potential for a fire or explosion to occur. All wastes were stored in 55-gallon drums and regularly removed. All wastes were removed off site by 1981.

Ref. Nos. 1, 9

26. What is the population within a 2-mile radius of the hazardous substance(s) at the facility?

The population within a 2-mile radius of the site is approximately 57,800 people.

Ref. No. 12

DIRECT CONTACT/ON-SITE EXPOSURE

27. Describe the potential for direct contact with hazardous substance(s) stored in any of the waste units on site or deposited in on-site soils. Identify the hazardous substance(s) and the accessibility of the waste unit.

Presently, there is no potential for direct contact with any wastes generated by Frann Paper. The wastes were stored in 55-gallon drums and transported off site when approximately 10 drums were filled. The drums were stored on an asphalt surface in the rear parking lot and were surrounded by a fence. All wastes were removed off site by 1981.

Ref. Nos. 1, 9

28. How many residents live on a property whose boundaries encompass any part of an area contaminated by the site?

There are no known residential properties bordering the site that have been contaminated as a result of on-site operations.

Ref. Nos. 1, 9

29. What is the population within a 1-mile radius of the site?

The population within a 1 mile radius of the site is approximately 4,100 people.

Ref. No. 12

PART VI: ACTUAL HAZARDOUS CONDITIONS

No hazardous conditions pertaining to human or environmental contamination have been documented. Specifically:

- No contamination has been documented in flora, fauna, or in organisms in a food chain leading directly to humans, that can be attributed to on- site operations.
- There have been no documented incidents of direct contact with hazardous wastes at the facility involving a human.
- There has been no documented evidence concerning spills or contamination of the sewer system as a result of on- site operations.
- There has been no documented evidence of groundwater or surface water contamination.
- There has been no documented evidence of a release of contaminants to the air.

Ref. No. 1

PART VII: SITE SUMMARY AND RECOMMENDATIONS

Frann Paper Company, located in Garden City, Nassau County, New York was a gravure printing facility located in an industrial/commercial area. Frann Paper was privately owned, and operated from 1958 to 1981. The estimated amount of wastes generated from 1958 to 1981 was approximately 4,000 gallons per year. The wastes originated from press wash-ups and color match failures and consisted of nitrocellulose and chlorinated rubber inks, as well as alcohols and ketones. The wastes were contained in 55-gallon drums, and stored in a fenced corral located in the rear parking lot on site. Although this corral was located on asphalt, no berms or diversion structures were ever constructed. When approximately 10 drums of waste accumulated, the company had the drums removed off site. The solvents used by Frann Paper consisted of an annual volume of 1,500 gallons of toluene, 9,000 gallons of ethyl acetate, 50 gallons of glycol ether, and 200 gallons of alcohols. These solvents were stored in the press area located within the building. Frann Paper submitted a Notification of Hazardous Waste Activity form in 1980, and was subsequently listed as a generator only facility.

In 1980, Frann Paper received a New York State Pollution Discharge and Elimination System (SPDES) Permit from the Nassau County Department of Health, Bureau of Water Pollution Control to discharge noncontact cooling water into the municipal sewer system. The following year Frann Paper received permission from the New York State Department of Environmental Conservation to operate a solid waste management facility.

Frann Paper subsequently leased the site to Creative Fulfillment Inc., a mail order firm. This firm occupied the site for only one year. A 1982 site inspection revealed that all wastes generated by Frann Paper had been removed off site. In 1982, following the purchase of the site by Stahl Eye Associates, the building was completely renovated and the parking lot expanded. The site is currently owned and occupied by Stahl Eye Associates and the Nassau Center for Ambulatory Care, both medical facilities.The wastes generated by both of these facilities consist of medical refuse which is regularly removed off site. This waste is not regulated under CERCLA/SARA, and has not been evaluated in this report.

Based on the following background information a recommendation of **NO FURTHER REMEDIAL ACTION PLANNED** is given to the Frann Paper Site. Prior to 1981, a potential for direct contact with on-site wastes existed at this site. Although the wastes were stored in a fenced area and placed on asphalt, no berms or diversion structures were ever constructed. In the event of a release, contaminants would have entered the storm sewer system. This system flows to a discharge point located in the East Meadow Brook. Presently, the potential for direct contact with any on-site wastes generated by Frann Paper appears to be low. Waste was contained in 55-gallon drums and transported off site on a regular basis. All wastes were removed off site when Frann Paper left the site in 1981. Although the public water supply system draws its water from a sole source aquifer, there are no reports of spills or illegal on- site disposal of wastes.

ATTACHMENT 1

FRANN PAPER CORPORATION
GARDEN CITY, NEW YORK

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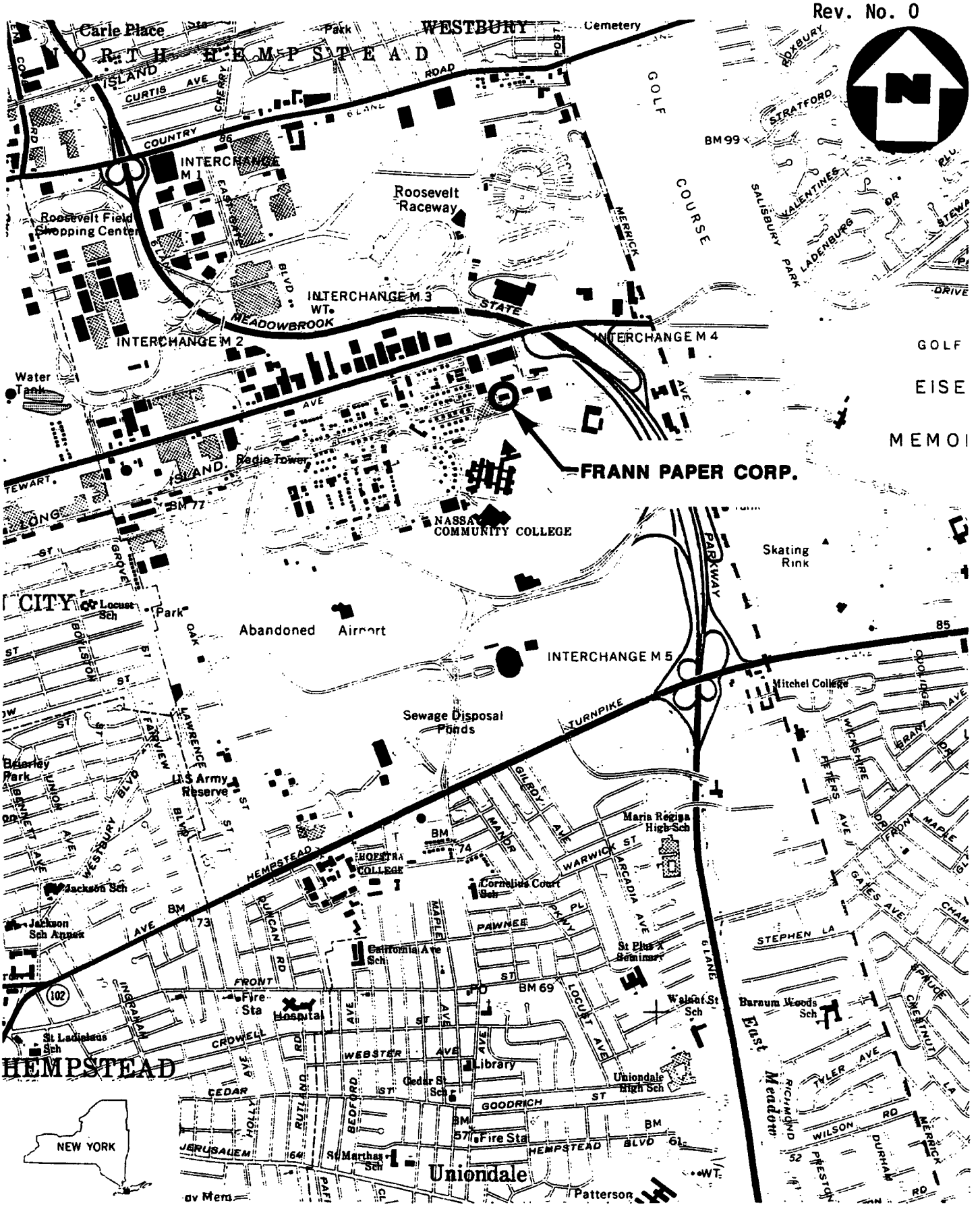
Figure 1: Site Location Map
Figure 2: Site Map
Exhibit A: Photograph Log Off-Site Reconnaissance
Exhibit B: Photograph Log On-Site Reconnaissance



(QUAD) FREEPORT, N.Y.

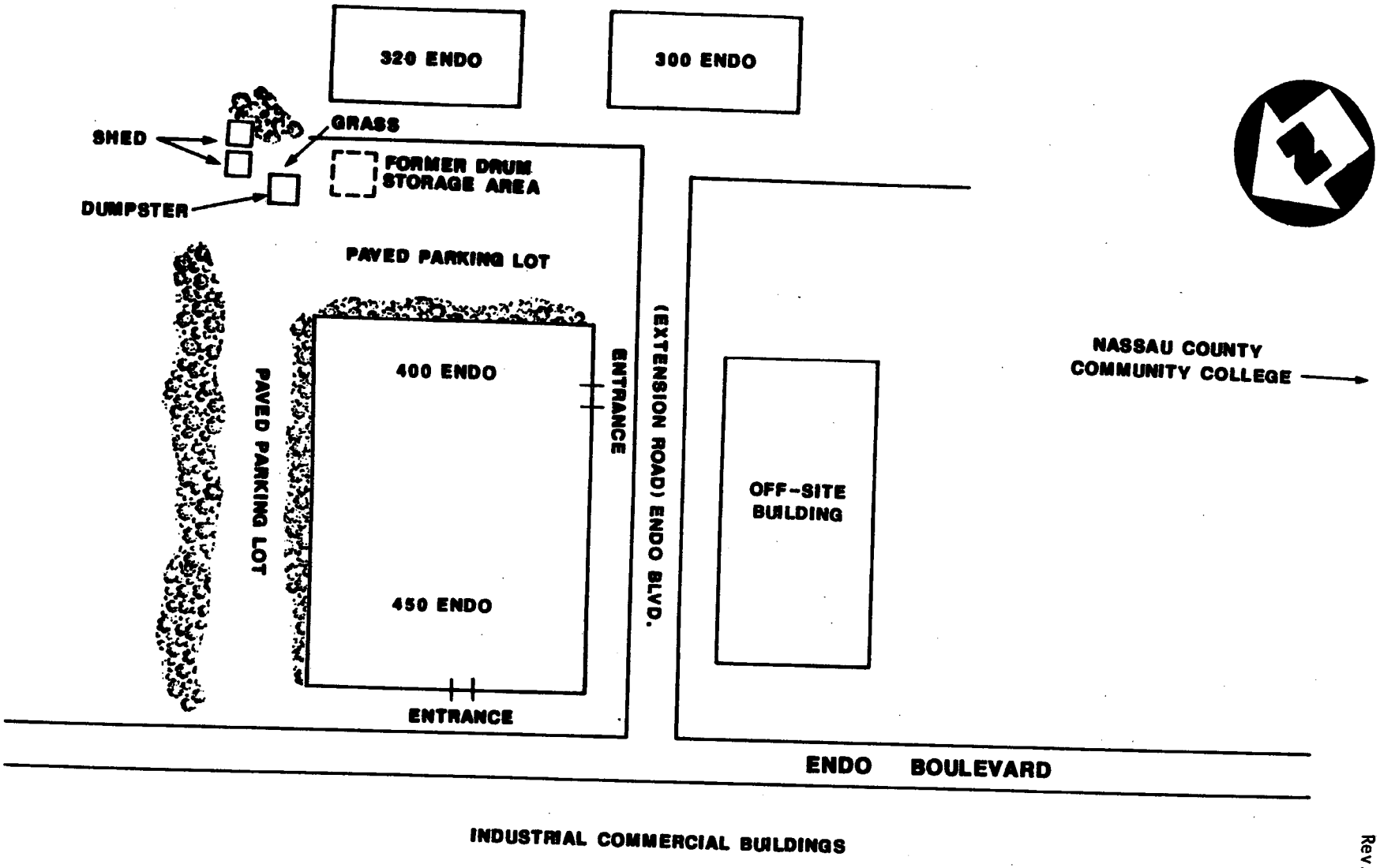
FIGURE 1

SITE LOCATION MAP

FRANN PAPER CORP., GARDEN CITY, N.Y.

SCALE: 1" = 2000'

NUS CORPORATION



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SITE MAP

FRANN PAPER CORPORATION, GARDEN CITY, N.Y.

(NOT TO SCALE)

FIGURE 2

NUS CORPORATION

EXHIBIT A

PHOTOGRAPH LOG

FRANN PAPER CORPORATION
GARDEN CITY, NEW YORK

OFF-SITE RECONNAISSANCE: JUNE 21, 1990

FRANN PAPER CORPORATION
GARDEN CITY, NEW YORK
JUNE 21, 1990

PHOTOGRAPH INDEX

ALL PHOTOGRAPHS TAKEN BY TOM VARNER and RICH SETTINO*

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FRANN PAPER CORPORATION, GARDEN CITY, NEW YORK

1P-1* June 21, 1990 1415
View of rear of the building facing north.

1P-2 June 21, 1990 1417
View of the southwestern corner of the front of the building along Endo Blvd. Facing south.

FRANN PAPER CORPORATION, GARDEN CITY, NEW YORK

1P-3

June 21, 1990
View of front of the building along Endo Blvd.
Facing northeast.

1418

1P-4

June 21, 1990
View of the northern corner of the front of the building along Endo Blvd. Facing northeast.

1419

FRANN PAPER CORPORATION, GARDEN CITY, NEW YORK

1P-5

June 21, 1990
View of northern side of the building and parking lot along Endo Blvd. Facing south.

1420

1P-6

June 21, 1990
View of northern side of the building facing south.

1421

EXHIBIT B

PHOTOGRAPH LOG

FRANN PAPER CORPORATION
GARDEN CITY, NEW YORK

ON-SITE RECONNAISSANCE: JULY 12, 1990

FRANN PAPER CORPOARTION
GARDEN CITY, NEW YORK
JULY 12, 1990

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ALL PHOTOGRAPHS TAKEN BY STEVE OKULEWICZ

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FRANN PAPER CORPORATION, GARDEN CITY, NEW YORK

1P-1

July 12, 1990
View of generator near the rear of the building facing southwest.

1400

1P-2

July 12, 1990
View of storage sheds at the northeast corner of the site facing northeast.

1402

FRANN PAPER CORPORATION, GARDEN CITY, NEW YORK

1P-3

July 12, 1990
View of the rear site boundary facing south.

1403

1P-4

July 12, 1990
View of rear parking lot facing south.

1405

ATTACHMENT 2

REFERENCES

1. Potential Hazardous Waste Site Preliminary Assessment, TDD Number 02-8707-05, NUS Corporation Region 2 FIT, Edison, New Jersey, August 25, 1987.

2. Buxton H.T., Somlensky D.A., and Shernoff P.K., Hydrogeologic Correlations for selected wells on Long Island, New York, U.S. Department of the Interior, Geological Survey, 1989.

3. Federal Register, Volume 43, No. 120, Wednesday, June 21, 1978, Aquifers Underlying Nassau and Suffolk Counties, New York, Determination.

4. U.S. Department of the Interior, Geological Survey, Depth to the water table on Long Island, New York, March, 1979.

5. Uncontrolled Hazardous Waste Site Ranking System, A users manual, 40 CFR, Part 300 Appendix A, 1986.

6. Three mile vicinity map, Based on U.S. Department of the Interior, Geological Survey Topographic Maps, 7.5 minute series, "Freeport, NY" Quadrangle, 1969, photorevised 1979, "Lyndbrook, NY" Quadrangle, 1969.

7. Letter from Italo J. Vacchio, Westbury Water District, to Ed Leonard, NUS Corp., March 21, 1988.

8. Letter from Harold V. Morgan, Administrative Assistant, Hempstead Water Department, to Ed Leonard, NUS Corp., April 6, 1988.

9. Field Notebook Number 0623, Frann Paper Co., TDD Number, 02-9004-32, On-Site Reconnaissance, NUS Corp. Region 2 FIT, Edison, New Jersey, June 20, 1990.

10. Telecon Note: Conversation between Charles Guthrie, New York State Department of Environmental Conservation, and Joe Filosa, NUS Corp., July 24, 1990.

11. Atlantic Coast Ecological Inventory, N.Y.-Conn.-N.J., U.S. Department of Interior, Fish and Wildlife Service, 1980.

12. General Sciences Corporation, Graphical Exposure Modeling System (GEMS). Landover Maryland, 1986.

13. Telecon Note: Conversation between Allan Fitzgerald, Nassau County Department of Health, and Pauline Doherty, NUS, Corp., August 25, 1987.

14. Telecon Note: Conversation between Mrs. Landon, Nassau County Assessors Office, and Matt Meldrim, NUS Corp., May 3, 1990.

15. Telecon Note: Conversation between North Hempstead Tax Assessor Office, and Pauline Doherty, NUS Corp., August 25, 1987.

16. Telecon Note: Conversation between Michael White, Attorney, Nixon, Hargrave, Devans, and Doyle, and Richard Feinberg, NUS, Corp., June 29, 1990.

17. Soil Survey of Nassau County New York, U.S. Department of Agriculture, Soil Conservation Service, February, 1987.

REFERENCES (Cont'd)

18. U.S.G.S. Well Inventory, Freeport Quadrangle, Nassau County, New York, U.S. Department of the Interior, Geological Survey, Syosset, New York, 1989.

19. National Wetlands Inventory U.S. Department of the Interior, Fish and Wildlife Service, April, 1981.

20. Letter from John H. McCrosson, Assistant Superintendent, Hicksville Water District, to Ed Leonard, NUS Corp., March 22, 1988.

21. Telecon Note: Conversation between Richard Peters, Nassau County Department of Public Works, Division of Highways, and Joe, Filosa NUS Corp., August 10, 1990.

22. U.S. EPA Superfund Program, Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) , P. 265, June 7, 1990.

23. New York State Board of Elections, New York State Legislative Task Force on Demographic Research and Reapportionment, New York State Congressional Districts, 1984.

24. Telecon Note: Conversation between Carlos Parentes, Nassau County Department of Health, and Matt Meldrim, NUS Corp, May 4, 1990.

REFERENCE NO. 1

0003 0
02-8707 05

NUS CORPORATION
A Halliburton Company

02-8707-05-PA

POTENTIAL HAZARDOUS WASTE SITE

PRELIMINARY ASSESSMENT

Frann Paper Corporation
Site Name

NYD062525043
EPA Site ID Number

450 Endo Blvd.
Garden City, NY
Address

02-8707-05
TDD Number

Date of Site Visit: July 14, 1987

SITE DESCRIPTION

Frann Paper Corporation was a gravure printing facility located at 450 Endo Boulevard, Garden City, New York. The firm was in operation from 1958 to 1981. Their wastes originated from press wash-ups and color match failures and included toluene, ethyl acetate, ether glycol and alcohols. The wastes were kept in 55-gallon drums and stored in a fenced area of the parking lot, before being hauled off site for disposal.

The Frann Paper Corporation site is situated in a highly commercial area. It is currently owned and operated by Stahl Eye Associates.

PRIORITY FOR FURTHER ACTION: High ____ Medium ____ Low X

RECOMMENDATIONS

A site inspection is recommended on a time available basis. Although there have been no suspected releases to the environment, the potential existed. The inadequate containment of wastes and the local dependence on groundwater warrants sampling.

Prepared by: Pauline Doherty
of NUS Corporation

Date: 08/25/87

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 006525043

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)
Frann Paper Corporation

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
450 Endo Boulevard

03 CITY
Garden City

04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST.
NY	11530	Naussau	059	5

09 COORDINATES

LATITUDE	LONGITUDE
4 0° 4 4' 4 6". N	0 7 3° 3 5' 2 7". W

10 DIRECTIONS TO SITE (Starting from nearest public road)

From the Meadowbrook Parkway take Interchange M4 to Stewart Avenue. Heading west on Stewart Avenue take a right onto Endo Boulevard.

III. RESPONSIBLE PARTIES

01 OWNER (if known)
Norman O. Stahl

02 STREET (Business, mailing, residential)
450 Endo Boulevard

03 CITY
Garden City

04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
NY	11530	

07 OPERATOR (if known and different from owner)
Stahl Eye Associates

08 STREET (Business, mailing, residential)
450 Endo Boulevard

09 CITY
Garden City

10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
NY	11530	(516) 832-8000

13 TYPE OF OWNERSHIP (Check one)
X A. PRIVATE ___ B. FEDERAL: _____ (Agency name) ___ C. STATE ___ D. COUNTY ___ E. MUNICIPAL
___ F. OTHER: _____ (Specify) ___ G. UNKNOWN

14. OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
___ A. RCRA 3001 DATE RECEIVED: / / X B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: 06/08/81
___ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
X YES DATE: 04 / 16 / 81
___ NO

BY (Check all that apply)
___ A. EPA ___ B. EPA CONTRACTOR ___ C. STATE ___ D. OTHER CONTRACTOR
X E. LOCAL HEALTH OFFICIAL ___ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
___ A. ACTIVE X B. INACTIVE ___ C. UNKNOWN

03 YEARS OF OPERATION
1958 (BEGINNING) 1981 (ENDING) ___ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Frann Paper Corp. were gravure printers dependent on solvents and water-based inks. The waste originated from press wash-ups and color match failures and included ethyl acetate, toluene, glycol ether and alcohols.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
The printing wastes were put in 55-gallon drums. Once filled, the drums were stored in a fenced area in the parking lot and were later picked up by a scavenger. There is no suspected release of contaminants to the environment.

IV. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste information and Part 3 - Description of Hazardous Conditions and Incidents)

___ A. HIGH (Inspection required promptly) ___ B. MEDIUM (Inspection required) X C. LOW (Inspection on time available basis) ___ D. NONE

(No further action needed. complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Diana Messina	U.S. EPA	(201) 321-6776

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Pauline Doherty		NUS Corp.	(201) 225-6160	08 /25 /87

EPA FORM 2070-12 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 006525043

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- _ A. SOLID
- _ B. POWDER, FINES
- _ C. SLUDGE
- X E. SLURRY
- X F. LIQUID
- _ G. GAS
- _ D. OTHER: _____ (Specify)

02 WASTE QUANTITY AT SITE

(Measures of waste quantities must be independent)

TONS Unknown
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- _ B. CORROSIVE
- _ C. RADIOACTIVE
- _ D. PERSISTENT
- X E. SOLUBLE
- _ F. INFECTIOUS
- _ G. FLAMMABLE
- _ H. IGNITABLE
- _ I. HIGHLY VOLATILE
- _ J. EXPLOSIVE
- _ K. REACTIVE
- _ L. INCOMPATIBLE
- _ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			Printing wastes were stored in 55-gallon drums and picked up by a scavenger.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	92,000	Gallons	
IOC	INORGANIC CHEMICALS			Approximately 4000 gallons of wastes were generated per year from 1958 to 1981.
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	Ethyl Acetate	141-78-6	55-Gallon Drum	Unknown	Unknown
OCC	Toluene	108-88-3	55-Gallon Drum	Unknown	Unknown
OCC	Glycol Ether		55-Gallon Drum	Unknown	Unknown
OCC	Alcohol		55-Gallon Drum	Unknown	Unknown

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (See specific references. e.g., state files, sample analysis, reports)

Bureau of Water Pollution Control, SPDES Application for Frann Paper Corp. February 8, 1980.
New York State Department of Environmental Conservation, Application for Approval to Operate a Solid Waste Management Facility, Frann Paper Corp. April 23, 1981.

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D062525043

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 X A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: Approx. 190,000
02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

There is potential for groundwater contamination through the migration of compounds from the ground surface to the unconfined aquifer. Spills or leaks from waste drums would not have been properly contained.

01. _ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

There is no potential for surface water contamination. There is no migration route from the site to a body of surface water.

01 _ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

There is no potential for air contamination. An inspection conducted in 1982 by the Nassau County Health Department revelead that all waste drums had been removed.

01. _ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____
02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

There is no potential for fire or explosive conditions. An inspection conducted in 1982 by the Nassau County Health Department revealed that all waste drums had been removed.

01. X E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: Approx. 13,000
02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

There is potential for direct contact through runoff of possible spills or leaks that had not been properly contained. Presently, there are no waste drums on site.

01 X F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: Unknown (ACRES)
02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

There is potential for soil contamination. Possible spills or leaks from waste drums would not have been adequately contained and could migrate to the soil.

01. X G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: Approx. 190,000
02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

There is potential for drinking water contamination. Numerous community water systems are situated within 3 miles of the site. The migration of compounds from the ground surface to the aquifer would result in their contamination.

01 _ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____
02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

There is no potential for worker exposure. An inspection conducted in 1982 by the Nassau County Health Department revealed that all waste drums had been removed.

01 X I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: Approx. 190,000
02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

Approximately 190,000 people could be affected through the ingestion of contaminated groundwater or direct contact with contaminated soil.

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0062525043

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 X J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

There is minimal potential for damage to flora. The migration of contaminants to the soil could affect nearby plants.

01 X K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (Include name(s) of species) — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

There is minimal potential for damage to fauna through direct contact with contaminated soil.

01 X L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

There is potential for food chain contamination through the ingestion of contaminated water, plants or lower organisms.

01 X M. UNSTABLE CONTAINMENT OF WASTES
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: _____ — 02 X OBSERVED (DATE: 04/16/81) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

An inspection conducted in 1981 by the Nassau County Health Department revealed the need of an impervious surface and a berm.

01 X N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

There is potential for damage to offsite property through the surface runoff of contaminants.

01 X O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

There is potential for the contamination of storm drains. Possible spills or leaks from waste drums would not have been adequately contained and could migrate to the onsite storm drain.

01 P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED

There is no potential for illegal or unauthorized dumping. The former storage area is a fenced corral in the parking lot.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

No other known, potential or alleged hazards exist.

III. TOTAL POPULATION POTENTIALLY AFFECTED: Approximately 190,000

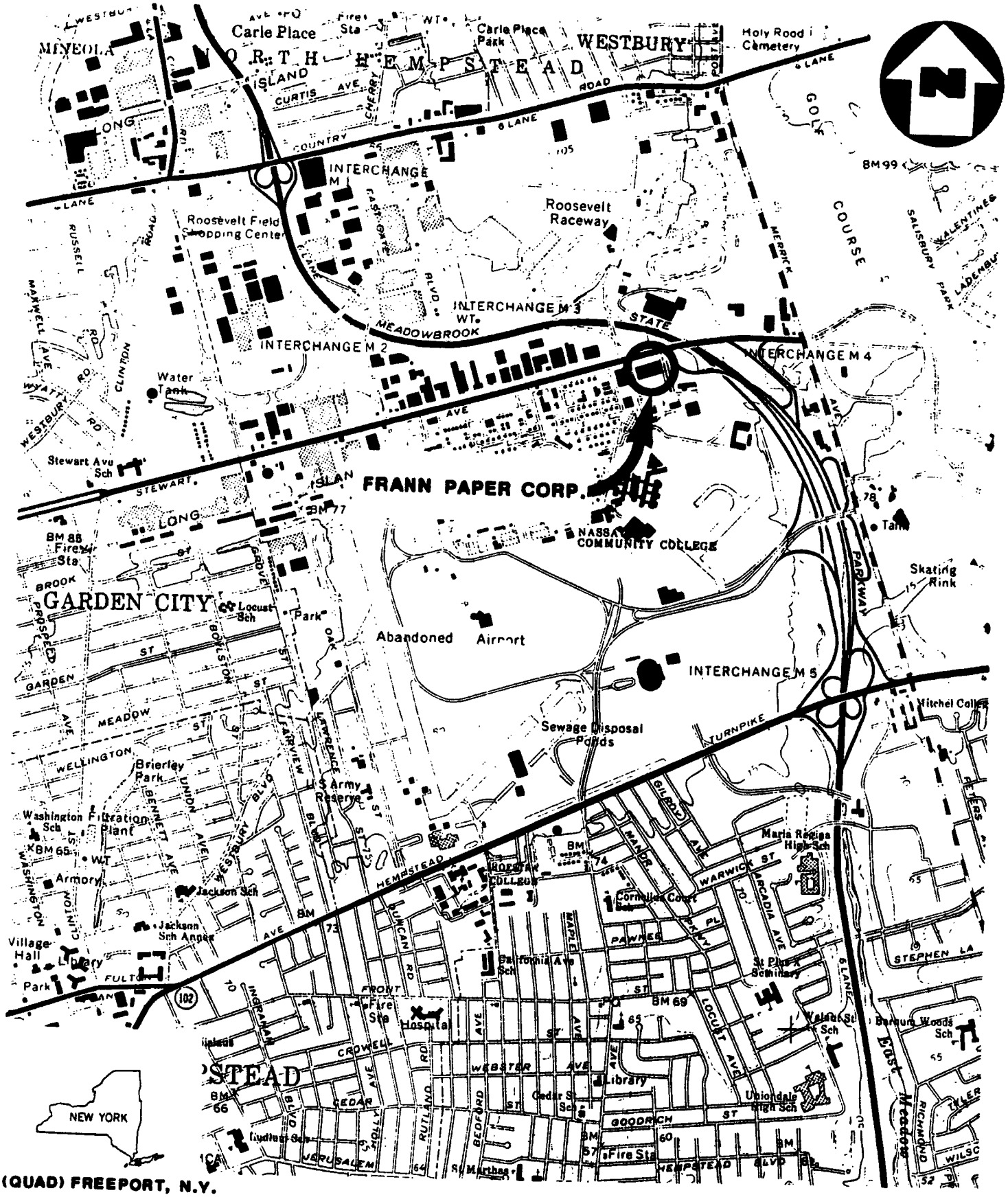
IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references. e.g., state files, sample analysis, reports)

Nassau County Health Department, Permit Compliance Inspection Report, Frann Paper Corp. July 9, 1982.
Bureau of Water Pollution Control, SPDES Application for Frann Paper Corp. February 8, 1980.
New York State Department of Environmental Conservation, Application for Approval to Operate a Solid Waste Management Facility, Frann Paper Corp. April 23, 1981.
Nassau County Department of Health Inspection Report Sheet, A. Fitzgerald, April 16, 1981.
EPA Notification of Hazardous Waste Site, Frann Paper Corp., May 4, 1981.
General Sciences Corporation, Graphical Exposure Modeling System, Landover, MD, 1986.
New York State Atlas of Community Water System Sources, New York State Department of Health, 1982.

APPENDIX A

MAPS AND PHOTOGRAPHS



(QUAD) FREEPORT, N.Y.

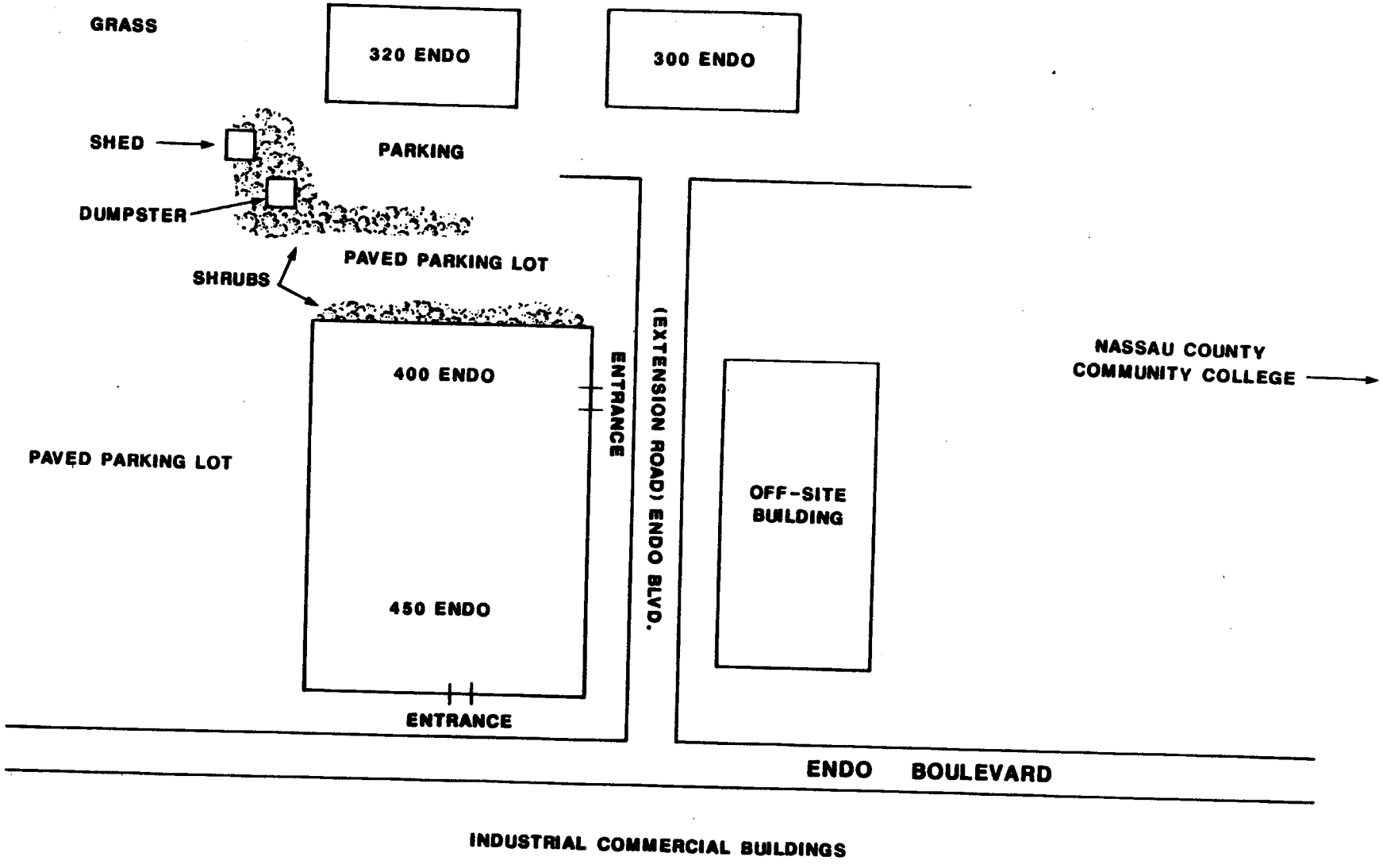
FIGURE 1

SITE LOCATION MAP

FRANN PAPER CORP., GARDEN CITY, N.Y.

SCALE: 1" = 2000'

NUS CORPORATION



SITE MAP

FRANN PAPER CORPORATION, GARDEN CITY, N.Y.

(NOT TO SCALE)

FIGURE 2

NUS CORPORATION

FRANN PAPER CORPORATION
GARDEN CITY, NEW YORK
TDD# 02-8707-05
JULY 14, 1987

PHOTOGRAPH INDEX

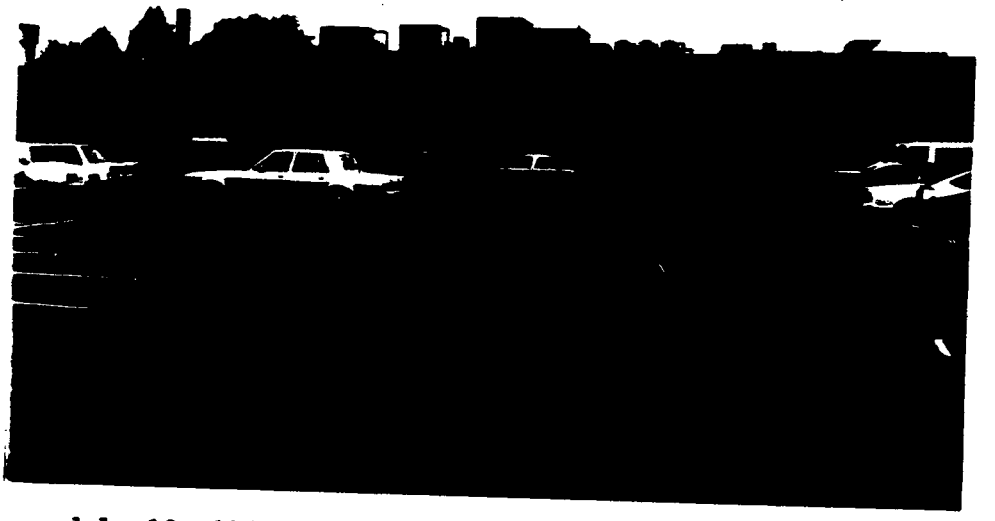
FRANN PAPER CORPORATION
GARDEN CITY, NEW YORK
TDD# 02-8707-05
JULY 14, 1987

PHOTOGRAPH INDEX

Photo Number	Description	Time
R1-P7	Facing north at the parking lot in the rear of the building.	1130
R1-P8	Facing east at 450 Endo Blvd.	1140
R1-P9	Facing east at the sign on the building.	1142

NUS CORPORATION

FRANN PAPER CORPORATION, GARDEN CITY, NEW YORK



R1-P7

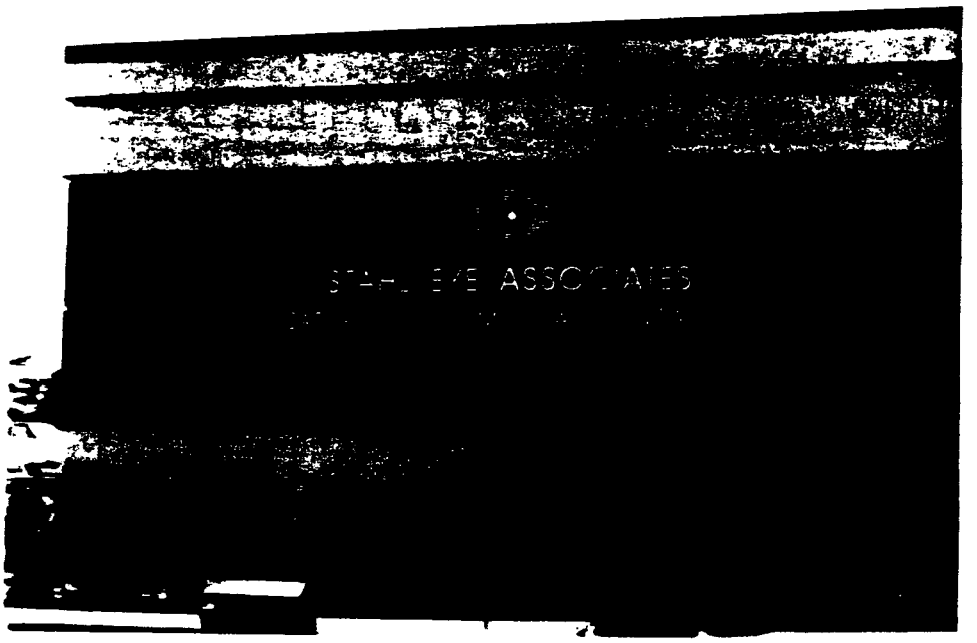
July 12, 1987 1130
Facing north, the parking lot in the rear of the building at 450 Endo Blvd.

R1-P8

July 12, 1987 1140
Facing east, the building at 450 Endo Blvd.

NUS CORPORATION

FRANN PAPER CORPORATION, GARDEN CITY, NEW YORK



R1-P9 July 14, 1987 1142
Facing east, the sign at 450 Endo Blvd.

APPENDIX B

BACKGROUND INFORMATION

REGION. 02 STATE: NY

NYD062525043 FRAN PAPER CORP

LAST UPDATE: 4/01/83

EXISTENCE DATE:

450 ENDO BLVD
GARDEN CITY NY 11530
516/333/8484

CLOSURE DATE:

COUNTY: NASSAU 059 DISTRICT: BASIN:

LATITUDE: 000000.0 LONGITUDE: 0000000.0

FACILITY STATUS: MODIFY/CONSTRUCT: COMMERCIAL: NON-REGULATED: OWNER TYPE: N FACILITY TYPE: GEN

MAILING ADDRESS
SMITH DAVID A GEN MGR
450 ENDO BLVD
GARDEN CITY NY 11530

OWNER ADDRESS
ROBERT LAOHMAN
516/333-8484

OPERATOR ADDRESS

INDICATORS

CONFIDENTIALITY NOTIF : 0
CONFIDENTIALITY PART A : 0
NATURE BUSINESS IND :
MAP STATUS IND :
DRAWING STATUS IND :
PHOTO STATUS IND :
INDIAN LAND IND :
OWNER/OPERATOR IND :

NOTIFICATION DATA

PERMIT STATUS:
NOTIFICATION RECEIVED: 8/18/80
NOTIFICATION ACKNOWLEDGED: 11/07/80
PART A RECEIVED:
(1) PART A ACKNOWLEDGED:
(2) PART A ACKNOWLEDGED:

PERMITS

TYPE	NUMBER

DESIGN CAPACITY

PROCESS	AMOUNT	UNIT

SIC CODES

2751

TRANSPORTATION

WASTE DESCRIPTION

ASTE CODE: D000	ESTIMATED AMOUNT:	MT	PROCESSES:
ASTE CODE: D001	ESTIMATED AMOUNT:	MT	PROCESSES:
ASTE CODE: F003	ESTIMATED AMOUNT:	MT	PROCESSES:
ASTE CODE: F005	ESTIMATED AMOUNT:	MT	PROCESSES:
ASTE CODE: U112	ESTIMATED AMOUNT:	MT	PROCESSES:
ASTE CODE: U220	ESTIMATED AMOUNT:	MT	PROCESSES:
ASTE CODE: U239	ESTIMATED AMOUNT:	MT	PROCESSES:

COMMENTS

EPA Notification of Hazardous Waste Site

United States Environmental Protection Agency
Washington DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

8/0504 NYS 000 001 053

- 8 JUN 1981

A Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name: Lawrence Lachman at Frann Paper Corp
Street: 450 Endo Blvd
City: Garden City State: N.Y Zip Code: 11530

B Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site: Frann Paper Corp
Street: 450 Endo Blvd
City: Garden City County: Nassau State: NY Zip Code: 11530

NYD062525043

C Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title): Lachman, Lawrence Manager
Phone: 516-832-8484

D Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year): 1958 To (Year): ~~Present~~ 1981

Waste Type: Choose the option you prefer to complete

Option I: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:
Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☒ Inorganics
3. ☒ Solvents
4. ☐ Pesticides
5. ☐ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☐ Other (Specify)

Source of Waste:
Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☒ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☐ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☐ Other (Specify)

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

D001

Form Approved
OMB No. 2000-0138
EPA Form 8900-1

F Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☒ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet ~~22000 G~~

gallons ~~3,500 gal / year~~

Total Facility Area

square feet 20 ~~sq ft.~~ S

acres –

G Known, Suspected or Likely Releases to the Environment:

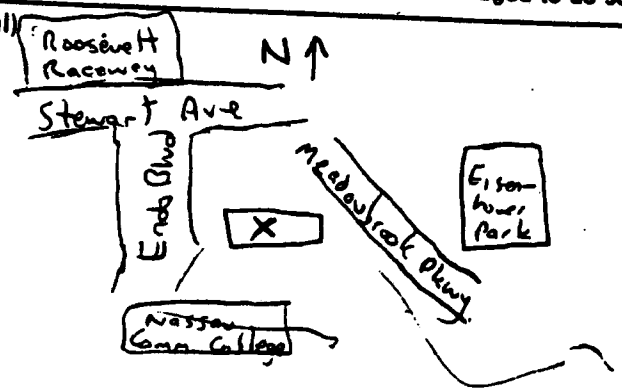
Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☑ None

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.



Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

Our waste is composed of printing inks and solvents. The ink is predominantly chlorinated rubber and nitrocellulose. The solvents are part of the alcohol, ester, and aromatic families. When we accumulate approximately ten 55 gallon drums, we have the waste picked up. The firm that picks up our waste is Pollution Control, which is located in Bayshore, N.Y.

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify check "Other".

Name Lawrence Lachman Manager

Street 450 Endo Blvd

City Garden City State N.Y. Zip Code 11530

Signature Lawrence Lachman Date 5/4/81

☒ Owner, Present
☐ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☐ Other

Please print or type with ELITE type (12 characters/inch) in the unshaded areas only.

Form Approved OMB No. 158-S79016
GSA No. 0246-EPA-CT

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.	NYD062525043
I. NAME OF INSTALLATION	
II. INSTALLATION MAILING ADDRESS	FRAN PAPER CORP 450 ENDO BLVD GARDEN CITY, NY 11530
III. LOCATION OF INSTALLATION	450 ENDO BLVD GARDEN CITY, NY 11530

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act).*

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER: F NYD062525043 T/A 3 S 1

APPROVED:

DATE RECEIVED (yr., mo., & day): 80 08 18

I. NAME OF INSTALLATION

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3

CITY OR TOWN: 4 ST. ZIP CODE

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 5

CITY OR TOWN: 6 ST. ZIP CODE

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title): 2 Smith David R. Gen Mgr

PHONE NO. (area code & no.): 516-333-8484

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: 8 Robert Laohman

B. TYPE OF OWNERSHIP (enter the appropriate letter into box)

F = FEDERAL
M = NON-FEDERAL

M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))

- [X] A. GENERATION
- [ ] B. TRANSPORTATION (complete item VII)
- [ ] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION (transporters only – enter "X" in the appropriate box(es))

- [ ] A. AIR
- [ ] B. RAIL
- [ ] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER (specify):

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION (complete Item C)

C. INSTALLATION'S EPA I.D. NO.: NYD062525043

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

EPA Form 8700-12 (6-80)

CONTINUE ON REVERSE

I.D. – FOR OFFICIAL USE ONLY

W N Y D 0 6 2 5 2 5 0 4 3 1

IX. DESCRIPTION OF HAZARDOUS WASTES *(continued from front)*

A. HAZARDOUS WASTES FROM NON–SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.31 for each listed hazardous waste from non–specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
F003	F005				
7	8	9	10	11	12

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four–digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
U112	U220	U239			
37	38	39	40	41	42
43	44	45	46	47	48

D. LISTED INFECTIOUS WASTES. Enter the four–digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. CHARACTERISTICS OF NON–LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non–listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

- [X] 1. IGNITABLE (D001)
- [ ] 2. CORROSIVE (D002)
- [ ] 3. REACTIVE (D003)
- [X] 4. TOXIC (D006)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
David A Smith	David A. Smith – Gen Mgr	8/13/80

EPA Form 8700-12 (6-80) REVERSE

RP

Gary Lachman

BUREAU OF WATER POLLUTION CONTROL
Nassau County Department of Health
240 Old Country Road, Mineola, N.Y. 11501 Tel. 535-2404

4

Part I

Company Name: FRANN PAPER CORP	SIC (if known) Code: 2754
Company Mailing Address: 45-2 Rado Blvd GARDEN CITY	Zip: 115 3
Plant Name (if different): LIGHTNER WOODSIDE	Contact Name: DAVID SMITH
Tel.: 333-8 45	
Plant Address: 109 GREEN ST HEMPSTEAD	Village / Water Distr. / Code / Zip
Principal Business of Plant: GRAVURE PRINTING	No. Employees at this Facility: 10

Part II

COMPLETE LIST OF CHEMICALS USED (See attached)

PART III - DISCHARGE INFORMATION

WATER

1. Does your plant discharge liquid wastes to a municipally owned sanitary sewer system? ☑ Yes ☐ No
   If yes, name of system:
2. Is your facility permitted to discharge liquid wastes under a State (SPDES) or Federal (NPDES) permit? ☐ Yes ☑ No
   If yes, enter Permit No.
3. Do you discharge liquid industrial wastes in any other manner? ☐ Yes ☑ No
   If yes, explain:
4. If any of the above are yes:
   a. Do you discharge process or chemical wastes, i.e., water used in manufacturing, including direct contact cooling water and scrubber water? ☐ Yes ☑ No
   b. Do you discharge non-contact cooling water? ☑ Yes ☐ No
   c. Do you discharge sanitary wastes? ☑ Yes ☐ No

AIR

1. Does your facility have sources of possible emissions to the atmosphere? ☑ Yes ☐ No
2. Enter location and facility code as shown on your Air Pollution Control Application for Permits & Certification (if applicable)
3. Heating System: HOT WATER ☐ None ☑ Boiler ☐ Space Heater | Type of Fuel: ☐ Electric ☐ Gas ☑ Oil #2 | Incinerator: ☐ Yes ☑

SOLID & CONCENTRATED LIQUID WASTES

1. List name and address of firm (incl. yourself) removing wastes other than office and cafeteria refuse (industrial scavenger)

Name	Name
SILVER RECOVERY	JAMAICA ASH
Address: Linden N.Y.	Address: WESTBURY

2. List location(s) of landfills owned and used by your Facility

	Active	Inactive
a. NONE		
b.		

PEST

Does this facility manufacture, produce, formulate or repackage pesticides? ☐ Yes ☑ No

Signature (owner, partner, or officer): Date:

Name (printed or typed): MR DAVID SMITH Title: GENERAL MGR

Inspector's Name: Allen Fitzgerald Date of Inspection: 7/8/80

EH 651 4/77

IN[redacted]RIA[redacted]EMI[redacted]SUR[redacted]-BU[redacted]U OF [redacted]ATER [redacted]LLUTION
Nassau County Department of Health

Name of Company FLOOD PAPER CORP

SIC

PART II - CHEMICALS USED (include gases and oils)

INSTRUCTIONS: Complete all information for those chemicals your facility has used, stored, distributed, or otherwise disposed of since January 1, 1977. Do not include chemicals used only in analytical laboratory work.

Name of Chemical/Trade Name, Supplier and Address	Code	Avg. Annual Usage	Gal	Lbs	Use of Chemical	Final Disposition of Chemical
ETHYLACETATE		9,000	✓		THINNING INK	STORED FOR SCAVENGER PICK UP
TOLUOL		1,500	✓		THINNING INK	" " "
ALCOHOL		200	✓		" "	" " "
CELLOSOLVE (GLYCOL ETHER)		50	✓		" "	" " "
LUBRIPLATE		20	✓		LUBRICATING MACHINERY	REMAINS IN MACHINE
30# MOTOR OIL		5	✓		COMPRESSORS	PICKED UP BY SCAVENGER

FOR OFFICE USE ONLY

RECOMMENDED ACTION

2 ☐ Immediate Abatement
3 ☐ Sample
4 ☒ SPDES Application
5 ☐ Refer To: _____
6 ☐ Re-inspection
7 ☐ No Action
9 ☐ Other (specify)

SOLVENTS RECOVERY SERVICE
OF NEW JERSEY, INC.
1200 SYLVAN STREET LINDEN N J 07036
PHONE (201) 925 9600

November 20, 1979

Frann Paper Corporation
450 Endo Boulevard
Garden City, New York 11530

Attn: Mr. David Smith

PRICE CHANGE
EFFECTIVE DECEMBER 17, 1979

RECOVERED SOLVENT: Mixed Solvent

MINIMUM CRUDE: 2000 Gallons

RECOVERED:
BY-PRODUCT PROCESSING:

$ .76/gal. recovered, minimum billing $250
$ .23/gal. difference between crude and recovered volumes, add
$ .12/gal. if less than 50% yield, add
$ .12/gal. if less than 25% yield
$ 14.50/drum

DRUM FURNISHING - Lined

TRANSPORTATION:

Bulk Pickup of crude $185.00/trip
Delivery in Drums - up to 34 drums $155
35-80 drums - $185

DETENTION

$20.00/hour - One hour free time. No free time while pumping into or out of drums.

SHIP CRUDE TO: SRSNJ
1200 Sylvan St.
Linden, NJ

VIA: SRS - Collect

RECOVERED TO: Frann Paper Company
450 Endo Boulevard
Garden City, NY

VIA: SRS - Prepaid

DELIVERY: Two to three weeks after receipt of material.
TERMS: Net 15 days

If you have any questions, please contact Paul R. DiLiberto.

Very truly yours,

Myron H. Smith

Myron H. Smith
Marketing Manager

MHS:mmr

ALL PRICES SUBJECT TO REVISION IF NOT ACTED UPON WITHIN 60 DAYS

ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent: FRAHN PAPER CORP
Address: 450 Endo Blvd Garden City

Inspector

DATE	COMMENTS
4/16/57	Visited Frahn Paper Corp & met with Mr Larry Lachman, manager, regarding storage of toxic wastes. I informed Mr Lachman that since he stores toxic wastes, he will have to submit a 360 application to this dept in order to acquire a permit for the storage & removal of toxic wastes. I reviewed & discussed the entire 360 package with him and advised that it be returned in two weeks
	Inspection of the waste storage area revealed that it is in need of an impervious surface and a berm. Mr Lachman stated that the area would be altered to conform with the provisions of the permit. O'Reffield

EH 109a 1/68
DH-1198 9/71

PERMIT COMPLIANCE INSPECTION REPORT

Bureau of Land Resources Management

Nassau County Department of Health

Facility Name: FRAHN PAPER CO

Address: 450 ENDO BLVD GARDEN CITY

Company Representative: LARRY LACHMAN

Title:

Phone:

Changes in Name, Address, Rep.:

Permit No. DRAFT

[X] New [ ] Renewal

Effective Date of Permit:

Expiration Date of Permit: DRAFT

Item	Yes	No	N/A
1. Waste Storage and Handling			
A. Adequate Spill Control?			
B. No obvious infraction of Fire Code?			
C. Proper waste containers?			
D. Proper Storage of incompatible wastes?			
E. Waste containers properly labeled?			
F. Proper drum stack size and aisles?			
G. Containers off ground and not leaking?			
H. Waste stored in secure area?			
2. Registered Industrial Waste Scavenger?			
Name			
DEC #			
[ ] Different scavenger since last report			
Records			
A, B, C Proper waste inventory records?			

Item	Yes	No	N/A
3. Records (Cont'd.)			
D. Record of spills & notification of N.C.H.D.?			
E. Record of special sampling results?			
4. Records kept a minimum of 3 years?			
5. Reports submitted on time?			
6. Waste storage in comformance with permit?			
Quantities O.K.? Drums			
Tanks			
Maximum storage time O.K.? 10 DRUMS/90 days			
7. Sampling in conformance with permit?			
8. Is compliance schedule met as required by permit?			
9. Overall Inspection Rating			
[ ] Satisfactory			
[ ] Non-Compliance [ ] Major [ ] Minor			

Date	Item	Comments
		CREATIVE FULFILLMENT MAIL order
		Frahn Paper Co no longer occupied the premises which is now occupied by Creative fulfillment — a mail order firm. Inspected the premises + found that all waste drums have been removed
		7/13/86

* Please note that this copy was retraced with ink for better clarity Joe Jelosa 8/16/90

Signature of Inspector: A. Fitzgerald

Date 7/9/85

Signature of Company Representative:

Date

EH 702 9/80

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR APPROVAL TO OPERATE A SOLID WASTE MANAGEMENT FACILITY

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

FOR STATE USE ONLY

PROJECT	DATE RECEIVED
DEPARTMENT ACTION ☐ Approved ☐ Disapproved	DATE

1. OWNER'S NAME: Robert Lachman	2. ADDRESS (Street, City, State, Zip Code): 450 Endo Blvd Garden City	3. Telephone No.
4. OPERATOR'S NAME	5. ADDRESS (Street, City, State, Zip Code)	6. Telephone No.
7. ENGINEER'S NAME	8. ADDRESS (Street, City, State, Zip Code)	9. Telephone No.
10. ON-SITE SUPERVISOR: Larry Lachman	11. ADDRESS (Street, City, State, Zip Code)	12. Telephone No.

13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE?
☐ Yes Date Course Title Location ☐ No

14. PROJECT/FACILITY NAME: Frann Paper Corp	15. COUNTY IN WHICH FACILITY IS LOCATED: Nassau	16. ENVIRONMENTAL CONSERVATION REGION

17. TYPE OF PROJECT FACILITIES: ☐ Composting ☐ Transfer ☐ Shredding ☐ Baling ☐ Sanitary Landfill ☐ Incineration ☐ Pyrolysis ☐ Resource Recovery-Energy ☐ Resource Recovery-Materials ☐ Other

18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? ☐ Yes Date ☐ No

19. LIST WASTES ~~NOT ACCEPTED~~

Our waste of inks per year is approximately 4000 gallons
These inks are predominatly nitrocellulose and chlorinated rubber composed of

20. BRIEFLY DESCRIBE OPERATION

We are gravure printers dependent on solvent and water based inks. Our waste originates from press wash-ups as well as color match failures. In proportion to our ink consumption, our waste is small. ~~when~~ we have waste picked up in the range of six times a year. Our largest accumulation of waste never exceeds ten drums; each drum holding 55 gallons. Our waste is removed by Chemical Pollution Control in Bayshore NY

* Please note that this copy was retraced with ink for better clarity
Joe Filasa
8/16/90

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION:
a. Total useable area: (Acres) Initially _____ Currently _____
b. Distance to nearest offsite, downgradient, water supply well _____ Feet
c. No. of groundwater monitoring wells Upgradient _____ Downgradient _____

22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION:
☐ Form 47-19-2 or SW-7 ☐ Operations Plan & Report ☐ USGS Topographic Map ☐ Record Forms ☐ Other Attached
☐ Construction Certificate ☐ Boring Logs ☐ Water Sample Analysis ☐ None

23. CERTIFICATION:
I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

4/23/81 — Lawrence Lachman Manager
Date — Signature and Title

FRANCIS T. PURCELL
County Executive

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N.Y. 11501

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
Division of Environmental Health

May 14, 1981

Mr. Morris Bruckman, P.E.
New York State Department of
Environmental Conservation
SUNY-Bldg. 40
Stony Brook, New York 11790

Re: Frann Paper Corp.
Part 360 Application
and Permit

Dear Mr. Bruckman:

Please find enclosed, an application for a Part 360 permit for the above facility. We have reviewed the application and found it to be complete.

Consequently, a draft permit has been drawn up and enclosed. This permit requires a facility number, your signature and an issuance date.

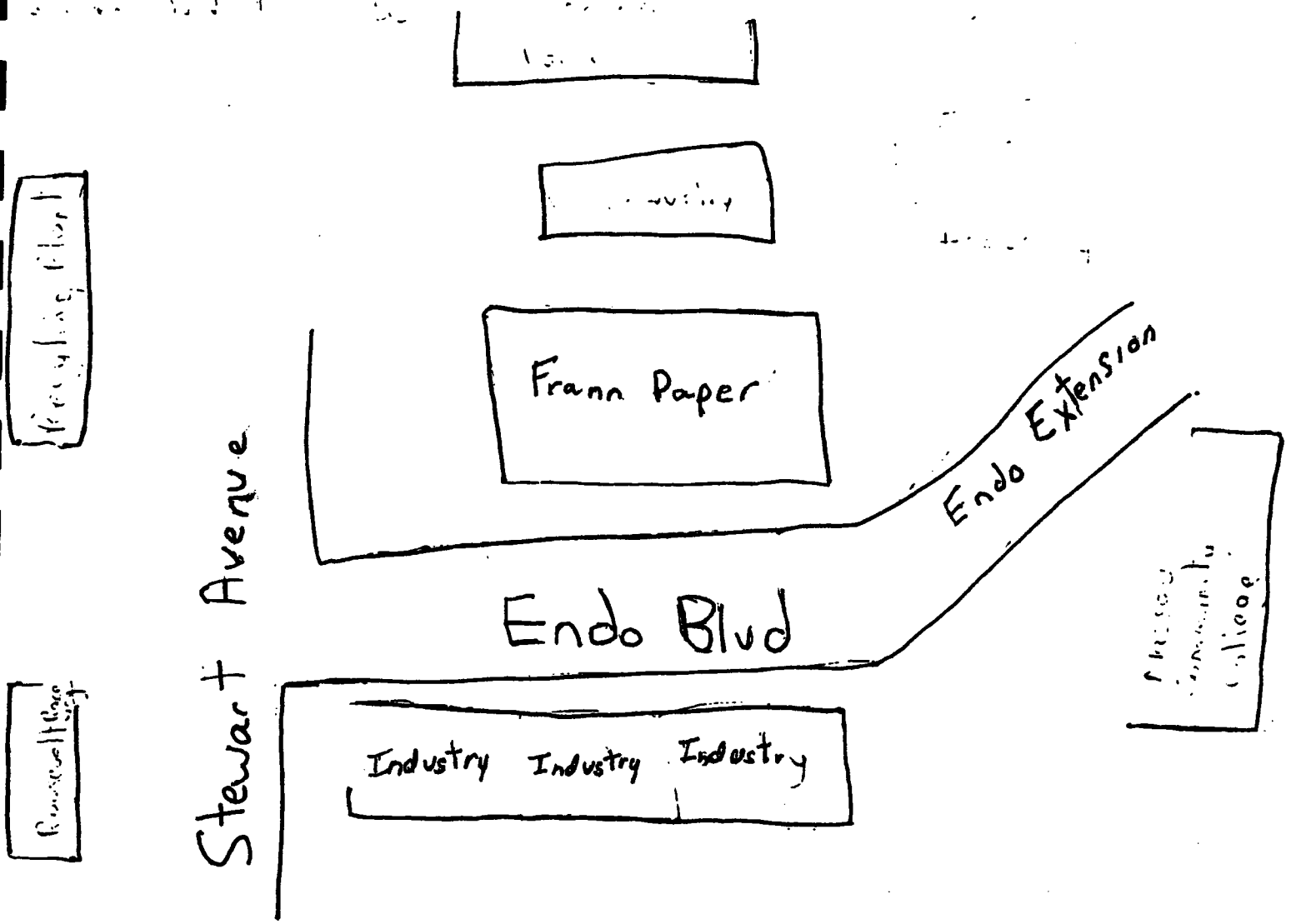
If you have any questions, please contact me at 535-2406.

Very truly yours,

L. Sama
Public Health Engineer
Bureau of Land Resources Management

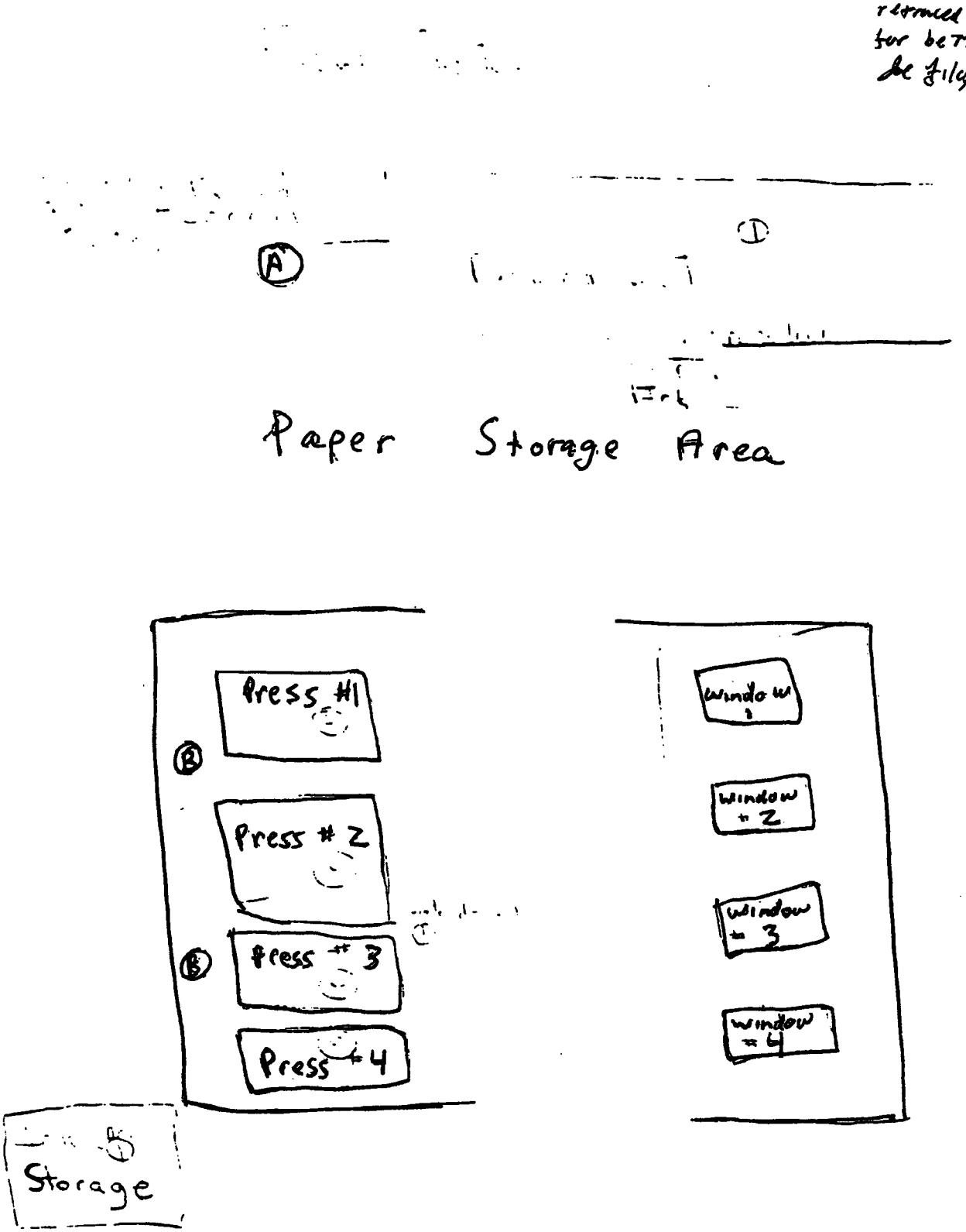
LS:ceg
Encl.

Frann Paper Corp
450 Endo Blvd



* Please note That
This copy was retraced with
Ink for better clarity
Joe Felesa
8/27/90

* Please note that this copy was retraced with ink for better clarity
[illegible] 8/17/90



Our waste is a combination of solvents in the esto aromatic alcohol and Ketone family, and printing inks. These inks are chlorinated rubber and nitrocellulose based. This waste is kept in drums in area B until full. When the drums beame full, they are stored in area A.

When we accumulated approximately 10 drums 55 gallon they were Then picked up by Chemical Pollution Control - BayShore. These drums [illegible] were waiting pickup.

* Please note that this copy was retraced with Ink for better clarity

Joe Filipa
8/17/90

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y., 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
for Environmental Health

Frann Paper Corp.
450 Endo Blvd.
Garden City East, N.Y. 11530

Att: Mr. L. Lachman

BUREAU OF LAND RESOURCES MANAGEMENT

NOTICE OF COMPLETENESS

Date: May 13, 1981

Application For: Part 360 Solid Waste Management Facility Permit

Application No: 81-33

This is to advise you that your application for a permit, as indicated above, is complete and that a review of it has commenced. Additional information may be requested from you at a future date if it is necessary for the processing of the application.

It has been determined that your project is a "minor project". A decision will be mailed to you within 45 days.

Department Representative: L. Sama

L. Sama

Telephone No: 535-2406

PERMIT

Under the Environmental Conservation Law, Article 27, Title 7, Part 360

EXPIRATION DATE: 1 year after

☐ CONSTRUCTION ☒ OPERATION

☐ INITIAL ISSUE ☐ RENEWAL

☐ REISSUANCE ☐ MODIFICATION

PERMIT ISSUED TO	ADDRESS OF PERMITTEE	TELEPHONE NO
Frann Paper Corp.	450 Endo Blvd. Garden City, East, NY 11530	(516) 555-8484

LOCATION OF PROJECT Town	County	Environmental Conservation Regional Office
Hempstead	Nassau	Region I-Stony Brook, N.Y. 11790

DESCRIPTION OF PROJECT	ON-SITE SUPERVISOR
Waste inks and solvents from printing operations	Mr. Larry Lachman

GENERAL CONDITIONS

1. The permittee shall file in the office of the Environmental Conservation Region specified above, a notice on intention to commence work at least 48 hours in advance of the time of commencement and shall also notify said office promptly in writing of the completion of the work.
2. The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation who may order the work suspended if the public interest so requires.
3. As a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.
4. All work carried out under this permit shall conform to the appro plans and specifications. Any amendments must be approved by Department of Environmental Conservation prior to their implem tation.
5. The permittee is responsible for obtaining any other permits, provals, easements and rights-of-way which may be required this project.
6. By acceptance of this permit, the permittee agrees that the permit contingent upon strict compliance with Part 360 and the spec conditions. Any variances granted by the Department of Environmen Conservation to Part 360 must be in writing and attached hereto.

SPECIAL CONDITIONS

Hold to Haul

Item 1 thru 7 See list of permit conditions attached

Item 8. Compliance Schedule

The waste storage area is to be modified to conform with Item 1a of permit conditions within 12 weeks of the effective date of the permit (EDP). All other conditions to be complied with no later than four weeks after EDP.

ISSUE DATE	ISSUING OFFICER	SIGNATURE

Permit Conditions for Operation of a Waste Generating Facility

1. The following minimum standards will apply for storing and handling wastes:

   a. There should be adequate spill control in the storage area; i.e. an impervious storage pad or floor, bermed to facilitate containment of spills. Stormwater runoff shall be directed to prevent entry into the pad.

   b. Building and fire codes should be met where required.

   c. Wastes should be stored in leakproof containers which are compatible with the waste materials. The containers should not be corroded or leaking and should be tightly closed.

   d. Wastes which deleteriously react with each other must not be stored directly adjacent or mixed together.

   e. Waste containers should be labeled, numbered and distinctly coded and identified as to contents in accordance with Department of Transportation Regulations 49CFR, Part 172.

   f. Waste drums should not be stacked more than two high and aisles should be provided so that all drums are accessible and clearly visible for inspection.

   g. Waste drums should be stored off the ground a minimum of 2 inches to facilitate detection of bottom leaks.

   h. Wastes should be stored in a secured area.

2. Removal of wastes should be only by registered industrial scavenger.

3. Records should be kept on premises and made available to Personnel from the Department of Environmental Conservation or its agents upon request. The following should be included:

   a. Quantity and type waste generated.

   b. Waste container inventory and identification including starting date of collection.

   c. Waste removals by scavenger including container I.D. numbers and scavenger I.D. numbers and final disposal site.

   d. Spills - Notification of DEC (751-7900) and/or Health Department (535-2404) should be made immediately.

e. Sampling results

4. All records shall be kept a minimum of three years.

5. A report shall be filed on an approved form by the fifteenth day of the following months each year:

February and August

Reports shall be filed with the Nassau County Department of Health.

6. Limits on maximum storage time and quantities of wastes stored on the site shall be _____.

Less than 90 days for 10 55 gal. drums

7. Samples shall be collected and analyzed as follows:

N/A

CRT ENVIRONMENTAL ASSESSMENT FORM

INSTRUCTIONS:

(a) In order to answer the questions in this short EAF is is assumed that the preparer will use currently available information concerning the project and the likely impacts of the action. It is not expected that additional studies, research or other investigations will be undertaken.

(b) If any question has been answered Yes the project may be significant and a completed Environmental Assessment Form is necessary.

(c) If all questions have been answered No it is likely that this project is not significant.

(d) Environmental Assessment

1. Will project result in a large physical change to the project site or physically alter more than 10 acres of land? . . . . . ___ Yes ___ No
2. Will there be a major change to any unique or unusual land form found on the site? . . . . ___ Yes ___ No
3. Will project alter or have a large effect on an existing body of water? . . . . . ___ Yes ___ No
4. Will project have a potentially large impact on groundwater quality? . . . . . ___ Yes ___ No
5. Will project significantly effect drainage flow on adjacent sites? . . . . . ___ Yes ___ No
6. Will project affect any threatened or endangered plant or animal species? . . . . . ___ Yes ___ No
7. Will project result in a major adverse effect on air quality? . . . . . ___ Yes ___ No
8. Will project have a major effect on visual character of the community or scenic views or vistas known to be important to the community? . . . ___ Yes ___ No
9. Will project adversely impact any site or structure of historic, pre-historic, or paleontological importance or any site designated as a critical environmental area by a local agency? . . . ___ Yes ___ No
10. Will project have a major effect on existing or future recreational opportunities? . . . ___ Yes ___ No
11. Will project result in major traffic problems or cause a major effect to existing transportation systems? . . . . . ___ Yes ___ No
12. Will project regularly cause objectionable odors, noise, glare, vibration, or electrical disturbance as a result of the project's operation? . ___ Yes ___ No
13. Will project have any impact on public health or safety? . . . . . ___ Yes ___ No
14. Will project affect the existing community by directly causing a growth in permanent population of more than 5 percent over a one-year period or have a major negative effect on the character of the community or neighborhood? . . ___ Yes ___ No
15. Is there public controversy concerning the project? . ___ Yes ___ No

PREPARER'S SIGNATURE: _____ TITLE: _____

REPRESENTING: _____ DATE: _____

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PROJECT PERMIT REQUIREMENT QUESTIONNAIRE

The purpose of this questionnaire is to assist the applicant in determining when, if any Department Permits or approvals must be obtained before starting work on a proposed project. If you are not sure if the action proposed is a regulated activity or is within an area subject to Department regulations (tidal wetlands, freshwater wetlands, etc.) contact our regional office for clarification. A pre-application conference with our staff to obtain guidance in the Department's Permit application review process can be arranged.

ANSWER ALL QUESTIONS

NAME OF APPLICANT: _____

DETAILED PROJECT DESCRIPTION & LOCATION: _____

	YES	NO	NOT KNOWN
1. Realty Subdivision Approvals in Nassau County Does project involve subdivision of land into 5 or more residential lots that will be served by a public or community sewage disposal system?		✓	
2. Mining Permit Does project involve the mining and commercial sale or off-site use of 1,000 tons of mineral within 12 calendar months (excepting excavation or grading in connection with on site construction or farming)?		✓	
3. Air Contamination Permit a) New or Modified Sources: Does project involve the construction, modification or operation of a boiler greater than 1 million BTU/hr rated heat input, an incinerator or an industrial process.		✓	
b) Indirect Source: Does project involve construction or modification of a highway, airport or a parking facility with 250 or more spaces?		✓	
4. Solid Waste Management Permit Does project involve the storage, transfer, processing or disposal of solid waste?	✓		
5. Wild, Scenic & Recreational Rivers Permit Only applies to certain lands within a ½ mile of the Carmans River. Consult D.E.C. Regional Office for exact determination.		✓	
6. Water Supply Permit Does project involve the acquisition of land or construction of facilities for water supply or distribution purposes?		✓	
7. Long Island Well Permit a) Does project involve the construction of a new well or deepening or increasing the capacity of an existing well to withdraw water at a rate greater than 45 gallons a minute?		✓	
b) Will project require the temporary lowering of groundwater levels for construction purposes?		✓	
8. Protection of Waters a) Will project change, modify or otherwise disturb the course, channel or bed of any stream classified C(T) or higher? (Consult the Regional Office for classifications).		✓	
b) Does project involve the temporary or permanent artificial obstruction of a natural stream or waterbody?		✓	
c) Does project involve the construction or repair of a permanent dock, pier or wharf having a top surface area more than 200-square feet?		✓	
d) Does project involve any excavation or placing of fill in the navigable waters of the State and adjacent wetlands?		✓	

	YES	NO	NOT KNOWN
9. Tidal Wetlands Permit			
I. Will project be located:			
a) in tidal waters,			
b) within 300-feet of either the landward edge of a tidal wetland boundary or a tidal body of water?			
II. Will there be any subdivision of land or physical alterations of land or water?			
Exemptions to the above regulated locations if:			
1) Project will be located at a ground elevation of 10-feet or higher above mean sea level (excepting on the face of a bluff or cliff).			
2) A substantial, man-made structure (such as a paved street or bulkhead) 100-feet or longer exists between the project site and tidal wetlands or tidal water. (Consult D.E.C. Regional Office if unsure.)			
10. Freshwater Wetlands Permit			
a) Will project area be within, or within 100-feet of, a freshwater wetland or freshwater body of 12.4 acres or larger?			
b) Will project involve draining, dredging, filling, excavating, erecting structures, roads, utilities or other alterations or placing any form of pollution in a wetland? (Consult D.E.C. Regional Office if unsure).			
11. Section 401 - Water Quality Certification Letter Does project or activity require a Federal Permit or License? If so, this State certification may be required prior to Federal approval.			
12. State Pollutant Discharge Elimination System (SPDES) Permit			
Does project involve:			
a) A proposed subdivision of 5 or more units?			
b) A proposed or existing discharge of 1,000 gallons per day of sewage or any discharge of industrial or other wastes to ground waters?			
c) Any discharge of sewage, industrial or other wastes to surface water?			
d) Any disposal of stormwater containing sewage industrial or other wastes?			
e) Any storage and disposal of potentially toxic or hazardous wastes?			
13. The following additional required D.E.C. permits have been applied for:			

Type of Permit	Appli. No.	Application Filing Date	Applicant's Name (If different from application now being submitted.)

14. List all other permits, licenses or approvals required by other agencies of government:

Type of Permit or Approval	Governmental Agency	Status

I certify that the above information is correct to the best of my knowledge.

DATE

SIGNATURE OF APPLICANT OR AUTHORIZED REPRESENTATIVE

FRANN PAPER CORPORATION

Lat: 40°44'46"N Long: 73°35'27"W

Data List of Dataset: NYV8 Number of Records = 6

REC #	POP	HOUSE	DISTANCE	SECTOR
1	635	260	0.400000	1
2	2439	907	0.810000	1
3	10747	3039	1.60000	1
4	33897	10631	3.20000	1
5	86359	28014	4.80000	1
6	131362	40823	6.40000	1

REFERENCE NO. 2

HYDROGEOLOGIC CORRELATIONS FOR SELECTED WELLS ON LONG ISLAND, NEW YORK--

A data base with retrieval program

by H. T. Buxton, D. A. Smolensky, and P. K. Shernoff

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations
Report 86-4318

Prepared in cooperation with the

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS
SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
SUFFOLK COUNTY WATER AUTHORITY
NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Syosset, New York

1989

DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

U.S. Geological Survey
5 Aerial Way
Syosset, New York 11791
(516) 938-8830

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CONVERSION FACTORS AND ABBREVIATIONS

For the convenience of readers who prefer metric (International Syster units to the inch-pound units in this report, the following conversion facr may be used:

Multiply inch-pound units	by	To obtain metric units
	Length	
inch (in)	25.40	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
	Flow	
gallon per minute (gal/min)	0.06308	liter per second (L/s)

National Geodetic Vertical Datum of 1929 (NGVD of 1929)

A geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "mean sea level."

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HYDROGEOLOGIC CORRELATIONS FOR SELECTED WELLS ON LONG ISLAND, NEW YOR

A data base with retrieval program

By H. T. Buxton, D. A. Smolensky, and P. K. Shernoff

ABSTRACT

Accurate delineation of Long Island's internal hydrogeologic structure is integral to the understanding and management of the ground-water system. The irregular extent and surface configuratio of Long Island's seven major hydrogeologic units give the ground-wat system a complex internal structure. This report presents a compute ized data base of hydrogeologic correlations for 3,146 wells on Long Island and adjacent parts of New York City. The data base includes the well-identification number, the latitude and longitude of the we location, the altitude of land surface at the well, the altitude of the bottom of the drilled hole, and the altitude of the upper surfac of the major hydrogeologic units penetrated by the well. A computer program is included that allows retrievals of selected types of data for all or any local area of Long Island. These data retrievals are valuable aid to the construction of hydrogeologic-surface maps.

INTRODUCTION

Long Island extends approximately 120 mi eastward from the East Rive New York Harbor to Montauk Point (fig. 1). It contains the densely popul boroughs of New York City (Kings and Queens Counties) in the west, suburb Nassau and western Suffolk Counties in the central part, and areas of farmlands and pine barrens in the east.

Ground water is the sole source of freshwater supply for the 2.6 mil inhabitants of Nassau and Suffolk Counties. About 500 Mgal/d was pumped the Island's ground-water reservoir in 1981 for public supply, commercial agricultural needs. This demand is expected to increase in coming years, which will make proper resource management imperative.

Long Island's geologic history has consisted of alternating periods erosion and deposition. The result is a sequence of aquifers and confini units of irregular extent and surface configuration that give the ground-w system a complex internal structure. This irregular internal geometry has large influence on the patterns and rates of ground-water flow. Ground-wa flow is retarded where the aquifers are separated by a confining unit but unimpeded where the intervening confining unit has been eroded or where cut-and-fill deposition makes two aquifers laterally contiguous.

Knowledge of the internal hydrogeologic structure is necessary for efficient resource management, which includes (1) designing future water- development plans; (2) selecting sites for waste disposal; (3) locating an tracking the movement of contaminants within the ground-water system; and mitigating other undesirable effects of man's influence on the system, suc streamflow depletion and saltwater intrusion.

Purpose and Scope

This report presents a computerized data base of hydrogeologic-unit correlations for 3,146 wells on Long Island and adjacent parts of New York City. The data base (at end of report) gives the altitude at which the upper surface of each of seven major hydrogeologic units was penetrated and also includes the location, land-surface altitude, and depth of each well.

The following sections discuss the hydrogeologic units and the well data used to correlate surface altitudes for each unit; they also describe the format of the data base and explain each element. Also included is a description of a simple system of data retrieval that facilitates construction of hydrogeologic maps with a computer program.

A report by Smolensky and others (in press) presents a set of maps showing the configuration of the upper surface of these hydrogeologic units. The correlations presented herein were developed during construction of those maps and are consistent with their representation of the system geometry. The data-retrieval methods described in this report were used during map construction.

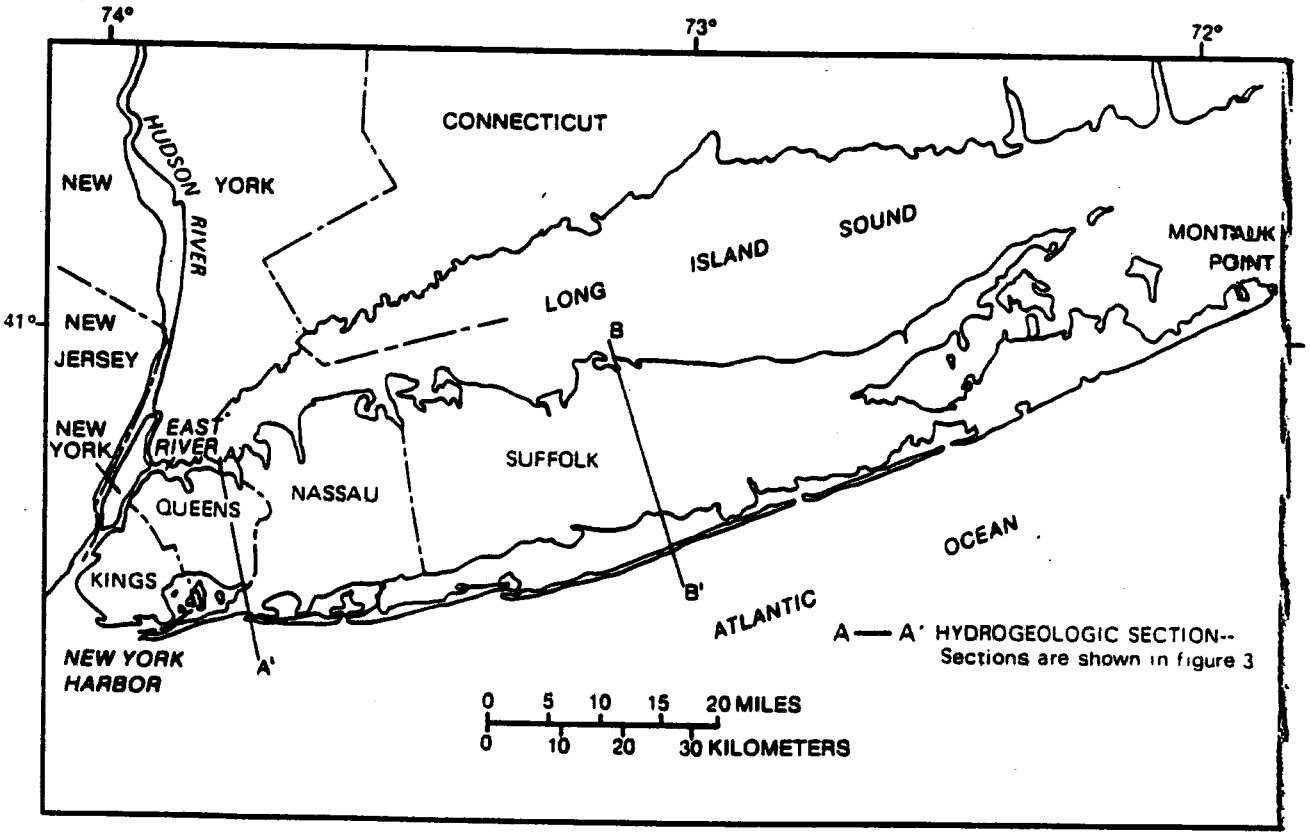


Figure 1.--Location of Long Island, N.Y., and of hydrogeologic sections depicted in figure 9.

Previous Investigations

Some previous hydrogeologic investigations that were completed on a loc scale were used as a starting point for this study. Krulikas (1981) and Jensen and Soren (1971) evaluated the hydrogeology of Suffolk County, Kilbur (1980) and Kilburn and Krulikas (1986) evaluated the hydrogeology of parts o Nassau County, and Buxton and others (1981) evaluated the hydrogeology of Kings and Queens Counties.

Acknowledgments

The authors greatly appreciate support provided by the New York State Department of Environmental Conservation, Nassau County Department of Public Works, Suffolk County Department of Health Services, Suffolk County Water Authority, and New York City Department of Environmental Protection.

HYDROGEOLOGIC FRAMEWORK

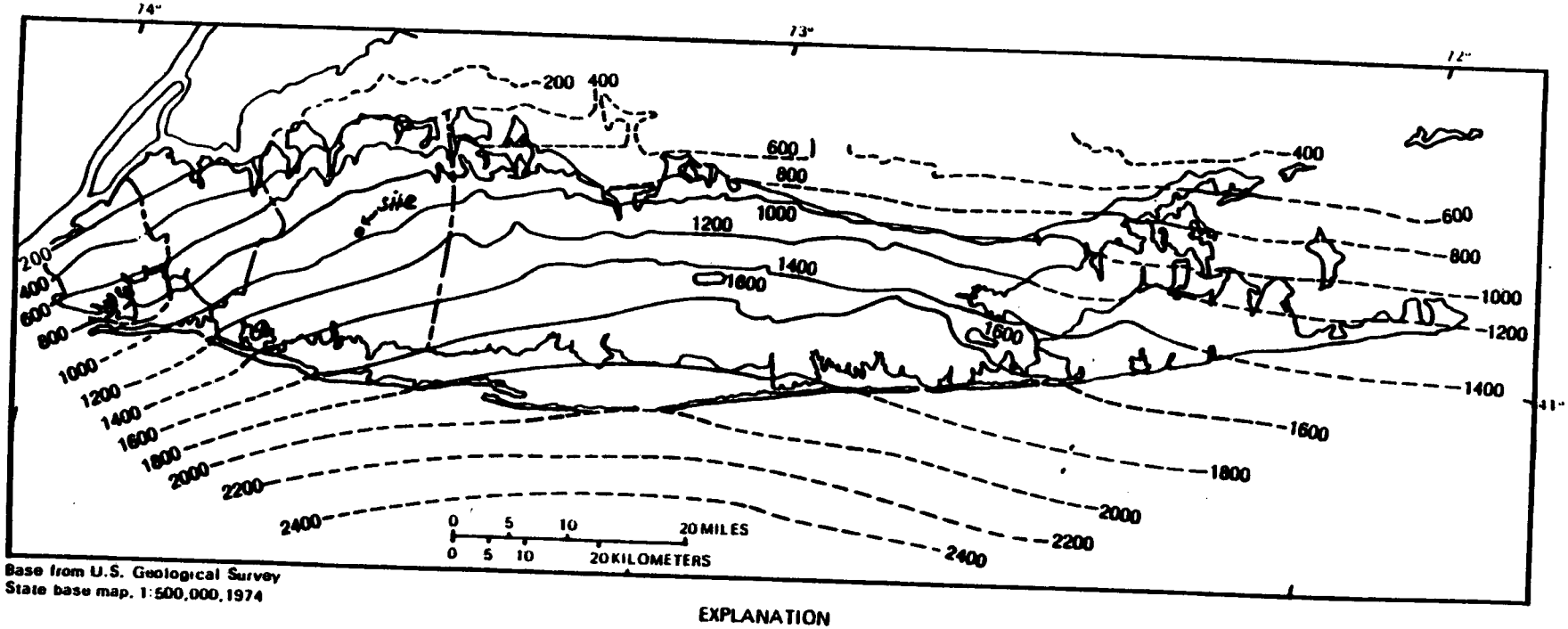
Long Island is underlain by unconsolidated deposits of clay, silt, sand, and gravel that overlie southward-dipping consolidated bedrock (fig. 2). The unconsolidated deposits are thinnest in northern Queens County (northwestern Long Island) and thicken to the south and east to a maximum thickness of 2,000 ft at the south shore. These deposits contain several distinct geologic units ranging in age from Late Cretaceous through Pleistocene, with some recent deposits near shores and along streams. These units are differentiated by age, method of deposition, and lithology in table 1.

In studies of ground-water availability and flow patterns, correlations that are based strictly on geologic factors may not adequately describe the internal structure of the hydrologic system; generally an interpretation in which the units are differentiated on the basis of water-transmitting properties is more useful. Thus, table 1 gives both the geologic units and the corresponding hydrogeologic units and shows their stratigraphic relationships. Eight major hydrogeologic units are indicated; these are, in order of deposition, consolidated bedrock, the Lloyd aquifer, the Raritan confining unit, the Magothy aquifer, the Monmouth greensand, the Jameco aquifer, the Gardiners Clay, and the upper glacial aquifer. The two hydrogeologic vertical sections shown in figure 3 depict the relative position of these units in western and eastern Long Island, respectively. The Jameco aquifer is present only in western Long Island (fig. 3A), and the Monmouth greensand is present only in eastern Long Island (fig. 3B). A map showing the extent and configuration of all units below the upper glacial aquifer is given in Smolensky and others (in press). Other local hydrogeologic units have been identified within the upper glacial deposits but are not discussed herein.

Table 1.--Hydrogeologic units of Long Island and their water-bearing properties.

System	Series	Geologic unit	Hydro-geologic unit	Approximate maximum thickness (ft)	Character of deposits	Water-bearing properties
Quaternary	Holocene	Recent deposits: Salt marsh deposits, stream alluvium, shoreline deposits, and fill.	Recent deposits	50	Sand, gravel, clay, silt, organic mud, peat, loam, and shells. Colors are gray, brown, green, black, and yellow.	Beach deposits are highly permeable; marsh deposits poorly permeable. Locally hydraulically connected to underlying aquifers.
	Pleistocene	Upper Pleistocene deposits	Upper glacial aquifer	700	Till composed of clay, sand, gravel, and boulders, forms Harbor Hill and Ronkonkoma terminal moraines. Outwash deposits consist of quartzose sand, fine to very coarse, and gravel, pebble to boulder sized. Also contains lacustrine, marine, and reworked deposits. Local units are Port Washington aquifer and confining unit, "20-foot clay," and clay at Smithtown.	Till is poorly permeable. Outwash deposits are moderately to highly permeable. Glaciolacustrine and marine clay deposits are mostly poorly permeable but locally have thin, moderately permeable layers of sand and gravel. Average horizontal hydraulic conductivity is approximately 270 ft/d; conductivity of morainal material is approximately 50 percent of outwash deposits; anisotropy is approximately 10:1.
		unconformity?				
		Gardiners Clay	Gardiners Clay	150	Clay, silt, and few layers of sand. Colors are grayish green and brown. Contains marine shells and glauconite.	Poorly permeable; constitutes a confining layer for underlying aquifer. Some sand lenses may be permeable. Average vertical hydraulic conductivity is approximately 0.001 ft/d.
		unconformity?				
		Jameco Gravel	Jameco aquifer	200	Sand, fine to very coarse, and gravel to large-pebble size; few layers of clay and silt. Gravel is composed of crystalline and sedimentary rocks. Color is mostly brown.	Moderately to highly permeable. Confined by overlying Gardiners Clay. Average horizontal hydraulic conductivity is 200 to 300 ft/d; anisotropy is approximately 10:1.
		unconformity				

Cretaceous	Upper Cretaceous	unconformity Monmouth Group unconformity		Monmouth Greensand	200	Interbedded marine deposits of clay, silt, and sand, dark-greenish gray, greenish-black, greenish, dark-gray, and black, containing much glauconite.	Poorly permeable; primarily a confining unit for underlying Magothy aquifer. Average vertical hydraulic conductivity is approximately 0.001 ft/d.
		Matawan Group-Magothy Formation, undifferentiated unconformity		Magothy aquifer	1,100	Sand, fine to medium, clayey in part; interbedded with lenses and layers of coarse sand and sandy and solid clay. Gravel is common in basal zone. Sand and gravel are quartzose. Lignite, pyrite, and iron oxide concretions are common. Colors are gray, white, red, brown, and yellow.	Most layers are poorly to moderately permeable; some are highly permeable locally. Water is unconfined in uppermost parts, elsewhere is confined. Constitutes principal aquifer for public supply. Average horizontal hydraulic conductivity is 50 ft/d; anisotropy is approximately 100:1.
		Raritan Formation	Unnamed clay member	Raritan confining unit	200	Clay, solid and silty; few lenses and layers of sand. Lignite and pyrite are common. Colors are gray, red, and white, commonly variegated.	Poorly to very poorly permeable; constitutes confining layer for underlying Lloyd aquifer. Average vertical hydraulic conductivity is approximately 0.001 ft/d.
			Lloyd Sand Member	Lloyd aquifer	500	Sand, fine to coarse, and gravel, commonly with clayey matrix; some lenses and layers of solid and silty clay; locally contains thin lignite layers. Sand and most of gravel are quartzose. Colors are yellow, gray, and white; clay is red locally.	Poorly to moderately permeable. Water is confined by overlying Raritan clay. Average horizontal hydraulic conductivity is 40 ft/d; anisotropy is approximately 10:1.
		unconformity					
Precambrian and Paleozoic	- - -	Bedrock		Bedrock	- -	Crystalline metamorphic and igneous rocks; muscovite-biotite schist, gneiss, and granite. A soft, clayey zone of weathered bedrock locally is more than 70 ft thick.	Poorly permeable to virtually impermeable; constitutes lower boundary of ground-water reservoir. Some hard fresh water is contained in joints and fractures but is impractical to develop at most places.

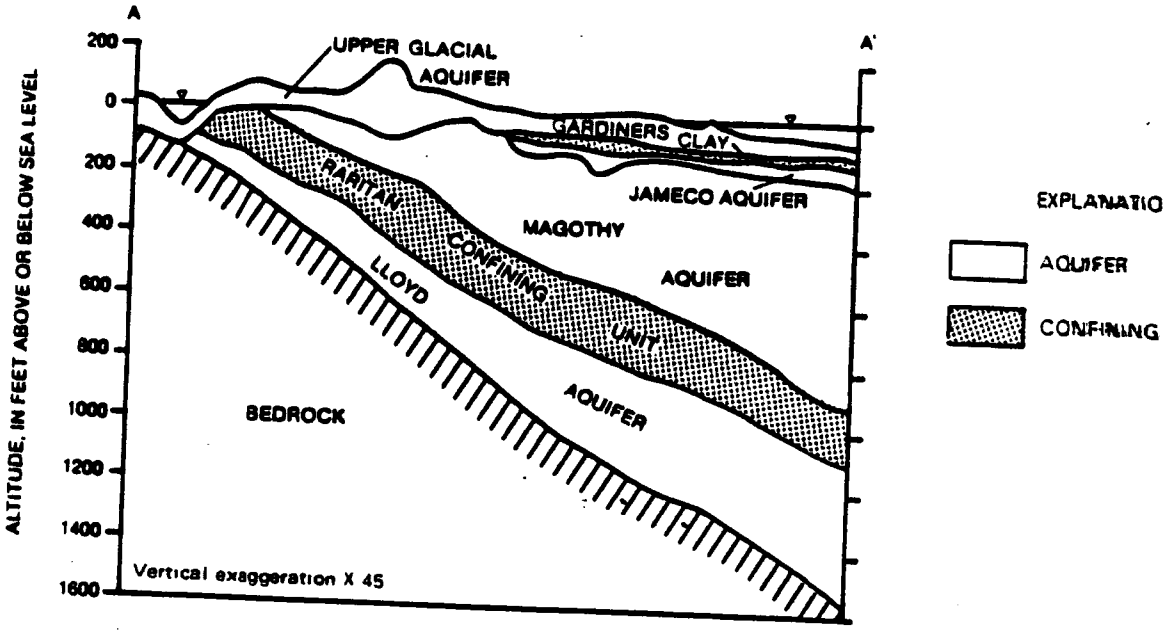


Base from U.S. Geological Survey
State base map, 1:500,000, 1974

EXPLANATION

1800 — — — LINE OF EQUAL THICKNESS OF UNCONSOLIDATED DEPOSITS--
Dashed where approximately located. Contour interval 200 feet

Figure 2.--Thickness of unconsolidated deposits on Long Island.



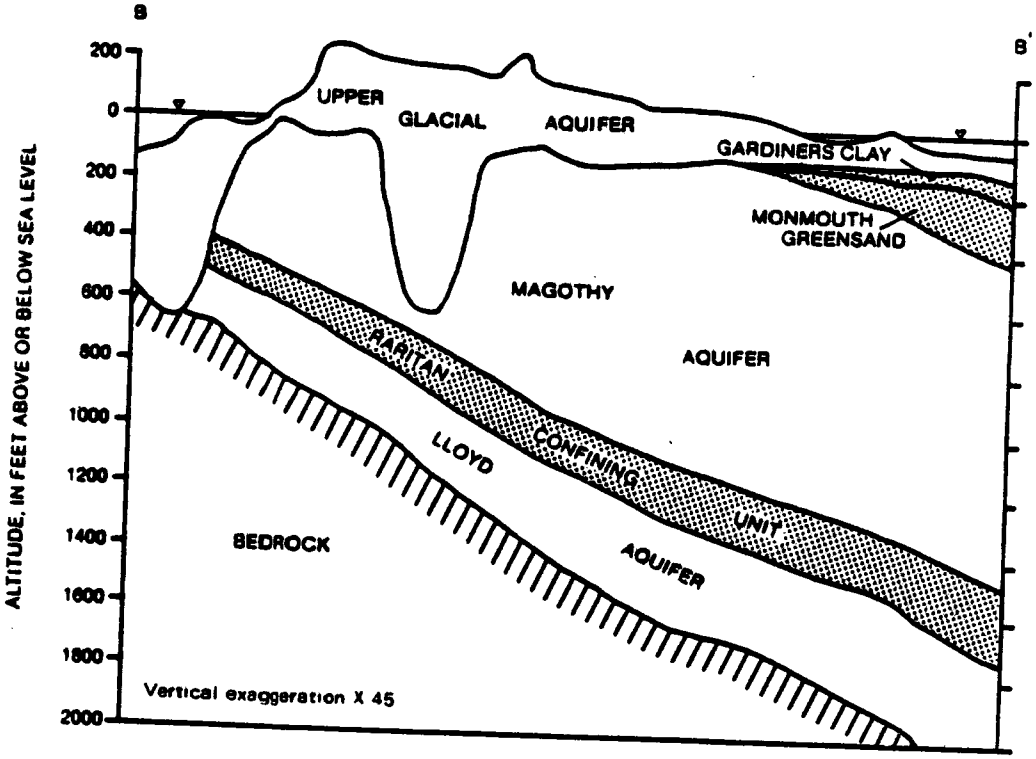


Figure 9.--Generalized vertical sections showing major hydrogeologic units: A. On western Long Island. B. On eastern Long Island. (Locations are shown in fig. 1.)

CRITERIA FOR HYDROGEOLOGIC INTERPRETATION OF WELL DATA

Hydrogeologic well data included geophysical logs and drillers' and geologists' descriptions of cores and other drilling samples. Lithologic, mineralogic, and paleontologic evidence from these sources was used in conjunction with a conceptual sedimentation model of the succession of physical environments through Long Island's geologic past to define the altitude of the upper surface of each major hydrogeologic unit penetrated by a well. Offshore seismic-reflection data (Grim and others, 1970, and Deborah Hutchinson, U.S. Geological Survey, written commun., 1984) were also considered. The surface altitudes of a unit at all wells were correlated to form a surface consistent with Long Island's geologic history.

ELEMENTS OF DATA BASE

Hydrogeologic well data from 3,146 wells throughout Long Island are given in the data base at the end of this report. These include 1,559 wells in Suffolk County, 830 wells in Nassau County, 462 wells in Queens County, 264 wells in Kings County, and 30 wells in the adjacent parts of New York City. The locations of wells in Kings, Queens, and Nassau Counties and adjacent areas are shown on plate 1; those in western Suffolk County on plate 2; and those in eastern Suffolk County on plate 3. All elements of the data base are explained in the following sections.

Well Identification

The State of New York requires that Long Island wells that pump more than 45 gal/min have a permit from the New York State Department of Environmental Conservation (NYSDEC). In the permit process, the well owner files an installation report with basic well data with NYSDEC, who assigns a well number. Other wells that are installed as geologic test holes or for collection of other forms of hydrologic data are reported voluntarily and filed.

The prefix letter of the well indicates the county in which the well is located, as follows: K, Kings; Q, Queens; R, Richmond (Staten Island); B, Bronx; M, New York (Manhattan); N, Nassau; and S, Suffolk. Wells are assigned numbers chronologically as they are reported.

Well Location

Each well has been plotted on U.S. Geological Survey 24-minute topographic maps, and the latitude and longitude estimated to the nearest second. A 5-second latitude-longitude grid is included on plates 1 through 3 to facilitate well location.

Well Altitudes

The altitude of land surface and of the bottom of the borehole is given in feet above or below (-) sea level. Many boreholes are significantly deeper than the completed well, and commonly the hydrogeologic information from the backfilled part of the hole is of value in that it indicates the presence or absence of a hydrogeologic unit at that depth.

Hydrogeologic Unit Penetrated and Altitude of Upper Surface

The altitude of the upper surface of any of the seven major hydrogeolog units penetrated by a well is given in feet above or below sea level. Altitudes facilitate correlation of these horizons among adjacent wells. In areas where the hydrogeologic unit is believed present but its exact surface altitude is difficult to identify, the term PRES (present) is entered. Wher the unit is believed present but no drillers' log or other geologic information is available, the term NOREC (no record) is entered.

Adjacent Wells

Many wells are drilled in or near the same location; they may be clustered for site-specific projects or may be one of several grouped togethe in a well field. Only the most recent well at a location is labeled on plate 1 through 3; adjacent wells are included in the data base.

SELECTIVE DATA RETRIEVAL

Selective retrieval of information on individual hydrogeologic units is useful in defining the configuration and extent of a unit and its relationshi to contiguous units. This section briefly describes a simple algorithm (and FORTRAN program, table 2) that retrieves selected information from the data base and prepares it in a form compatible with software available for plottin maps of Long Island (G. W. Hawkins, U.S. Geological Survey, written commun., 1984).

Program Documentation

A user can select pertinent information from nine fields in the data base. These nine fields along with a blank field are:

Field	Information
1	Well number
2	Altitude of hole bottom
3	Altitude of upper surface of Gardiners Clay
4	Altitude of upper surface of Jameco aquifer
5	Altitude of upper surface of Monmouth Greensand
6	Altitude of upper surface of Magothy aquifer
7	Altitude of upper surface of Raritan confining unit
8	Altitude of upper surface of Lloyd aquifer
9	Altitude of upper surface of consolidated bedrock
10	Blank field

The algorithm retrieves information from the selected field(s) and creates a file of labels. The file includes the latitude and longitude of the well for location, the symbol used for plotting the well on a map of Long Island, and the desired label to be plotted at each symbol (labels are selected from the above fields).

Table 2.--FORTRAN computer program for

```
      CHARACTER*6 NF(10),NA,NB,NC,NL
      CHARACTER*1 NS,TEXTIN,NN
      PRINT*,'*****************************************************'
      PRINT*,'***  PROGRAM - HYDROGEOLOGY RETRIEVE(HGR.F77)  ***'
      PRINT*,'***  GENERATES A LABEL FILE (FOR MLIPLOT)      ***'
      PRINT*,'***  FROM THE HYDROGEOLOGY DATA BASE.          ***'
      PRINT*,'*****************************************************'
      PRINT*,'***ENTER NAME OF HYDROGEOLOGY FILE'
      CALL IFILE(15)
      PRINT*,'***ENTER NAME OF LABEL CARDS FILE'
      CALL OFILE(4,16)
C
      PRINT*,'*****************************************************'
      NCHOP=INTIN(' ***ENTER 0 FOR ISLAND-WIDE RETRIEVAL, 1 FOR LOCAL')
      IF(NCHOP.EQ.0) GO TO 20
      LNLAT=INTIN(' ***ENTER LAT OF NORTHERN EXTENT OF LOCAL AREA***')
      LSLAT=INTIN(' ***ENTER LAT OF SOUTHERN EXTENT OF LOCAL AREA***')
      LELONG=INTIN(' ***ENTER LONG OF EASTERN EXTENT OF LOCAL AREA***')
      LWLONG=INTIN(' ***ENTER LONG OF WESTERN EXTENT OF LOCAL AREA***')
   20 CONTINUE
C
      PRINT*,'*****************************************************'
      PRINT*,'***  THE DATA BASE HAS THE FOLLOWING           ***'
      PRINT*,'***  INFORMATION IN THE NOTED NUMBERED FIELDS. ***'
      PRINT*,'*****************************************************'
      PRINT*,'*** - 1- WELL NUMBERS                          ***'
      PRINT*,'*** - 2- ALTITUDE OF HOLE BOTTOM               ***'
      PRINT*,'*** - 3- ALT. OF GARDINERS CLAY                ***'
      PRINT*,'*** - 4- ALT. OF JAMECO GRAVEL                 ***'
      PRINT*,'*** - 5- ALT. OF MONMOUTH GREENSAND            ***'
      PRINT*,'*** - 6- ALT. OF MAGOTHY AQUIFER               ***'
      PRINT*,'*** - 7- ALT. OF RARITAN CONFINING UNIT        ***'
      PRINT*,'*** - 8- ALT. OF LLOYD AQUIFER                 ***'
      PRINT*,'*** - 9- ALT. OF BEDROCK                       ***'
      PRINT*,'*** -10- BLANK FIELD(NO LABEL IN OPTIONS)      ***'
      PRINT*,'*****************************************************'
      NN=TEXTIN('ENTER C TO CONTINUE')
      PRINT*,'*****************************************************'
      PRINT*,'***     THREE OPTIONS ARE AVAILABLE            ***'
      PRINT*,'***     --------------------------             ***'
      PRINT*,'***  1- LABEL WITH FIELD A IF:                 ***'
      PRINT*,'***              FIELD B IS NOT BLANK.         ***'
      PRINT*,'***  2- LABEL WITH FIELD A IF:                 ***'
      PRINT*,'***              FIELD B IS BLANK              ***'
      PRINT*,'***  3- LABEL WITH FIELD A IF:                 ***'
      PRINT*,'***              FIELD B IS BLANK, AND         ***'
      PRINT*,'***              FIELD C IS NOT BLANK.         ***'
      NN=TEXTIN('ENTER C TO CONTINUE')
      PRINT*,'*****************************************************'
      PRINT*,'*** '
      NOP=INTIN(' ***     ENTER OPTION( 1,2 OR 3)***')
```

```
      PRINT*,'*** '
      NS=TEXTIN(' ***ENTER SYMBOL FOR WELL POINT ***')
      PRINT*,'***  '
C
       NF(10)='      '
      IA=INTIN(' ***ENTER FIELD FOR A ***')
      IB=INTIN(' ***ENTER FIELD FOR B ***')
       IF(NOP.NE.3) GO TO  15
      IC=INTIN(' ***ENTER FIELD FOR C ***')
C
   15 PRINT*,'*****************************************************'
      PRINT*,'***   YOU HAVE THE OPTION TO HAVE THE INFO IN  ***'
      PRINT*,'***   ONE OF THE FIELDS ADDED TO THE END OF    ***'
      PRINT*,'***   THE LABEL CARDS FOR REFERENCE.           ***'
      IL=INTIN(' ***      ENTER FIELD # FOR EXTRA LABEL***')
C
C  READ DATA FOR A WELL
C
   10 READ(15,8,END=99)NF(1),LAT,LONG,(NF(I),I=2,9)
    8 FORMAT(A6,3X,I6,1X,I6,7X,A6,3X,A6,1X,A6,
     /     1X,A6,1X,A6,1X,A6,1X,A6,1X,A6)
C
      IF(NCHOP.EQ.0)GO TO 25
      IF(LAT.GT.LNLAT.OR.LAT.LT.LSLAT) GO TO 10
      IF(LONG.GT.LWLONG.OR.LONG.LT.LELONG) GO TO 10
   25 CONTINUE
C
C   DEFINE FIELDS A,B,C AND L
C
      NA=NF(IA)
      NB=NF(IB)
      IF(NOP.NE.3) GO TO 140
      NC=NF(IC)
C
  140 CONTINUE
      NL=NF(IL)
C
      GO TO (50,60,70),NOP
   50 IF(NB.NE.'      ') GO TO 5
      GO TO 10
   60 IF(NB.EQ.'      ') GO TO 5
      GO TO 10
   70 IF(NB.EQ.'      '.AND.NC.NE.'      ') GO TO 5
      GO TO 10
C
    5 WRITE(16,9)NS,LAT,LONG,NA,NL
    9 FORMAT('L   0    ',A1 20X,I6,1X,I6,4X,A6,30X,A6)
      GO TO 10
   99 CONTINUE
      STOP
      END
```

One of three options can be selected:

(1) Label with field A if field B is not blank,
(2) Label with field A if field B is blank,
(3) Label with field A if field B is blank, and field C is not blank,

where A, B, and C are defined to be one of the ten fields listed on page 9. Data can be retrieved on an islandwide scale or for a local area by defining limiting latitudes and longitudes.

Sample Retrievals

The options provided by this program enable the user to retrieve selected data and plot maps that are useful in defining hydrogeologic geometry, either on an islandwide or a local scale. Several examples of data retrievals are outlined below; an application to construct a hydrogeologic surface map is presented also.

Example 1.--Select option 1; designate field A equal to 1 (well number) and field B equal to 6 (altitude of the upper surface of the Magothy aquifer).

A file is prepared for use in plotting a map that shows the locations well numbers of all wells that penetrate the Magothy aquifer. (If field A were designated equal to 6, the map would show the surface altitude of the Magothy aquifer at each well).

Example 2.--Select option 3; designate field A equal to 10, field B equal to 3, and field C equal to 6.

A file is prepared for use in plotting a map that identifies by a symbol each well that does not penetrate the Gardiners Clay but contacts the underlying Magothy aquifer. This indicates that the Gardiners Clay is absent at this site and provides a guide to defining the extent of that unit.

Example 3.--Select option 3; designate field A equal to 2, field B equal to 7, and field C equal to 6.

A file is prepared for use in plotting a map that shows the altitude of the bottom of all wells that penetrate the Magothy aquifer but not the underlying Raritan confining unit. The surface of the confining unit must be below this altitude.

An example of a hydrogeologic-unit map constructed with this data-retrieval system is shown in figure 4 (p. 14). This map shows the upper-surface configuration of the Raritan confining unit. All data on the map were retrieved from the data base through the discussed algorithm and are as follows:

-- Upper surface altitude of the Raritan confining unit in wells where i overlain by the Magothy aquifer, in feet. These values indicate the altitude of the unconformity between these units, a relatively flat surface.

-- Upper surface altitude of the Raritan confining unit in wells where t Magothy aquifer is absent. These values indicate the altitude of the Cretaceous surface where it has experienced severe post-Cretaceous erosion, especially during the Pleistocene.

-- Bottom altitude of wells that penetrate the Magothy aquifer but not t Raritan confining unit. These values indicate the highest possible surface altitude of the Raritan confining unit and are used to guide contours where wells are not deep enough to penetrate the unit.

-- Locations of wells that do not penetrate the Raritan confining unit b do contact older and stratigraphically deeper hydrogeologic units (th Lloyd aquifer or unconsolidated bedrock), indicating that the Raritan confining unit is absent at this location.

When combined, these data are a valuable aid to defining the surface configuration of a hydrogeologic unit; they also facilitate definition of extent of a hydrogeologic unit and differentiation of the parts of the su that were shaped by differing geologic events or environments. Use of th data-retrieval method is most advantageous in areas where typically layere strata have been affected by severe erosion.

SUMMARY

The hydrogeologic data base and method of selective retrieval presente in this report offer a method to obtain hydrogeologic data for any local a on Long Island and provide the data in a format suitable for construction hydrogeologic maps. The data represent the upper surface altitudes of the hydrogeologic units penetrated in 3,146 wells on Long Island and surroundi parts of New York City. The surface altitude of each hydrogeologic unit a well was inferred through inspection of lithologic, mineralogic, paleontologic, and geophysical data collected from the well and by correla of surface altitudes in nearby wells. The resulting series of correlated surface altitudes were used to define the surface configuration of the hydrogeologic units on a set of maps by Smolensky and others (in press).

As additional hydrogeologic data become available, reevaluation of correlations with nearby wells and concurrent adjustment of the data would advisable so that the data base will accurately represent the hydrogeologic structure of Long Island's ground-water reservoir.

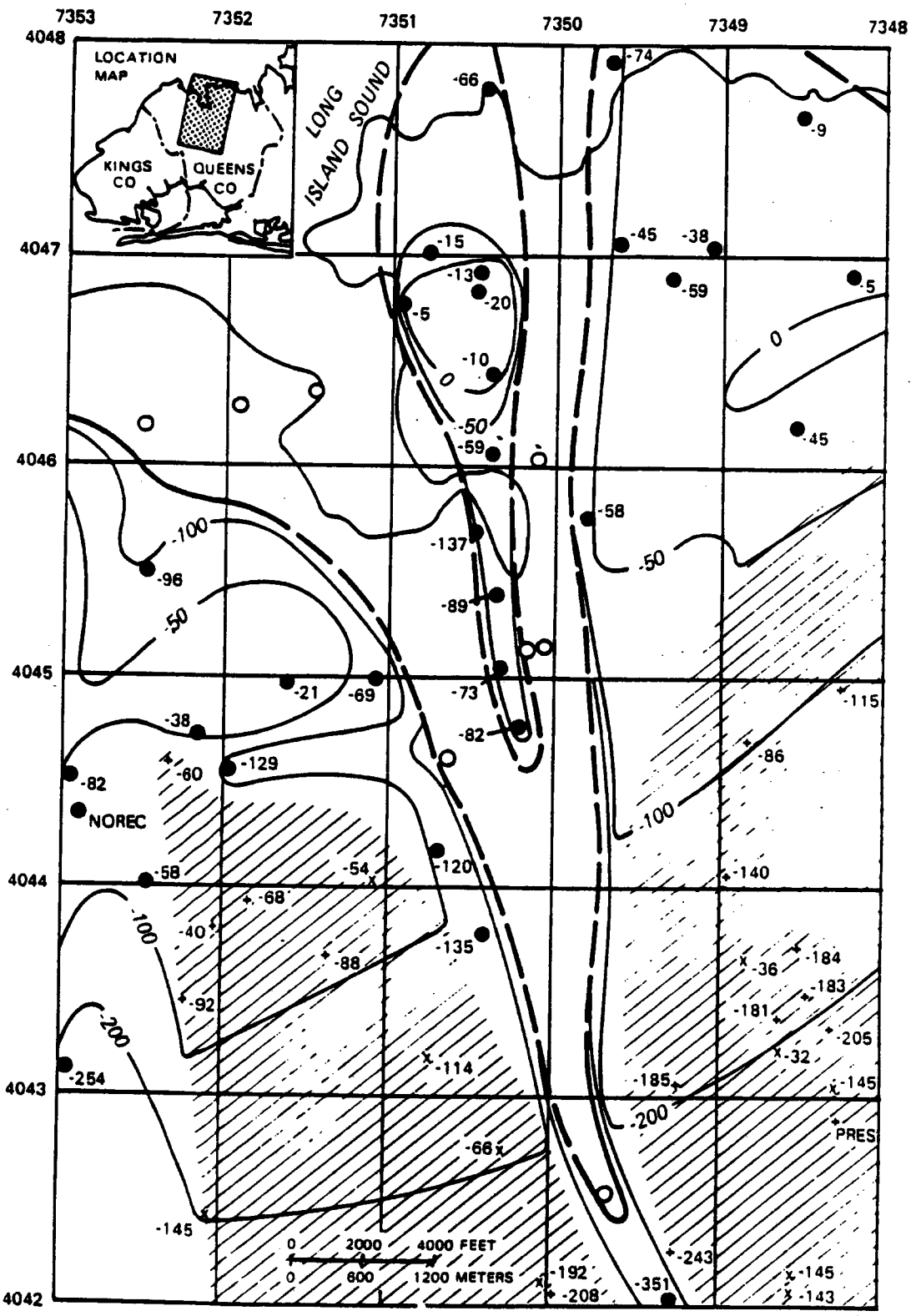


Figure 4.--Selected hydrogeologic data and estimated configuration of the upper surface of the Raritan confining unit in northern Queens County.

EXPLANATION TO FIGURE 4

+-60	UPPER SURFACE ALTITUDE OF RARITAN CONFINING UNIT--where Magothy aquifer is overlying, in feet below NGVD of 1929.
●-38	UPPER SURFACE ALTITUDE OF RARITAN CONFINING UNIT--where Magothy aquifer was eroded away, in feet below NGVD of 1929.
x-114	ALTITUDE OF BOTTOM OF WELL THAT CONTACTS MAGOTHY AQUIFER BUT NOT RARITAN CONFINING UNIT--in feet below NGVD of 1929.
O	WELL THAT DOES NOT CONTACT RARITAN CONFINING UNIT BUT DOES CONTACT AN UNDERLYING UNIT.
+PRES	UNIT IS BELIEVED PRESENT BUT ITS SURFACE ALTITUDE IS UNDEFINED AT THIS WELL.
●NOREC	NO BOREHOLE INFORMATION IS AVAILABLE IN THE INTERVAL WHERE THIS UNIT IS BELIEVED PRESENT.
———	EXTENT OF RARITAN CONFINING UNIT.
—50—	LINE OF EQUAL UPPER SURFACE ALTITUDE--contour interval 50 and 100 feet. Datum is NGVD of 1929.
▨	AREA WHERE RARITAN CONFINING UNIT IS UNCONFORMABLY OVERLAIN BY MAGOTHY AQUIFER.
4044, 7351	DEGREES AND MINUTES OF LATITUDE AND LONGITUDE, RESPECTIVELY.

REFERENCES CITED

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DATA BASE

Upper Surface Altitudes of Major Hydrogeologic Units at 3,146 Wells on Long Island, New York

(Locations are shown on plates 1, 2, 3)

NOTES

Well identification

Prefix letter (column 1) indicates county in which well is located:

K = Kings
Q = Queens
S = Suffolk
R = Richmond (Staten Island)
B = Bronx
M = New York (Manhattan)
N = Nassau

Hydrogeologic unit penetrated

The term PRES (present) is entered for wells where the hydrogeologic unit is believed present but its surface altitude is difficult to identify. Where the unit is believed present but no drillers' log or other geologic information is available, the term NOREC (no record) is entered.

Other abbreviations

Mon. greensand = Monmouth greensand
Rarit. conf. unit = Raritan confining unit

Remarks

Veatch 65 - indicates well number used in Veatch (1906).
NR -10 to -30 - indicates no hydrogeologic records are available from 10 to 30 feet below sea level.

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL								
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK	LOCATED NEAR WELL	REMARKS
B 1	404826 735000	2								-63		
B 2	404817 734958	0								-98		
B 3	404852 734909	9								-50		
B 4	405130 734616	10								-2		
B 39	404831 735005	2	-90							-63		
B 59	404820 735249	8	-80							-70		
B 69	404845 735210	0	-76							-71		
M 41	404240 740029	30	-46							-46		
M 114	404236 740037	30	-47							-47		
M 160	404705 735635	3	-146							-139		
M 161	404432 735915	30	7							16		
R A	403614 740310	0	-210	-124	-170					-190		BRIDGE BORING
R B	403609 740326	90	-216	-99						-163		BRIDGE BORING
R C	403834 740413									-115		
R D	403831 740440									100	R80	
R 7	403753 740437	10	-40									
R 14	403734 740445	25	-18									
R 18	403659 740416	45	-97									
R 22	403700 740358	15	-162							-162		
R 65	403506 740538	10	-77					-75				
R 66	403529 740518	12	-87					-84				
R 73	403730 740449	50	-30							-30		
R 79	403815 740519	120	76							110		
R 80	403830 740441	110	73							106		
R 81	403831 740433	40	-9							6		
R 82	403443 740316	5	-1000				NOREC	NOREC	NOREC	-450		
R 89	403659 740409	25	-11									
R 91	403652 740404	25	-15									
R 93	403646 740359	25	-27								R94	
R 94	403643 740357	25	-34									

N	102	4045340733743	175	78													
N	105	4046520733727	154	-353						81							
N	107	4047330733524	212	-294						10							
N	109	4049250733817	48	-481						153					N7513		
N	110	4049310733821	56	-463							-272	-374					
N	118	4052440733509	65	-412							-298	-335			N570		
N	119	4052440733523	80	-492													
N	120	4052410733528	80	-478								-337	-411				
N	122	405352 733704	5	-470								-411	-492				
N	123	4053530733645	25	-279								-363	-478				
												PRES	-467				
N	128	4035580733027	6	-1028	PRES		PRES	PRES	PRES			-205					
N	129	4036240733014	10	-946	PRES		PRES	PRES	PRES								
N	130	4037520733010	5	-63	-50										N8414		
N	131	4039490733417	11	-519													
N	133	4039530733420	21	-508				-68									
N	134	4039500733415	16	-512				-66							N7796		
N	135	4040020733423	20	-130													
N	136	4040450733418	25	-97				-56									
N	137	4039530733050	10	-80				-10							N7796		
N	138	4040560733107	25	-100				-33									
								-32								20FT	-12
N	140	4042300733134	55	-101				-17									
N	141	4041420733435	28	-81				0									
N	152	4046280733418	141	-343				-12									
N	167	4051480733417	55	-68				73									
N	173	4053370733448	38	-360				34									
												-322			N613		
N	181	4040300732908	24	-988													
N	184	4040250732802	10	-151				-89	-796								
N	185	4043000732733	45	-227				-90								20FT	-28
N	190	4044500732654	146	-554				-25								20FT	-38
N	198	4049170732929	240	-685				98									
								40	-390		-576						
N	199	4049220732924	235	-376													
N	216	4049550734524	30	-482				20									
N	248	403946 734252	14	-176									-200				
N	263	4045320734229	171	-584				-41									
N	268	4046050734018	172	56				26	-254		-489				N1332		
								92									
N	273	4047070734353	58	-35													
N	314	4051430734336	60	-190				-25									
N	319	4035130733957	10	-376									-190				
N	320	4036230733925	5	-378	-70	-108		-80									
N	373	4046250733506	149	-31				-124									
								74									

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL							LOCATED NEAR WELL	REMARKS
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK		
N 374	404643073350 4	205	102				168					
N 375	404653073352 0	182	32				162					
N 377	404722073352 9	200	-143				173					
N 381	404756073364 1	300	1				200					
N 384	404659073383 7	132	-118				32					
N 417	405403 733644	18	-228						-197			
N 418	405202 733638	10	-215				PRES	PRES	-215			
N 420	405401 733616	10	-332						-250			
N 440	404003073310 3	8	-72	-40			-60					20FT -20
N 502	405346073311 3	8	-362					-152	-308			
N 504	405422073303 6	19	-279					-131	-276			
N 506	405445073313 5	8	-310						-292			
N 558	404644073440 0	44	-138				-36				N4388	
N 569	403713 734333	20	-109	-64			-109					20FT -25,-41
N 570	404919073293 1	237	-369				-27	-369				
N 576	404605073313 4	144	-265				54					
N 578	404455073390 9	110	-305				-20					
N 599	404856073412 3	76	-378				-104	-164	-278		N8790	
N 613	405148073341 7	55	-85				33					
N 629	404141073414 3	55	-16				-14					
N 637	403821073345 0	5	-182				-47					20FT -37
N 638	404811073360 4	295	-265				138					
N 650	404533073393 6	108	-242				48				N651	
N 651	404534073393 3	105	-243				17					
N 661	405151073381 6	60	-343					-140	-212		N8048	
N 662	404940073392 7	11	-353					-274	-335			
N 687	404743 734444	8	-362						-272	-312		
N 693	404226073424 2	90	-17				-8					
N 695	405147073374 9	47	-247					-153	-225			

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL									
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK	LOCATED NEAR WELL	REMARKS	
N 1658	404448 0732949	115	-185				67						
N 1667	404524 0733532	108	-129				33				N7785		
N 1686	404723 0734349	95	-255				30	-125			N5576		
N 1687	404723 734349	95	-130				PRES	-113			N5576		
N 1715	404908 0734109	101	-419				-118	-165	-264	-397	N2030		
N 1716	404911 0734111	101	-412				-115	-158	-254	-408			
N 1742	403918 0733504	20	-252				-37						
N 1744	403922 0734017	20	-57				-50					20FT	-36
N 1771	404743 0734034	212	-158				-149						
N 1793	404338 733307	91	-209				38						
N 1802	404512 0734210	132	-618				9	-284	-427	-616			
N 1804	404528 734149	119	-137				1				N8373		
N 1805	405427 0733112	15	-337					-142	-290				
N 1818	404532 734209	141	-94				21						
N 1819	404514 0734150	117	-167				9						
N 1825	404756 0733732	200	-167				82						
N 1835	404519 734210	122	-148				1						
N 1841	404515 0734159	118	-141				8				N4207		
N 1869	403847 0733302	10	-122				-42					20FT	-33
N 1877	404810 0733912	20	-535				26	-240	-405		N2571		
N 1917	405138 0733824	15	-292					-150	-200		N4440		
N 1922	404523 0732947	125	-66				63						
N 1926	404841 734533	51	-235						-160	-235			
N 1927	403521 0733819	10	-1461	-89			-121	-859	-1051	-1461	N8233	20FT	-20
N 1939	405314 0733155	5	-374					-169	-332				
N 1940	405300 0733250	20	-460					-190	-350		N9595		
N 1958	404426 734148	116	-641				16	-298	-491	-639			
N 2002	404938 0733850	18	-454				-15	-229	-342				
N 2006	404110 0734003	45	-18				-14						
N 2017	405311 0733200	10	-385					-159	-325				

N 906	405034073391 2	9	-410												
N 914	403932 734243	10	-104	-60											
N 941	404147073400 1	55	-12							PRES	PRES	-427			
N 1038	404114073364 8	60	-55					-88							
N 1122	404645073403 3	179	40					-8							
								-15							
N 1123	404539073400 4	125	32					75							
N 1155	404800073371 2	281	31												
N 1175	404902073353 9	177	19					66							
N 1176	404738073353 1	195	-3					73							
N 1177	404648073361 3	183	37					97							
								163							
N 1190	405132073340 7	128	29					156					N7549		
N 1210	405023073315 5	187	44												
N 1212	404840073311 9	227	42					35							
N 1227	405055073295 0	172	38					90							
N 1228	404954073293 9	224	35					104							
								132							
N 1229	404846073291 0	251	50					38							
N 1244	404910073270 8	249	-13												
N 1245	404820073265 9	260	58					93							
N 1246	404703073264 2	186	62					184							
N 1291	404948073412 8	105	-296					192							
								97							
N 1293	404707073373 2	162	18							-235					
N 1298	404655 734445	15	-370					22							
N 1300	404549073402 1	165	-210					-70	-132	-243	-325				
N 1326	404722073436 2	96	-99					54							
N 1328	404713073410 5	177	-593					12							
								55	-234	-356	-566		N5576		
N 1332	404530073423 0	162	-48												
N 1335	403744073423 0	25	-117					43							
N 1346	403850 734238	5	-143	-56				-110							
N 1420	404352073382 0	74	-800	-50				-142							
N 1476	405057073325 1	130	47					-6	-458	-620				20FT	-15
								101							
N 1477	405125073304 7	216	22												
N 1481	404608073302 9	149	72					30							
N 1486	405325073293 3	5	-495					78							
N 1499	403759073392 0	6	-239												
N 1581	404948073412 8	108	-290					-51		-475					
										-258					
N 1585	404224073404 1	65	-23										N3888		
N 1602	404025073393 2	30	-563					-13							
N 1603	404112073393 5	32	-507					-52							
N 1618	404631 734215	83	-502					-26							
N 1651	405231073363 3	162	-308					-52	-184	-324	-502		N3520		
										-259			N5110		

N 2025	405353073311 4	23	-378													
N 2028	404731073400 7	254	-358									-192	-372			
N 2030	404907073410 9	102	-263							59	-237					
N 2035	404737073411 7	141	-4							-113	-161	-256				
N 2052	404829073395 3	159	-249							74						
N 2064	403939073291 2	5	-68							-34	-208				N5228	
N 2087	405145073382 0	50	-295							-59						
N 2088	405209073284 4	159	-446								-163	-278				
N 2092	404829073395 1	158	-121							-174	-242	-439			N6549	
N 2113	405309073313 7	10	-439							-35						
N 2132	405337073301 5	10	-459								-190	-350			N5228	
N 2169	404648073421 5	58	-182									-396				
N 2201	404518073342 7	115	-487							-61	-182					
N 2203	403806 734412	5	-177	-70	-142					65	-445					
N 2214	404828 734504	47	-245							-158					N8497	
N 2225	403920073255 5	5	-169									-173	-243			
N 2236	404519073342 7	115	-455	-49		-70				-89						
N 2241	405325073315 1	18	-358							65	-445					
N 2269	404916073411 6	110	-155									-341			N8497	
N 2349	404205073323 5	55	-51							-125						
N 2359	403906073282 9	5	-58							-5						
N 2400	404710073380 4	166	-321	-44												
N 2422	404441073365 1	93	-17							-49						
N 2424	404935073384 9	16	-445							61	-311					20FT -34
N 2487	404546073390 2	135	-299							68						
N 2527	404443073365 1	94	-24							-40	-218	-353			N7186	
N 2528	405001073343 2	92	-251							-20						
N 2560	405445073310 5	15	-402							69						
N 2566	404543073404 7	173	38							-195	-204				N7186	
N 2570	404811073391 6	51	1								-140	-302				
N 2571	404811073391 4	42	-25							38						
N 2572	403731073383 5	5	-95							32					N2571	
N 2574	403951073361 5	20	-524	-48						6						
N 2578	404033 734312	25	-478							-92						
N 2580	404323073314 5	75	-1							-42						
N 2597	403532 734034	6	-1246							-57	-434				N8196	20FT -16
N 2602	404516073343 4	114	-744	-103	-117					0					N5145	
N 2747	404446073365 0	92	-325							-137	-788	-945				
N 2748	404445073365 1	94	-457							-39	-476	-635				
N 2749	404751 734405	56	-389							11						
										60	-453				N2748	
											-194	-250	-342		N4266	

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL							LOCATED NEAR WELL	REMARKS
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK		
N 2790	403805 0733953	3	-882				-85	-684	-853		N7889	
N 2921	403645 0733850	8	-112	-57			-104					20FT -37
N 3078	403705 0733906	5	-141	-57			-99					
N 3147	404546 0732841	121	-129				63					
N 3154	404443 0733848	91	19				56				N7186	
N 3185	404416 0733847	106	-393				-3					
N 3193	404339 0733040	85	-235				11				N7076	
N 3245	403914 0732645	5	-210	-55			-66					
N 3312	404310 0733029	70	-237				7				N7523	
N 3325	403742 0733433	5	-115				-63				N8761	20FT -35
N 3327	404033 734312	25	-545				-67	-432			N5145	
N 3355	404618 0732704	183	-1065				17	-604	-775	-1035		
N 3443	404815 734345	124	-347				-32	-136	-256	-339		
N 3444	404845 0733441	263	-197				158				N7446	
N 3448	403511 734150	7	-1243	-83			-123	-715	-990			20FT -47
N 3456	404302 0733325	77	-552				17					
N 3465	404305 0733331	80	-482				10					
N 3474	404847 0733440	244	-395				107	-325			N7446	
N 3475	404849 0733445	208	-279				44				N7446	
N 3479	404117 0732944	30	-42				-31					20FT -29
N 3484	404529 0733514	106	-59				77				N8543	
N 3488	404445 0733104	117	-234				29					
N 3494	404400 0733147	97	-553				2				N8321	
N 3519	404030 0734146	19	-600				-33	-519			N3781	
N 3520	404112 0733932	30	-445				-32					
N 3521	404823 0734148	49	-357				-154	-169	-272			
N 3523	404814 0734112	201	-383				-138	-199	-336			
N 3529	403520 0733932	10	-96				-94					20FT -34
N 3569	404751 0733045	181	-221				93				N6741	
N 3581	403741 0733912	8	-49	-48								20FT -22

N 3603	4042480734021	76	-458			-31	-427		
N 3605	4041530734102	48	-537			-44	-476		
N 3618	4043400733047	88	-332			12			20FT -17
N 3636	4042090733735	50	-306			-13			
N 3649	4044460733704	107	-197			23		N3700	
N 3668	4041500733729	55	-511			-30			
N 3672	4044590734021	105	-376			-15	-342		
N 3685	4042240733742	55	-95			-1			
N 3700	4044480733705	106	33			38			
N 3704	4041300733831	55	-145			-39			
N 3705	403824 734159	24	-166	-49	-136	-150			20FT -30
N 3719	4041120734041	33	-553			PRES	-487		20FT -16,-49
N 3720	4041120734041	35	-551			-63	-485	N3720	
N 3721	4040440733548	40	-61			-8			
N 3732	4046440733839	140	-310			26			
N 3733	4046280733831	141	-314			32			
N 3734	403711 734443	12	-130			-130			
N 3741	4039130734020	20	-102			-59			20FT -16
N 3742	4048420734044	140	-125			-125			20FT -32
N 3752	4048230733805	211	-52			2		N5708	
N 3758	4044350733718	110	10			19			
N 3781	4040300734145	19	-561			-16	-520		
N 3801	4047260734355	85	-100			56			
N 3838	4047590733115	195	32			100		N3851	
N 3851	404727 734355	82	-105			17			
N 3857	4043530732910	91	-601			39		N8941	
N 3860	4047450733059	183	-262			123		N3874	
N 3861	403751 734401	5	-616	-59	-133	-203	-545		20FT -23
N 3862	403621 734418	8	-787	-111	-123	-156	-646		20FT -36
N 3863	4035170734307	11	-206	-79	-115	-149		N6701	20FT -30
N 3864	403827 734250	4	-632	-65	-133	-206	-576	N6581	20FT -19,-37
N 3865	4037350733748	4	-846			-56	-736		20FT -28
N 3866	403816 734142	6	-446	-88	-130	-180			20FT -22,-33
N 3867	403912 734320	6	-543	-51	-78	-144	-513		20FT -30,-51
N 3874	4047450733059	183	-152			108			
N 3876	4043520732911	90	-316			36		N8941	
N 3877	4046280733237	152	-403			-5		N3953	
N 3878	4046240733233	150	-456			[illegible]	-488		
N 3881	4043200734028	[illegible]	[illegible]			[illegible]			
N [illegible]	[illegible]	108	-294			[illegible]			

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL							LOCATED NEAR WELL	REMARKS
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK		
N 3892	4052330733724	145	-300					-171	-234		N5261	
N 3894	4040590733417	30	-385				-27					20FT -10
N 3895	4041190733231	40	-463				-51				N8976	
N 3905	404544 734151	134	-636				41	-254	-431	-611	N4243	
N 3926	4037250734304	14	-101	-55								20FT -19
N 3937	4039570734017	25	-652				-29	-592				
N 3953	4046280733237	152	-362				23					
N 3982	4053150733342	20	-399					-149	-311			
N 4077	404324 734139	85	-453				PRES	-351				
N 4095	4046380732807	150	-377				78					
N 4097	4046310732939	158	-312				112				N6580	
N 4120	4040430734104	35	-423				-40					20FT -25
N 4128	4047330734146	137	-43				16					
N 4133	4048090733034	192	-253				-2					
N 4149	4039050733242	5	-873				-44	-764				20FT -33
N 4150	4038430733407	7	-819				-44	-745				20FT -29
N 4173	404526 734159	130	-130				12					
N 4206	4045240733632	106	-254				47					
N 4207	4045170734154	120	-125				18					
N 4215	4046330733759	132	28				36					
N 4223	4048550734034	192	-318				-148	-194	-311			
N 4243	404541 734152	132	-128				41					
N 4245	4047460733211	222	-349				72					
N 4246	4048020733128	200	-258				40					
N 4265	4047550733724	215	-275				19					
N 4266	404752 734403	57	-419					-155	-233	-348		
N 4327	4046210733923	127	-303				36	-303				
N 4332	4047560733940	189	-21				113					
N 4334	4042110733832	65	-96				-13					
N 4376	4054450733112	58	-309					-110	-242			

N 4382	4045220733437	114	-106											
N 4383	4045270733354	124	-12						54					
N 4388	4046460734403	28	-117						82					
N 4390	4045140734121	124	-177						-26				N9062	
N 4400	4051540732958	36	-364						9					
N 4401	4041530732622	37	-684						-177	-268			N7445	
N 4405	403515 734305	9	-1108						-57					
N 4411	4039200734049	17	-551	-84	-120				-141	-709	-865		N9173	
N 4425	4042590733715	60	-315						-58				N6701	20FT -35,
N 4430	4051430733821	28	-324						0					
N 4440	4051350733829	16	-300							-120	-272		N6549	
N 4461	4040510732948	25	-617	PRES						-119	-234			
N 4462	4050100733849	69	-202						-58					
N 4512	4040580734108	35	-487							PRES			N8837	
N 4623	4047220733948	257	-246						-28	-470				
N 4633	4047210733322	176	-132						67	-244				
N 4714	403802 734444		-228						19					
N 4756	4042060733452	61	-847		-150									
N 4772	4044370733743	109	-129						4	-575	-755			VEATCH 272
N 4859	4050100734142	30	-369						30					
N 4875	4037490734236	25	-123									-353		
N 5007	4045520733420	119	-140	-57					-112					
N 5058	4048480733407	238	-17						99					
N 5071	4052130733655	143	-99						170				N7353	20FT -15
N 5074	4047000734350	81	-39						48					
N 5076	404238 734203	71	-392						-39					
N 5079	4037420734052	15	-138						-31	-392				
N 5099	404647 734235	189	-245	-97					-122					
N 5110	404629 734213	82	-324						-50	-199				
N 5121	4039580734103	26	-521						-63	-188				
N 5129	4036060733030	9	-1094						-62					
N 5135	4047320734304	135	-29	-52		PRES							N8251	
N 5145	4040310734310	30	-474						-90	-990				
N 5149	4045560733045	147	-45						99					
N 5153	4039420733644	25	-330						-57					
N 5187	4040410733438	35	-579						39					
N 5188	4053500733124	22	-353						-25					
N 5193	4039290733821	27	-528						-18					
N 5194	4039230733922	16	-504	PRES						-178	-338			
N 5201	4049250733817	48	-461						PRES					
									PRES				N9792	
										-292	-376			

N 5698	403945 0733415	20	-545		-35					
N 5705	404538 0732652	145	-368		95					
N 5708	404824 0733806	211	-32		-3					
N 5710	404559 0734155	179	-211		59					
N 5731	403944 734319	15	-87		-58					20FT -34,-48
N 5762	405129 0733615	145	-165		-19	-135				
N 5768	403521 0733739	5	-845	-68	-127					
N 5777	403940 0732930	5	-78		-62					20FT -30
N 5851	404714 0733420	218	41		90					
N 5852	404808 0733746	235	-282		50	-265				
N 5876	404858 0734115	100	-195		-118	-168				
N 5883	404820 0733814	208	-7		6					
N 5884	404756 734258	68	-160		36	-95				
N 5901	404731 0733105	179	31		103					
N 5906	403833 0733555	10	-101		-42					20FT -28
N 5947	404646 0733908	129	-375		80	-282				
N 5994	405211 0733718	130	-110		25	-102				
N 6034	404743 0734022	210	-97		-17					
N 6035	404745 0734012	198	-96		81				N6395	
N 6046	404417 0733551	101	-255		39					
N 6062	403913 0732920	6	-82	-48	-58					
N 6073	404511 0734128	120	14		14					
N 6076	404650 0732911	158	-536		86	-512			N6077	
N 6077	404649 0732910	158	-534		86	-515				
N 6092	404912 0732751	241	-396		191					
N 6093	404908 0732751	240	-366		141					
N 6119	404609 0733929	123	-58		41					
N 6148	404216 0732733	50	-516		-40					
N 6149	404212 0732621	47	-670		-48					20FT -23
N 6150	404245 0732903	59	-645		-20					
N 6190	404707 0733053	177	-465		-41	-458			N6191	
N 6191	404707 0733049	180	-498		-1	-482				
N 6192	404516 0733100	127	-530		25				N9180	
N 6193	404517 0733105	130	-607		26	-574			N9180	
N 6202	404549 0733305	132	-132		37					
N 6205	404425 0733813	107	-161		4				N7849	
N 6224	405439 0733048	30	-322			-115	-278		N9464	
N 6282	405125 0734207	102	-340					-318		
N 6289	405122 0733517	162	-223			-220				
N 6312	405436 0733120	38	-302				-258		N6578	

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL							LOCATED NEAR WELL	REMARKS
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK		
N 5227	403532073353 3	10	-1278	-39			-87	-899	-1089			
N 5228	404829073395 1	158	-176				-35				N6860	20FT -39
N 5233	403522073382 1	12	-537	-49			-78					
N 5260	404133073383 4	55	-463				-41					20FT -28
N 5261	405233073372 2	145	-157					-105				20FT -27
N 5292	403805073345 3	5	-87				-46					
N 5301	404428073315 2	107	-397				27					20FT -39
N 5302	404246073314 3	65	-425				-49					
N 5303	404253073300 8	60	-455				-7					
N 5304	404225073304 3	55	-448				-35					
N 5308	403519073382 8	8	-1240	-102			-142	-840	-1020			
N 5335	404713073314 5	170	26				112					
N 5336	404441073320 7	114	-558				21	-542				
N 5357	404937073442 0	20	-263							-263		
N 5368	404528073301 5	130	-20				44					
N 5484	404419073364 4	90	-489				30	-480				
N 5485	404423073365 5	92	-465				21	-459				
N 5486	404415073365 5	89	-934				39	-470	-630			
N 5524	403826073442 9	5	-139	-92	-126							
N 5528	404728073400 5	257	-258				62	-238				
N 5530	404942073414 4	65	-371						-255	-365		
N 5535	404618073414 1	250	-185				49					
N 5576	404722 734348	95	-171				29	-110				
N 5596	404453073372 5	106	-362				20					
N 5603	404517073402 3	114	-338				55	-303				
N 5621	404857073411 5	100	-180									
N 5654	404451073352 6	102	-233				-117	-169				
N 5655	404541073333 5	130	-130				54				N5876	
N 5677	404841073304 7	218	-211				44					
N 889*	[illegible]	54	[illegible]				139					
							-34					

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL							LOCATED NEAR WELL	REMARKS
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK		
N 6315	404526073362 6	104	-251				41					
N 6334	404454073410 4	128	-80				24					
N 6354	403712073300 8	10	-104	-57		-68	-94					
N 6355	403644073330 5	5	-125	-52			-65					
N 6376	404633073270 6	200	-47				72					
N 6383	404123073285 2	31	-653				-31				N6442	
N 6394	404746073401 0	190	-27				116				N6395	
N 6395	404747073401 0	190	-18				115					
N 6416	405133073381 8	15	-280					-150	-236			
N 6435	405328073312 6	58	-380					-154	-307			
N 6437	404209073382 1	65	-226				-14					
N 6442	404123073285 3	31	-581				-42					
N 6444	405031073353 5	170	-87				80					
N 6450	403533073401 1	10	-1321				-97	-815	-950			
N 6455	403942073424 5	15	-69				-46					
N 6467	403810 734331	4	-694	-55	-132		-191	-571				20FT -21,-36
N 6468	403840 734330	5	-699	-52	-134		-230	-530				20FT -29,-33
N 6469	403810 734313	6	-597	-66	-131		-150	-569				20FT -7,-26
N 6510	403642 734333	10	-453	-88	-155		-154				N6610	
N 6549	405144073382 4	32	-409					-177	-223	-404		
N 6578	405433073312 2	20	-311					-156	-260			
N 6580	404630073293 7	160	-542				100	-524				
N 6581	403827 734250	8	-612	-61	-131		-207	-579				
N 6610	403641 734331	9	-235	-79	-100		-121					20FT -24,-40
N 6623	403907073353 2	20	-118				-52					
N 6631	404344073284 1	87	-500				23				N8004	
N 6636	404319073285 6	80	-140				-30					
N 6644	404410073271 0	90	-140				14					
N 6651	404754073310 7	226	-395				62	-385				
N 6655	404534073324 4	122	-114				57				N8080	

N 6657	403631073255 2	5	-406	-53		-84	-179				
N 6660	4039180733639	15	-73				-25				20FT -46
N 6675	4053330733032	7	-453						-431		20FT -22
N 6691	4046460733657	145	42				42				
N 6701	403517 734306	11	-846	-77	-133		-149	-716			
N 6706	403713 734159	6	-737	-88	-125		-155	-628			
N 6721	4046570733819	148	29				30				20FT -19,-33
N 6741	4047510733045	180	-243				67				
N 6757	4038550733248	5	-66	-46			-51				
N 6791	4037280733930	5	-73	-50							20FT -21
N 6806	4050260733616	154	-169				69				
N 6813	4039360734309	10	-228				-69				
N 6817	4039300733817	28	-550	-36			-64				
N 6819	4045370733335	130	-132				34			N9792	
N 6834	4040390732836	25	-678				-48				
N 6842	4044420733610	104	-54							N6866	20FT -28
N 6848	4044450733328	110	-2				40				
N 6850	4035330733532	7	-1043	-46			2				
N 6865	4044330734025	87	-214				-87	-908			
N 6866	4040390732835	26	-600				11				
N 6873	4053310733114	30	-360				PRES			N6918	
N 6893	4040490733543	40	-524					-176	-339		
N 6904	4043390733040	91	-602				-15				
N 6907	4046360733641	138	4				18				
N 6915	4044010732832	90	-498				55			N7076	
N 6916	4043580732831	91	-522				36			N7936	
N 6918	4044330734027	87	-216							N6918	
N 6925	404750 734448	11	-274				48				
N 6928	4038050733953	6	-852	?			2				
N 6945	4045470734011	154	-360					-159	-190		
N 6956	4045570732705	170	-484				-85	-685	-841		
N 6965	4037570734039	5	-132	-86	-103		81	-343		N7889	
N 6972	4047060734400	78	-48				38				
N 6992	4040510732721	24	-87	-44						N8595	
N 6996	4045280733040	132	12				-26				20FT -29
N 7022	4042000733500	60	-4				-69				
N 7030	4046370733305	160	-378				21				20FT -35
N 7045	4047290733423	241	90				-4				
N 7047	4051530733326	223	-41				-3				
N 7053	4046280734058	209	-77				91				
N 7076	4043390733040	91	-583				83				
N 7087	4047060734337	[illegible]	-10[illegible]				72				
N 71[illegible]	[illegible]	15[illegible]	[illegible]				20				
							-13				

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL							LOCATED NEAR WELL	REMARKS
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK		
N 7117	4042220734047	60	-431				-26					
N 7124	4043510732647	70	-85				-22					
N 7126	4046520734007	193	-636				113	-275	-429	-628	N7892	
N 7133	4037490734116	9	-141	-88			-126					
N 7152	4054330733446	14	-395					-239	-266	-369		
N 7160	4041560733448	60	-639				-3	-582				
N 7161	4038560733925	10	-690				-66	-680				
N 7186	4044410733650	92	-230				58					
N 7298	4043030733714	61	-526				-4					
N 7334	4045140734121	120	-362				15	-340			N7445	
N 7336	4046510733647	144	21				41					
N 7353	4045520733416	120	-295				60					
N 7377	4043130732750	65	-701				-14					
N 7399	4046520734226	126	-74				-64				N8456	
N 7407	4040020733332	24	-624				PRES				N8253	
N 7414	4040540732613	22	-597				-63					
N 7419	4049050732852	243	-82				78					
N 7420	4048030732806	283	18				153					
N 7430	4040100734252	20	-530				-57					
N 7433	4040050733429	25	-70				-21					
N 7438	4044260732743	127	-523				82					
N 7439	4052590733850	22	-190						-179			
N 7445	404515 734122	120	-333				16	PRES				
N 7446	4048480733443	222	-276				85					
N 7450	4048550733601	176	42				71					
N 7469	4039220733904	20	-258				-56					
N 7482	4041080734329	35	-425				-48					
N 7486	4054120733112	25	-335					-174	-314			
N 7487	4042120734239	50	-78				-44					
N 7500	4044180733454	90	-384				62					

N 7503	4043380732708	60	-605		-20				
N 7510	4054440733131	19	-310			-208	-265		N7516
N 7512	4045360734103	123	-257		28				
N 7513	4046520733727	154	-321		4				
N 7516	4043370732705	63	-526		PRES				
N 7518	4045330732937	133	-327		72				
N 7521	4039480733928	13	-559	-47	-65				
N 7522	4040010733913	25	-612		-55	-588			
N 7523	4043090733026	76	-608		16				
N 7524	4044250733805	106	-174		33				
N 7525	4054050733112	32	-385						N7849
N 7526	4047040732803	210	-484			-158	-358		
N 7529	4041550733802	45	-27		90				
N 7546	4054180733240	11	-353		-17				
N 7547	4054300733528	9	-313			-310	-332		
N 7548	4040070734250	20	-487			-261	-291		
N 7549	4047380733531	198	-306		-61				
N 7551	4046560733946	162	-443		155				
N 7552	4046490733944	143	-455		79	-248	-418		
N 7553	4046520733946	153	-305		101	-254			
N 7554	4047050733949	190	-310		111	-261			
N 7560	4045070734202	150	-92		99	-253			
N 7562	4046340733112	160	-523		38				
N 7570	4054240733400	125	-397		-18	-494			N8267
N 7581	4046400733814	123	30			-251	-286		N8249
N 7593	4050450732830	253	-220		31				N7620
N 7613	404814 734518	38	-197		66				
N 7614	4051450733815	32	-361				-147		
N 7620	4054240733400	125	-355			-148	-229		
N 7644	4054210733052	19	-301			-251	-281		
N 7651	4046110734010	162	-411			-158	-277		
N 7663	4039510732724	6	-171	-44	28	-284			
N 7666	4046110734010	162	-363		-54				N7666
N 7719	4054420733429	20	-380		28	-284			
N 7720	4042370734007	70	-493					-340	
N 7731	4046120734006	167	18		-38				
N 7732	4045170733339	121	13		78				
N 7764	4042210733537	60	-186		73				
N 7770	404827 734454	43	-267		-5				
N 7772	4050120733102	258	-310				-178		
					-76				N7773

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL								
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK	LOCATED NEAR WELL	REMARKS
N 7773	405010073305 9	230	-335				-136					
N 7776	403537073394 0	5	-1233				-123	-817	-980			
N 7781	404751073322 0	217	-333				91					
N 7782	405142073371 4	95	-133				24	-133				
N 7785	404526073363 4	108	-296				54					
N 7795	404023073370 9	40	-720				-23	-665				
N 7796	403949073341 7	11	-689				-51					
N 7830	405111073325 8	118	-79				83					
N 7849	404423073380 6	106	-145				23					
N 7852	404411073261 6	75	-640				-23					
N 7854	404035073403 5	35	-637				-18	-587				
N 7855	404040073403 6	37	-568				-16					
N 7857	405059073384 1	195	-432					-171	-275	-432		
N 7858	404811073332 1	218	-157				33					
N 7873	404811073363 3	253	-282				135					
N 7884	403803073395 3	7	-736	-40			-54	-685			N7889	
N 7885	403803073395 4	7	-725	-47			-54				N7889	
N 7886	403803073395 4	7	-595	-41			-54				N7889	
N 7887	403803073395 4	7	-538	-43			-58				N7889	
N 7889	403802073395 4	7	-595	-45			-55					
N 7892	404651073400 9	200	-255				101	-252				
N 7936	404636073364 1	138	-5				70					
N 7957	404419073353 1	96	-527				30	-488				
N 7980	404716073371 1	161	6				60					
N 8004	404345073284 0	85	-663				30	-654				
N 8007	404543073354 9	120	-458				64	-450				
N 8008	403913073321 1	10	-383	-42			-51					
N 8010	404739073392 1	225	-220				131	-224				
N 8031	404039073311 5	25	-498				-39					20FT -30
N 8037	404359073314 6	97	-587				1				N8321	

N 8038	404545073425 5	210	-85										
N 8043	404754073283 1	222	-499				104						
N 8048	405152073381 9	60	-310				132	-484					
N 8095	404914073392 4	35	-365					-184	-240				
N 8096	404917073392 4	27	-383					-250	-331				
								-258	-347		N8608		
N 8109	403844073423 3	5	-148	-52							N8608		
N 8123	405049073303 5	263	-63				-147						
N 8162	403904073313 4	10	-144	-42			41					20FT	-28
N 8163	404605073400 1	156	5				-51						
N 8171	403856073333 8	10	-373				81					20FT	-35
							-40						
N 8181	404616073354 5	141	-99										
N 8188	403718073334 3	12	-150	-58			12						
N 8195	403934073410 7	20	-683				-63						
N 8196	403952073361 6	24	-682				-52	-585				20FT	-33
N 8211	404528073412 9	120	-105				-30	-636				20FT	-31
							29						
N 8214	404156073262 0	37	-663								N8568		
N 8216	404000073371 0	30	-635				-30						
N 8217	404004073371 0	36	-669				-11				N9173		
N 8221	404922 734500	75	-215				-17	-646					
N 8233	403518073382 0	8	-1223	PRES					-155				
							-146	-893	-1042				
N 8248	404525073382 5	120	-398										
N 8249	404632073311 1	163	-332				15	-398					
N 8250	404109073371 6	50	-643				-27						
N 8251	403959073410 4	25	-660				-20	-551					
N 8253	404003073333 4	25	-675				-49	-530					
							-40						
N 8255	404656073422 4	105	-195									20FT	-35
N 8267	404505073420 5	125	-160									20FT	-23
N 8277	404419073383 0	103	-258				-59	-185					
N 8319	403949073432 5	15	-165				30				N8456		
N 8321	404400073314 7	97	-577				7						
							-35						
N 8326	405116073372 9	53	-454				PRES						
N 8327	405113073372 8	53	-309										
N 8342	404642 734405	18	-425						-304				
N 8343	405216073372 3	138	-282						-304		N8327		
N 8344	403931073431 0	10	-50	-48			-81	-179	-277	-421			
							-4	-96	-239		N9110		
N 8354	403522073370 0	5	-1270	-61							N8394		
N 8355	404829073315 9	258	-337				-87	-866	-1095				
N 8358	404530073414 4	119	-336				136						
N 8363	404217073290 4	56	-544				23	-252					
N 8369	404632073301 1	160	-35				-30				N8373		
							71				N8665		

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL							LOCATED NEAR WELL	REMARKS
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK		
N 8372	404529073414 6	119	-229				8				N8373	
N 8373	404529073414 6	119	-231				16					
N 8375	404654 734223	110	-454				-66	-174	-325		N8456	
N 8390	404052073421 6	45	-38				-25					
N 8394	405217073372 1	138	-455				11	-105	-251	-444		
N 8409	404420073393 9	96	-309				-8					
N 8413	404750073425 3	39	-96				-24	-96				
N 8414	403558073302 7	7	-1073	-56		-85	-113	-993				
N 8415	404228073293 3	58	-660				-32				338	
N 8423	404315073343 6	76	-16				58					
N 8431	404654073435 7	68	-28				-26					
N 8432	404857073352 1	165	-85				102					
N 8455	404940073444 6	55	-224							-205		
N 8456	404656 734226	105	-519				-73	-182	-342	-510		
N 8457	404456073360 7	105	-335				35					
N 8466	403803073414 2	11	-463	-69			-129					20FT -20
N 8472	404531073333 2	126	-70				36					
N 8477	404752073395 3	188	-565				112	-252	-398	-550		
N 8480	404229073293 4	58	-661				-32				N9338	
N 8481	403757073381 7	8	-72				-47					
N 8482	403842073380 8	16	-66				-52					20FT -17
N 8487	404126073305 2	35	-35				-17					
N 8497	404519073342 9	115	-489				66	-445				
N 8499	404538073412 7	140	-130				23					
N 8514	403900073292 9	5	-245	-45			-61					
N 8518	404531073412 6	130	-125				38				N8568	
N 8520	404051073260 3	21	-913				-64	-906			N8603	
N 8543	404528073351 4	106	-54				66					
N 8557	403522073410 8	9	-1286	-71			-127	-772	-971			
N 8558	404631073292 0	140	-373				7	-351				

N 8564	4046380734124	148	-172		42				
N 8565	4045310734126	130	-130		35				
N 8566	4045310734126	130	-120		36				N8568
N 8567	4045310734126	130	-120		38				N8568
N 8568	4045310734126	130	-111		34				N8568
N 8569	4047480733955	195	-550		125	-241	-393		
N 8576	4044530733834	112	-439		-2				
N 8583	4048150732946	194	17		115				
N 8595	4045540732703	182	-439		52				N9698
N 8601	4045050733454	104	-236		52				
N 8603	4040510732603	22	-871		PRES				
N 8608	4049170733924	27	-397			-273	-347		
N 8624	4050110733948	15	-362			-331	-340		
N 8642	4047270733456	243	-157		57				
N 8657	4039250733547	23	-617		-21				
N 8658	4048190733433	325	-345		246	-313			
N 8664	4042170732904	56	-525		-30				
N 8665	4042170732902	57	-553		-43				N8665
N 8668	4045410732650	141	-352		96				
N 8672	4041330733119	35	-728		-15				
N 8678	4046000734124	183	-412		100	-271			
N 8681	4049530733302	200	-170		78				
N 8690	4051340733843	25	-322			-165	-220		
N 8709	4051320733845	22	-290			-151	-218		N8709
N 8713	4049200733733	168	-244		-22	-235			
N 8761	4048420734044	140	-134		-131				
N 8767	4045320732849	124	-521		63				
N 8768	4045330732848	124	-559		61				N8768
N 8776	4054230733353	98	-361			-250	-294		
N 8790	4048560734123	76	-367		-98	-161	-266		
N 8799	4045390733742	111	-119		21				
N 8801	4045270734222	147	-133		41				
N 8803	4045250734225	146	-132		40				N8803
N 8805	4053230733131	63	-394			-158	-327		
N 8807	4045430733246	118	-32		25				
N 8818	4042110734056	55	-447		-29	-437			
N 8821	404533 734154	133	-107		18				
N 8829	4042160733710	60	-8		-2				N8840
N 8830	4041480733747	40	-52		-24				
N 8837	4040520732946	20	-661	-45	-64				

20FT -32

UPPER SURFACE ALTITUDE OF MAJOR HYDROGEOLOGIC UNITS AT 3,146 WELLS ON LONG ISLAND, NEW YORK

WELL IDENT-ICATION NUMBER	LAT-LONG	ALTITUDE OF WELL, IN FEET ABOVE OR BELOW SEA LEVEL		HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UNIT SURFACE, IN FEET ABOVE OR BELOW SEA LEVEL								
		TOP	BOTTOM	GARD-INERS CLAY	JAMECO GRAVEL	MON GREEN SAND	MAGOTHY AQUIFER	RARIT CONF UNIT	LLOYD AQUIFER	BED-ROCK	LOCATED NEAR WELL	REMARKS
N 8840	404532 734151	122	-118				22					
N 8842	404380732953	111	-543				5					
N 8858	403559073434 1	10	-94	-88								20FT -29
N 8873	403915073270 8	7	-200	-54			-74					
N 8880	404534073324 4	122	-125				52					
N 8881	404024073374 2	40	-31				-5					
N 8885	404740073360 8	196	-102				106					
N 8896	404036073430 9	30	-67				-58					
N 8898	404941073384 5	18	-205				-134	-200				
N 8935	403945073425 8	15	-351				-52					
N 8941	404353073291 0	91	-720				19	-682				
N 8956	404508073333 6	115	-477				20					
N 8962	405421073354 8	6	-422						-368	-422		
N 8964	404635 734356	47	-188				-143	-173				
N 8976	404119073323 1	38	-735				-48	-664				
N 8988	403928073384 1	26	-84	-38			-65					
N 8994	405153073420 6	21	-287							-286		
N 8995	405357073310 9	41	-364					-140	-346			
N 9019	404853073395 9	46	-365				-156	-223	-326			
N 9024	404444073371 2	94	24				40				N9027	
N 9025	404444073371 2	94	32				32				N9027	
N 9026	404445073371 2	94	24				31				N9027	
N 9027	404445073371 2	94	34				36					
N 9062	404527073335 4	124	-19				79					
N 9066	405204073363 4	143	-508				5	-121	-282	-461	N9211	
N 9084	404357 733317	96	-47				16				N9202	
N 9085	404415 733308	102	8				44				N9206	
N 9110	404640 734410	15	-371				-90	-174	-281			
N 9151	404224 734238	50	-386				-24	-383				
N 9170	404754073303 9	184	-369				40					

N 9173	404154073262 0	38	-846			-34	-814								
N 9178	404205073350 0	62	-584			-5	-583							20FT	-34
N 9180	404517073310 2	130	-570			40	-565								
N 9182	404407 733315	101	-96			28									
N 9193	404404 733304	100	-96			40				N9204					
N 9196	404404 733253	99	-108			36									
N 9202	404357 733316	98	-3			25				N9367					
N 9203	404402 733315	100	-1			14									
N 9204	404407 733314	101	0			39									
N 9205	404412 733313	103	2			18									
N 9206	404415 733307	104	-33							N9360					
N 9210	405202073363 3	142	-133			39									
N 9211	405205073363 4	142	-127			2	-114								
N 9212	404453 733246	117	-713			0	-126			N9211					
N 9219	404353 733318	96	0			47	-501								
N 9223	404346 733320	93	-6			28									
N 9234	404430073331 0	105	-100			28									
N 9247	404345 733243	93	-3			41									
N 9252	404331 733247	89	-107			33									
N 9308	404735 734240	12	-431			30									
N 9318	404153073351 2	55	-407				-144	-243	-419						
N 9334	405128073370 5	143	-488			-2									
N 9338	404228073293 5	58	-588			8	-152	-294	-481						
N 9360	404410 733312	102	-104			-22									
N 9367	404401 733248	101	-5			32									
N 9463	404601073315 0	141	-497			35									
N 9464	405439073304 5	22	-308			-64	-489								
N 9488	404628073311 2	161	-477				-165	-288							
N 9489	404912073323 5	225	27			-111	-477								
N 9514	404131073311 4	30	-650			130									
N 9520	405144073313 5	90	-468			-45									
N 9521	404411073361 0	90	-540					-447							
N 9523	403927073411 1	20	-118			20	-469								
N 9532	403948073421 8	10	-130	-70		-77									
N 9533	403752073412 3	10	-135	-94		-88									
N 9534	403927073391 5	20	-65			-125									
N 9535	403731073381 7	5	-100	-45		-44									
N 9536	403747073371 8	5	-75			-53									
N 9537	403938073371 1	28	-40			-60								20FT	-31
N 9538	403925073360 5	10	-135			-32								20FT	-25
						-34									
														20FT	-18

N10020		404406 733657	83	-207									
N10033		404259 733806	74	-544				31					
N10034		404258 733806	74	-526				10	-504				
N10038		404404 733346	95	-553				4	-504			N10034	
N10039		404354 733343	93	-571				-20					
								-43					
N10040		404344 733356	90	-554									
N10041		404336 733509	77	-571				-61					
N10042		404330 733530	83	-588				27	-518				
N10043		404418 733616	78	-118				35	-541				
N10100		404844 734408	35	-270				10					
S	3	404503 732548	97	-191						-255			
S	12	4037130732307	7	-308	PRES			62					
S	13	404210 732159	30	-340	PRES			-83					
S	15	4042240732237	40	-61	-38			-54				20FT	-38
S	16	4041060732525	20	-109	-52								
								-69					
S	17	4043420732145	50	-75	-43								
S	18	4045120732142	56	-344				-47					
S	19	4047500731942	130	-73				-18					
S	24	4047520732013	150	18				-54					
S	34	405530 732241	5	-1645				131					
									PRES	PRES	-597		
S	37	4043150731808	33	-787									
S	38	404318 731702	32	-168				-65					
S	40	403834 730941	15	-380				-63					
S	42	4047310731647	120	-888	-75		-115	-304					
S	45	404940 731652	160	31				-38	-706	-858			
S	48	405329 731843	123	-617									
S	49	405327 731843	130	-622					-400	-572		S49	
S	53	405411 731532	62	-132					-395	-590			
S	58	4044550731307	38	-430	-71								
S	64	405136 731251	20	-185				-88					
S	68	405355 731436	66	-348									
S	72	405342 731433	121	-379				-175					
S	74	4043080730955	10	-101	-97			-154					
S	78	4044150732031	41	-80									
S	80	404501 730529	35	-88				-50					
S	88	4043580732047	40	-76									
S	92	4045520730120	15	-165				-43				SPEAR(1912)	
S	94	404522 730312	35	-83	PRES		PRES	-125					
S	95	4046310730114	26	-437									
S	96	404954 730148	120	84				-131					

REFERENCE NO. 3

[6560-01]

[FRL 910-3]

AQUIFERS UNDERLYING NASSAU AND SUFFOLK COUNTIES, NEW YORK

Determination

Notice is hereby given that pursuant to Section 1424(e) of the Safe Drinking Water Act (42 U.S.C. 300f, 300h-3(e); 88 Stat. 1660 et seq.; Pub. L. 93-523) the Administrator of the Environmental Protection Agency has determined that the aquifer system underlying Nassau and Suffolk Counties, Long Island, New York, is the principal source of drinking water for these counties and that, if the aquifer system were contaminated, it would create a significant hazard to public health.

BACKGROUND

The Safe Drinking Water Act was enacted on December 16, 1974. Section 1424(e) of the Act states: "If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole of principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the FEDERAL REGISTER. After the publication of any such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health but a commitment for Federal financial assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer."

On January 21, 1975, the Environmental Defense Fund petitioned the Administrator to designate the aquifers underlying Nassau and Suffolk Counties, Long Island, New York, as a sole source aquifer under the provisions of the Act. A notice of receipt of this petition, together with a request for comments, was published in the FEDERAL REGISTER, Thursday, June 12, 1975. Written comments were submitted by the Environmental Defense Fund (EDF) on August 7, 1975, supporting their petition. A letter from the Director of the Nassau-Suffolk Regional Planning Board, dated October 1, 1976, requested that designation be delayed until after the completion of the areawide waste management (208) planning process for Long Island.

Because of the limited response to the FEDERAL REGISTER notice, EPA issued a press release and mailed an information sheet to elected officials and environmental groups on Long Island in March 1977. In addition, a presentation was made to the Citizens Advisory Committee (CAC) of the 208 planning agency and to the executive committee of the Long Island Water Conference. In response to these activities EPA received three comments: a letter from EDF questioning why project review would exclude direct Federal projects, a letter from a member of the East Hampton Planning Board expressing support for the designation, and a letter from the CAC requesting that designation be delayed until after the completion and approval of the Long Island 208 plan.

In considering the comments received, we could not agree with the letters requesting further delay since we do not believe that the review process under Section 1424(e) will constrain the options of 208 planning.

On the basis of the information which is available to this Agency, the Administrator has made the following findings, which are the basis for the determination noted above:

(1) The aquifers underlying Nassau and Suffolk Counties are the sole or principal drinking water source for the area. They supply good quality water for about 2.5 million people. Current water supply treatment practice for public supplies is generally limited to disinfection for drinking purposes, with some plants capable of nitrate removal. There are also numerous private sources. There is no alternative source of drinking water supply which could economically replace this aquifer system.

(2) The aquifer system is vulnerable to contamination through its recharge zone. Since contamination of a ground-water aquifer can be difficult or impossible to reverse, contamination of the the aquifer system underlying Nassau and Suffolk Counties, New York, would pose a significant hazard to those people dependent on the aquifer system for drinking purposes.

Among the determinations which the Administrator must make in connection with the designation of an area under Section 1424(e) is that the area's sole or principal source aquifer or aquifers, "if contaminated, would create a significant hazard to public health * * *" Obviously, threats to the quality of the drinking water supply for such a large population could create a significant hazard to public health. The EPA does not construe this provision to require a determination that projects planned or likely to be constructed will in fact create such a hazard; it is sufficient to demonstrate that approximately 2.5 million people depend on the aquifer system underlying Nassau and Suffolk Counties as their principal source of drinking water, and that the aquifer system is vulnerable to contamination through its recharge zone.

Section 1424(e) of the Act requires that a Federal agency may not commit funds to a project which may contaminate the aquifer system through a recharge zone so as to create a significant hazard to public health. The recharge zone is that area through which water enters into the aquifer system. Because of groundwater movement within these aquifers, the recharge zone is considered to be the entire area of Nassau and Suffolk Counties. However, both horizontal and vertical boundaries of the recharge zone are discussed in the background document under the section entitled "Area of Consideration."

The data upon which these findings are based are available to the public and may be inspected during normal business hours at the office of the Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York 10007. It includes a support document for designation of the aquifers underlying Nassau and Suffolk Counties, New York, and maps of the area within which projects will be subject to review.

A copy of the above documentation is also available at the U.S. Waterside Mall, Environmental Protection Agency, Public Information and Reference Unit, Room 2922, 401 M Street S.W., Washington, D.C. 20460.

The EPA has issued proposed regulations for the selective review of Federal financially assisted projects which may contaminate the aquifer system underlying Nassau and Suffolk Counties, New York, through the recharge zone so as to create a significant hazard to public health. These proposed regulations were published in the FEDERAL REGISTER issue of September 29, 1977, and public comments were requested. They will be used as interim guidance for project review until their promulgation during 1978.

EPA, Region II, is working with the Federal agencies which may in the near future fund projects in the area of concern to EPA to develop interagency procedures whereby EPA will be notified of proposed commitments for projects which could contaminate the bicounty area's sole source aquifer system. Although the project review process cannot be delegated, the Regional Administrator in Region II will rely to the maximum extent possible upon any existing or future State and local control mechanisms in protecting the ground-water quality of the aquifer system underylling Nassau and Suffolk Counties, New York. Included in the review of any Federal financially assisted project will be coordination with the State and local agencies. Their determinations will be given full consideration and the Federal review process will function so as to complement and support State and local mechanisms.

Dated: June 12, 1978.

DOUGLAS M. COSTLE,
Administrator.

[FR Doc. 78-17067 Filed 6-20-78; 8:45 am]

REFERENCE NO. 4

DEPARTMENT OF THE
U.S. GEOLOGICAL SU

74° 05'

41° 00'

DEPTH TO THE WATER TABLE ON LONG ISLAND, NEW YORK, IN MARCH 1979

This map (east and west sheets) shows depth to water below land surface on Long Island in March 1979. It was prepared from a U.S. Geological Survey topographic map and a map showing the water-table altitude in March 1979 (Donaldson and Koszalka, 1983). Although water levels were slightly higher than normal in March 1979 because of greater-than-average precipitation in January of that year, the map contours generally reflect the normal long-term water-table configuration.

Depth to ground water on Long Island is less than 150 feet in most areas, ranging from 0 feet along the shores and stream channels to greater than 250 feet in the extreme northwestern part of Suffolk County. The depth to water is determined primarily by the island's glacial geology and associated topographic features but also is affected by local and temporal variations in precipitation and ground-water withdrawals.

The water table is a subdued expression of the island's topography; thus, the depth to water generally is greater in topographically high areas, such as those near the north shore and the east-west-trending glacial moraines that form the "spine" of the island, than in low-lying areas, such as stream valleys and most of the southern half of the island.

This map depicts the regional configuration and is not meant to provide precise depth-to-water information for specific locations. It does not take into account local hydrogeologic conditions or "perched" ground water. In general, depths to water inferred from the map may be considered accurate to within one contour interval, or ± 25 feet.

This map was prepared in cooperation with the New York State Department of Environmental Conservation.

40° 45'

REFERENCE CITED

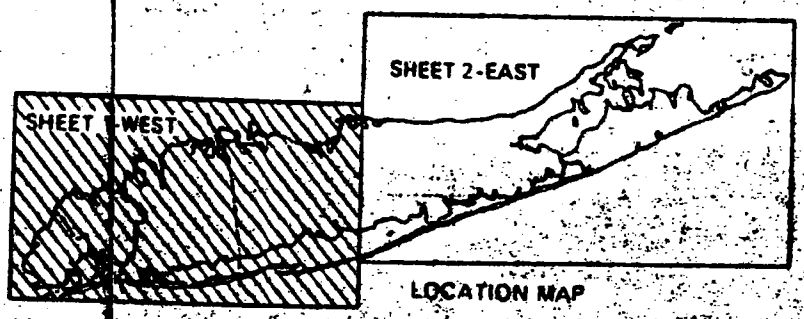
Donaldson, K. B., and Koszalka, E. J., 1983, Water-table altitude on Long Island, New York, March 1979: U.S. Geological Survey Open-File Report 82-1(6), 2 sheets.

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

74° 05'

41° 00'

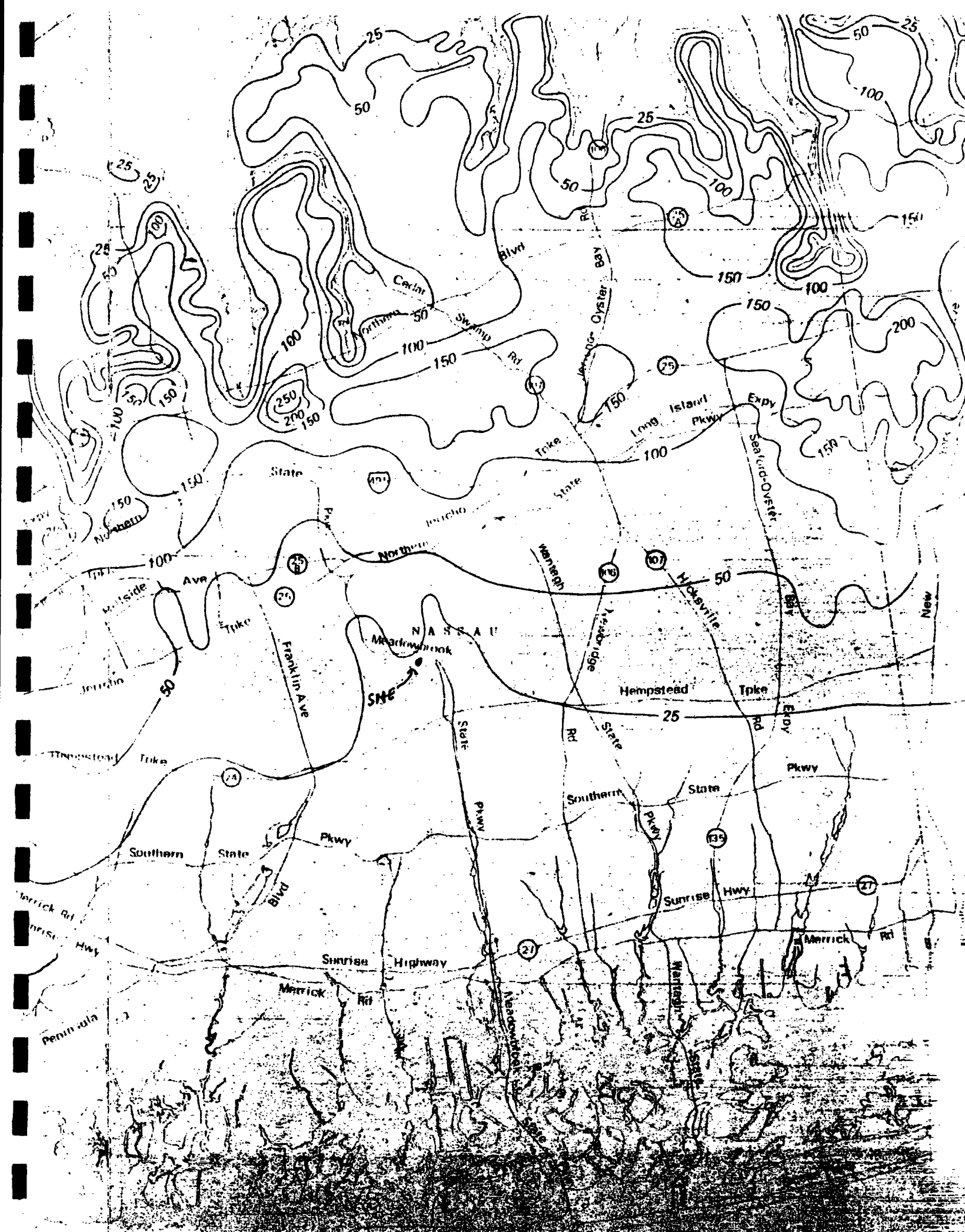
74° 00'



LOCATION MAP

EXPLANATION

—100— LINE OF EQUAL DEPTH TO WATER.--Contour interval 50 feet. 25-foot contour line included. Hachures indicate depression



Cedar Swamp Rd
Northern Blvd
Jericho Oyster Bay Rd
Long Island Expy
Pkwy
Seaford-Oyster Bay Expy
Tpke
State
Northern
Jericho
Wantagh
Hicksville
Hewbridge
Rd
New
Ave
Tpke
Franklin Ave
NASSAU
Meadowbrook
SNE
Hempstead Tpke
Rd
State
Pkwy
Southern State Pkwy
Southern State Pkwy
Blvd
Sunrise Hwy
Merrick Rd
Sunrise Highway
Merrick Rd
Wantagh
Meadowbrook
Peninsula

REFERENCE NO. 5

Uncontrolled Hazardous Waste Site Ranking System

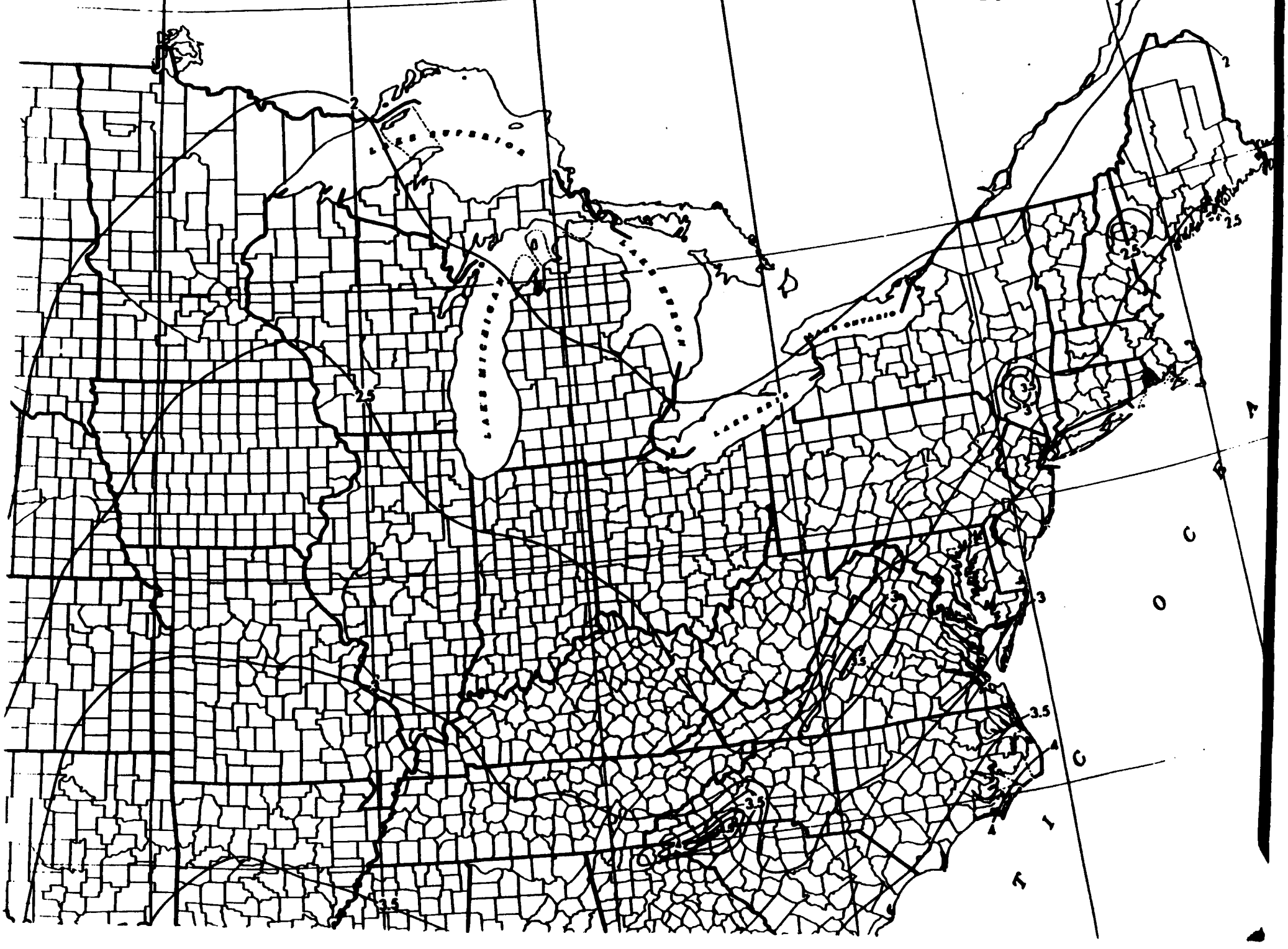
A Users Manual
(HW-10)

Originally Published in
the July 16, 1982, *Federal Register*

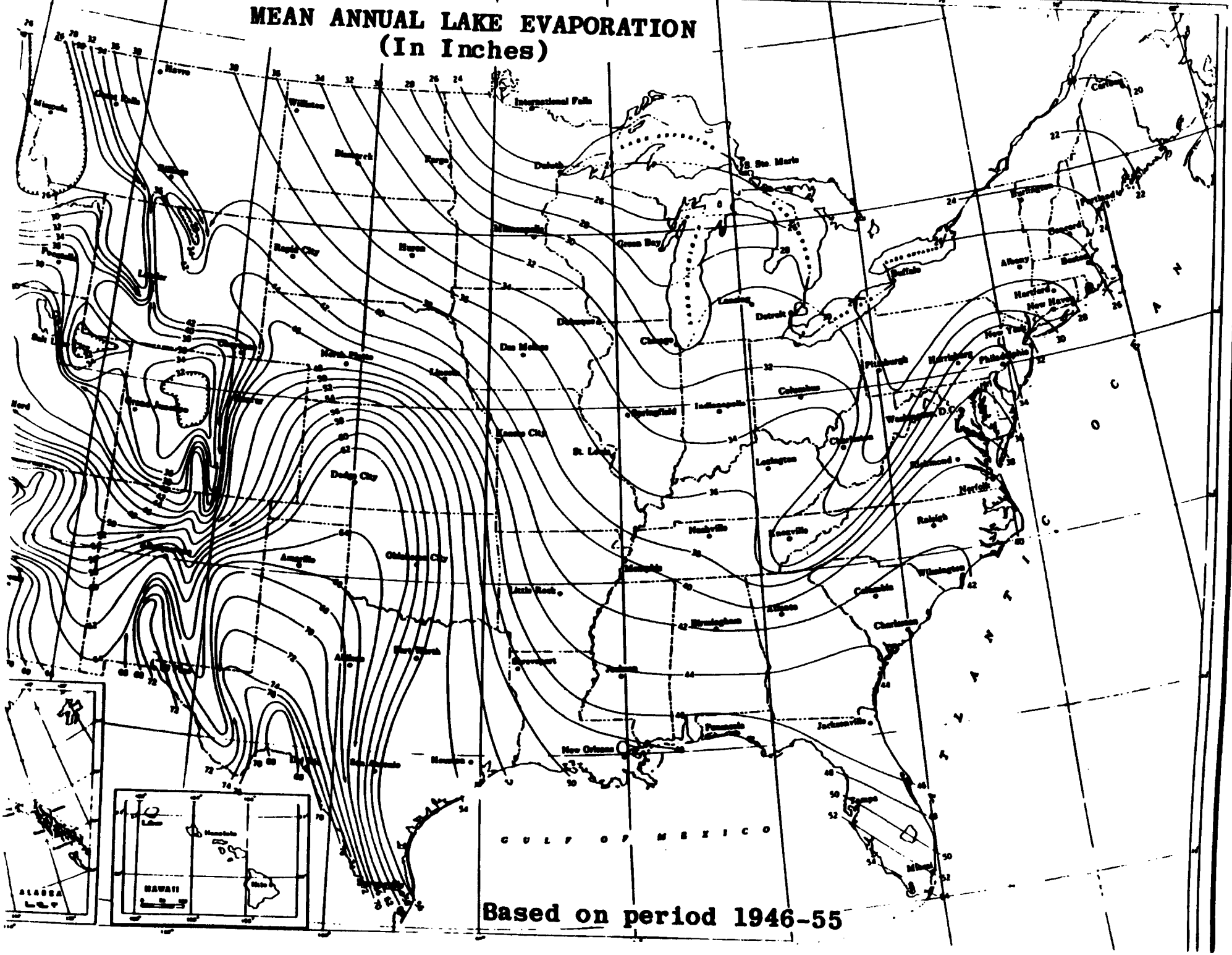
United States
Environmental Protection
Agency

1984

1 YEAR 24-HOUR RAINFALL (inches)



MEAN ANNUAL LAKE EVAPORATION
(In Inches)



Based on period 1946-55

NORMAL ANNUAL TOTAL PRECIPITATION (inches)

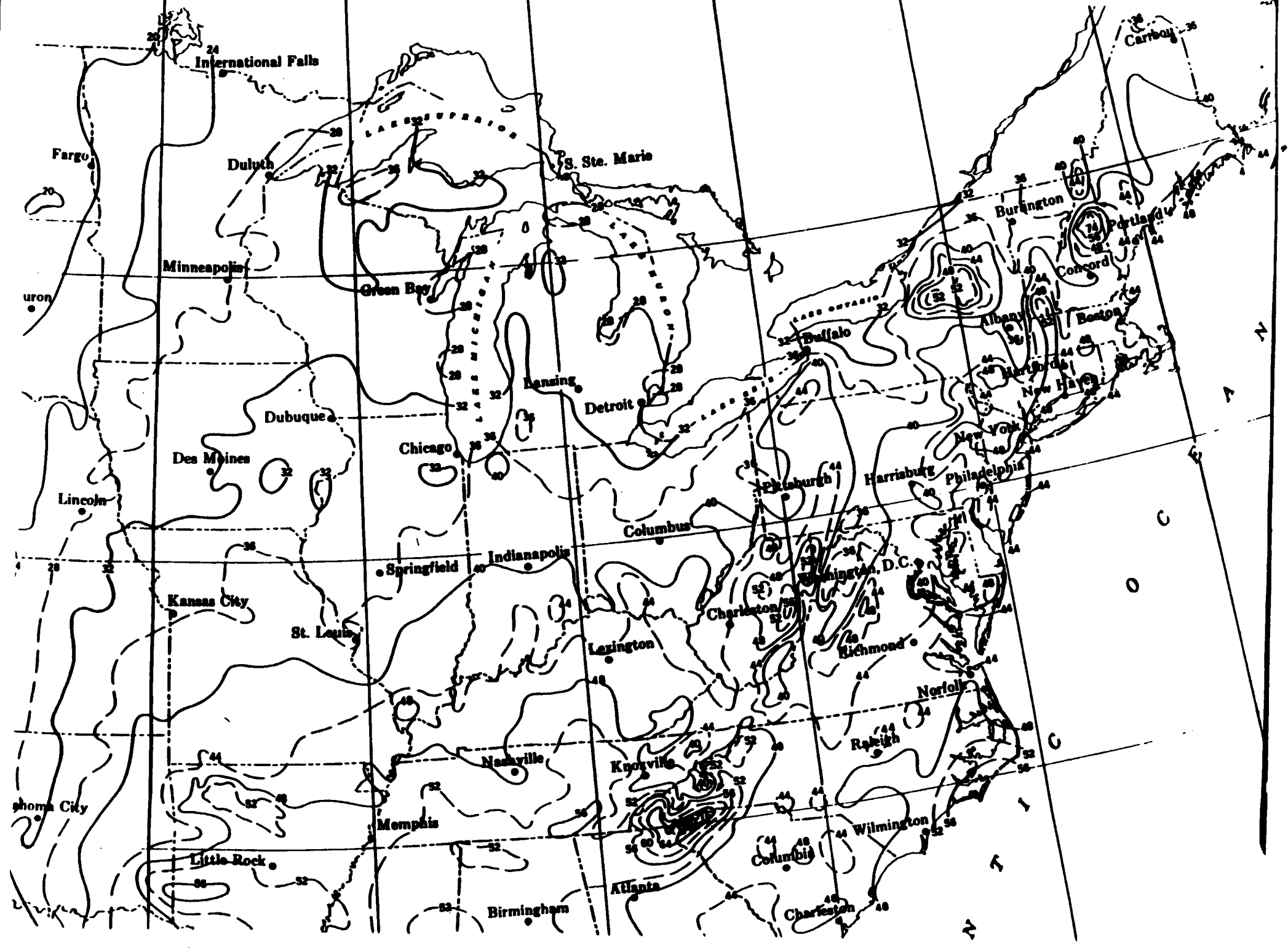


TABLE 2

PERMEABILITY OF GEOLOGIC MATERIALS*

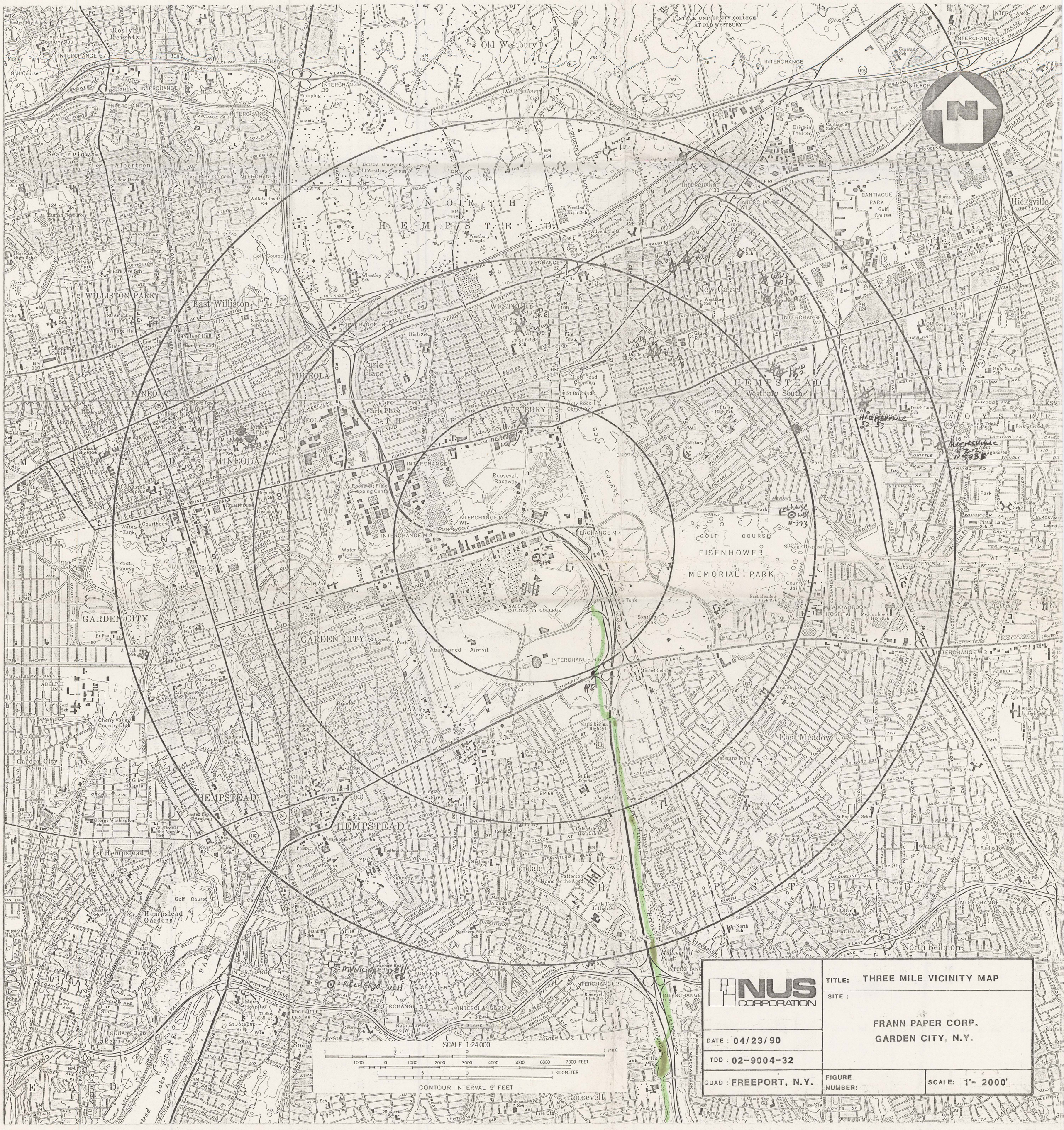
Type of Material	Approximate Range of Hydraulic Conductivity	Assigned Value
Clay, compact till, shale; unfractured metamorphic and igneous rocks	$<10^{-7}$ cm/sec	0
Silt, loess, silty clays, silty loams, clay loams; less permeable limestone, dolomites, and sandstone; moderately permeable till	$10^{-5} - 10^{-7}$ cm/sec	1
Fine sand and silty sand; sandy loams; loamy sands; moderately permeable limestone, dolomites, and sandstone (no karst); moderately fractured igneous and metamorphic rocks, some coarse till	$10^{-3} - 10^{-5}$ cm/sec	2
Gravel, sand; highly fractured igneous and metamorphic rocks; permeable basalt and lavas; karst limestone and dolomite	$>10^{-3}$ cm/sec	3

*Derived from:

Davis, S. N., Porosity and Permeability of Natural Materials in Flow-Through Porous Media, R.J.M. DeWest ed., Academic Press, New York, 1969

Freeze, R.A. and J.A. Cherry, Groundwater, Prentice-Hall, Inc., New York, 1979

REFERENCE NO. 6


NUS CORPORATION
TITLE: THREE MILE VICINITY MAP
SITE:
FRANN PAPER CORP.
GARDEN CITY, N.Y.
DATE: 04/23/90
TDD: 02-9004-32
QUAD: FREEPORT, N.Y.
FIGURE NUMBER:
SCALE: 1"= 2000'
SCALE 1:24000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 5 FEET
NORTH HEMPSTEAD
HEMPSTEAD
WESTBURY
MINEOLA
GARDEN CITY
EISENHOWER MEMORIAL PARK
GOLF COURSE
NASSAU COMMUNITY COLLEGE
Abandoned Airport
Roosevelt Raceway
Roosevelt Field Shopping Center
Old Westbury
STATE UNIVERSITY COLLEGE AT OLD WESTBURY
Old Westbury Pond
Hofstra University Old Westbury Campus
Westbury Temple
Westbury High Sch
Roslyn Heights
Searingtown
Albertson
WILLISTON PARK
East Williston
Carle Place
New Cassel
Hicksville
CANTIAGUE PARK Golf Course
Drive-in Theater
Plainview
Old Country Road Sch
Holy Rood Cemetery
Holy Rood Cemetery
Clarke High Sch
Salisbury Sch
Bowling Green Sch
Sewage Disposal
County Jail
East Meadow High Sch
MEADOWBROOK HOSPITAL
Meadowbrook High Sch
Sewage Disposal Ponds
Mitchel Field
Meadow Lawn Sch
Veterans Mem Park
East Meadow
Roosevelt
Uniondale
Uniondale High Sch
Patterson Home for the Aged
Turtle Hook Jr High Sch
Mercy Hospital
Molloy College
Radio Towers (WHLI)
Lakeview
Lake Success
Smith Pond
Mullen Pond
Roosevelt Park
North Bellmore
Forest City Park
Garden City South
West Hempstead
Hempstead Gardens
Cherry Valley Country Club
Adelphi Univ
Garden City Golf Course
Hicksville 52-53
Hicksville 42-2 N593
recharge well N-373
municipal well
recharge well

REFERENCE NO. 7

0053-C
02-5892-07

Westbury Water District

160 Drexel Avenue Westbury, L.I., N.Y. 11590
516-333-0427

DONALD A. CROUCHLEY, Chairman
FRANK J. IADEVIA, Secretary
ALFRED ARDIS, Treasurer
ITALO J. VACCHIO, Superintendent

March 21, 1988

NUS Corporation
1090 King Georges Post Road
Suite 1103
Edison, New Jersey 08837

Attention: E. L. Leonard

Dear Mr. Leonard:

In response to your letter of March 17, 1988, (copy attached), please find below the requested information:

1. See attached map.

2.

STATE WELL NO.	W.W.D. WELL NO.	DEPTH	AQUIFERS
N-101	6	341'	Magothy
N-7785	7	400'	Magothy
N-2602	9	805'	Lloyd
N-5007	10	560'	Magothy
N-5654	11	561'	Magothy
N-5655	12	260'	Magothy
N-6819	12A	270'	Magothy
N-7353	14	390'	Magothy
N-8007	15	564'	Magothy
N-8497	16	544'	Magothy
N-104510	17	600'	Magothy

4. Population estimated to be 24,000. All wells are interconnected.

5. None known.

6. 1. Carle Place Water District
   2. Town of Hempstead Water District
   3. Inc. Village of Old Westbury
   4. Hicksville Water District
   5. Jericho Water District

Westbury Water District

Should you require any other information, please contact me at the above address.

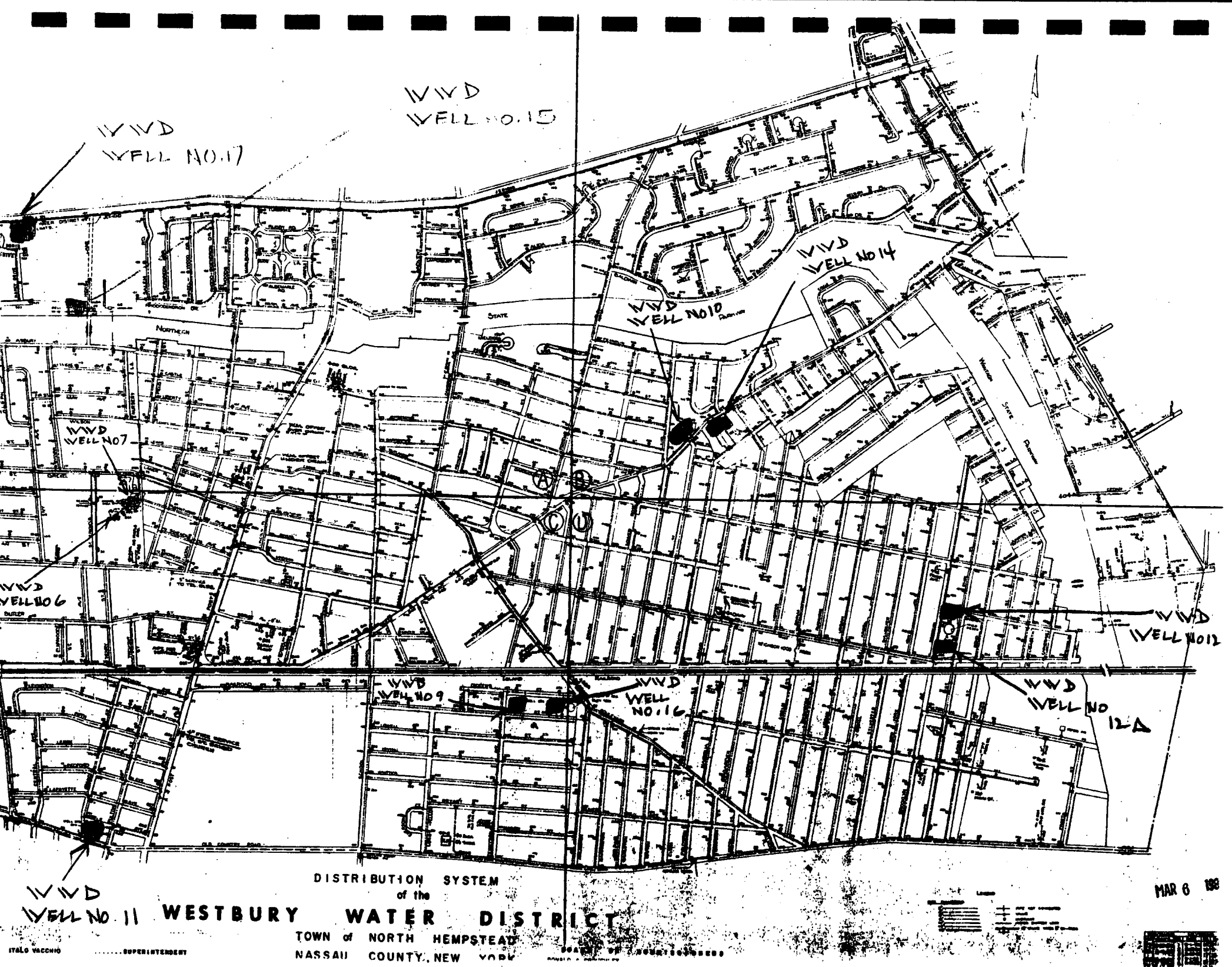
Very truly yours,

WESTBURY WATER DISTRICT

Italo Vacchio

Italo J. Vacchio
Superintendent

IJV/mh
Enc.


WWD WELL NO.15
WWD WELL NO.17
WWD WELL NO14
WWD WELL NO10
WWD WELL NO7
WWD WELL NO6
WWD WELL NO12
WWD WELL NO9
WWD WELL NO.16
WWD WELL NO 12A
WWD WELL NO. 11
NORTHERN
STATE
DISTRIBUTION SYSTEM
of the
WESTBURY WATER DISTRICT
TOWN of NORTH HEMPSTEAD
NASSAU COUNTY, NEW YORK
ITALO VACCHIO .....SUPERINTENDENT
MAR 6 196

REFERENCE NO. 8

0035-C
02-8802-07

JOSEPH N. MONDELLO
Presiding Supervisor

GREGORY P. PETERSON
Supervisor

Council Members
EUGENE L. WEISBEIN
JOSEPH G. CAIRO, JR.
MARTIN B. BERNSTEIN
RICHARD V. GUARDINO, JR.
ANGIE M. CULLIN
PATRICK A. ZAGARINO

DANIEL M. FISHER, JR.
Town Clerk

ROBERT D. LIVINGSTON, JR.
Receiver of Taxes

Town of Hempstead
Department of Water

1995 PROSPECT AVENUE, EAST MEADOW, N.Y. 11554
(516) 794-8300

DANIEL DAVIS, P.E.
Commissioner

April 6, 1988

Mr. Edward L. Leonard
NUS Corporation
1090 King Georges Post Road
Suite 1103
Edison, NJ 08837

Dear Mr. Leonard:

Below is the information requested in your letter of March 30, 1988. There are two wells located on Iris Place in the Bowling Green Estates Water District. Both wells are located in the magothy range and serves a population of approximately 12,000. Well #1, N-8956 is 535 feet deep; Well #2, N-8957 is 598 feet deep.

I am returning your map with the locations of the above wells marked in red.

If you should require any further assistance, please do not hesitate to contact me at (516) 794-8300, Ext. 204.

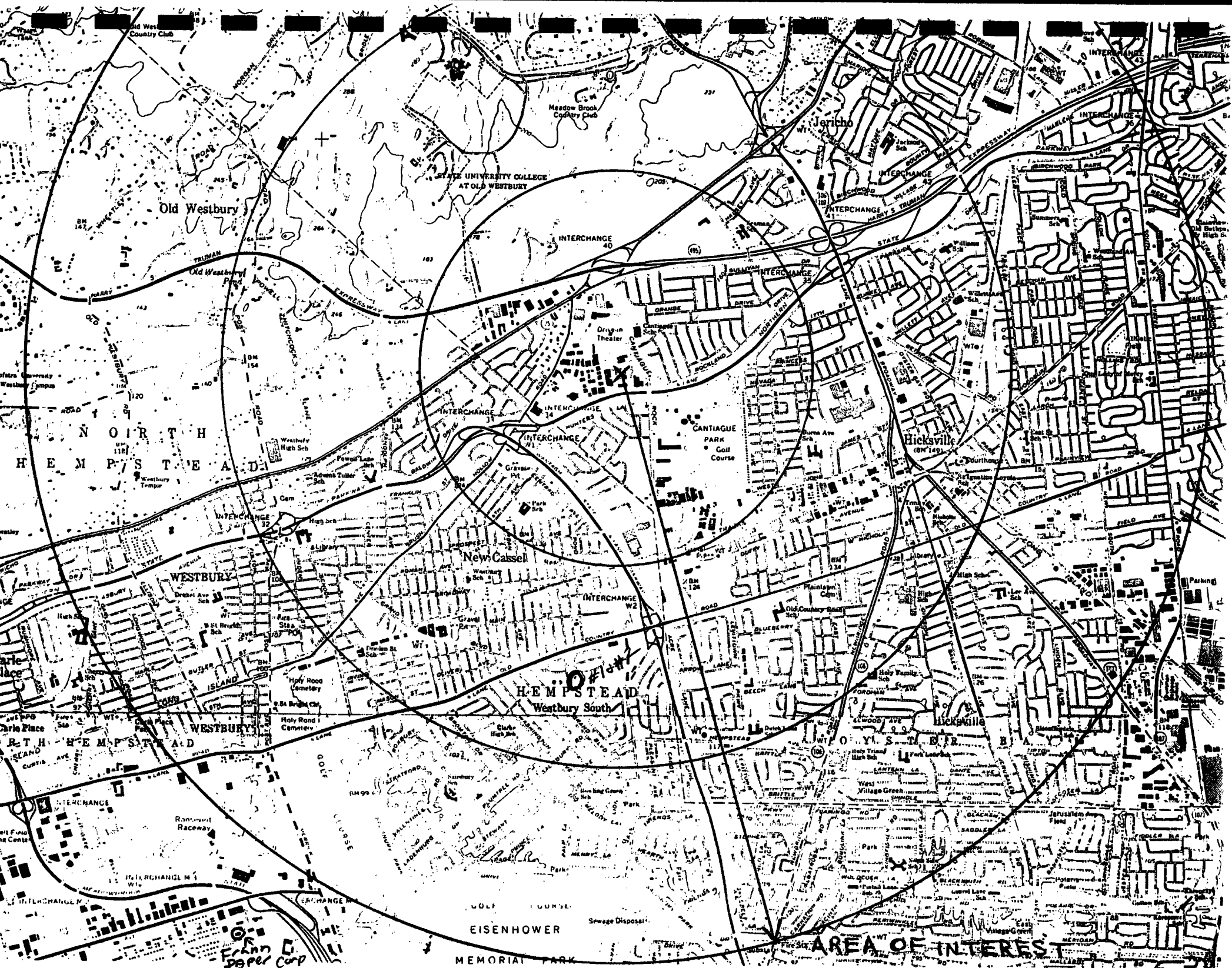
Very truly yours,

Harold V. Morgan
Harold V. Morgan
Administrative Assistant

HVM:th

enc. (2)

RECEIVED
APR 07 1988
NUS CORPORATION
REGION II



Old Westbury
Old Westbury Pond
STATE UNIVERSITY COLLEGE AT OLD WESTBURY
Meadow Brook Country Club
Jericho
INTERCHANGE 40
INTERCHANGE 41
INTERCHANGE 42
INTERCHANGE 35
INTERCHANGE 34
INTERCHANGE 33
INTERCHANGE 32
INTERCHANGE W1
INTERCHANGE W2
Drive-in Theater
CANTIAGUE PARK
Golf Course
Hicksville
NORTH HEMPSTEAD
WESTBURY
New Cassel
HEMPSTEAD
Westbury South
Holy Rood Cemetery
Roosevelt Raceway
GOLF COURSE
EISENHOWER
MEMORIAL PARK
Sewage Disposal
Fire Sta
Frann Paper Corp
AREA OF INTEREST

REFERENCE NO. 9

NUS CORPORATION

II

0623

FLAMM PAPER 02-9204-32 6/21/90

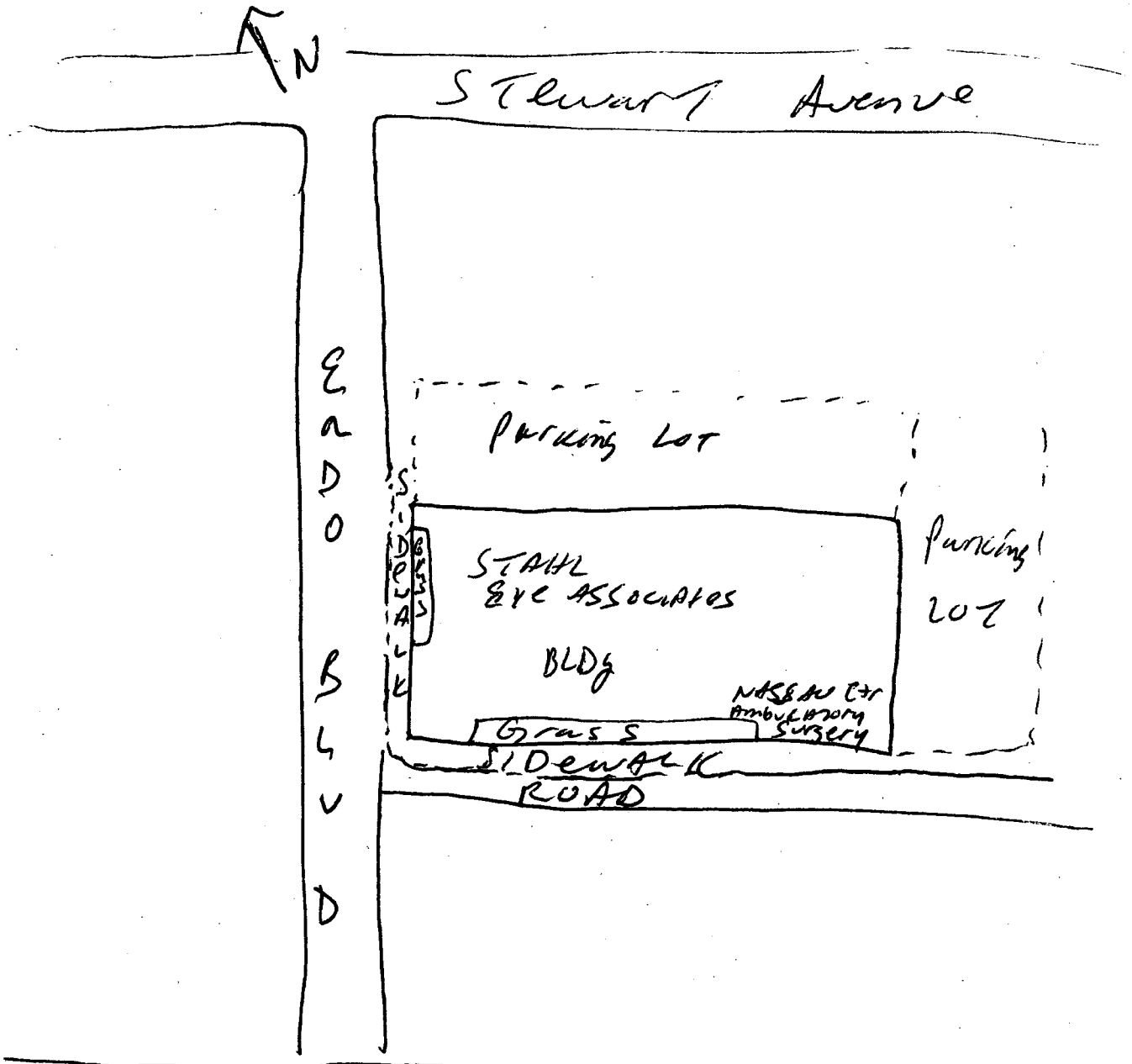
2

CONTENTS

OFF SITE Reconnaissance P 3-4
Photo Log OFF Site Reconnaissance P4

On-Site Reconnaissance P 5-7
Photo Log On Site Reconnaissance P 8

[illegible] 6/21/90 [illegible] 7/30/90



2P/2S (cont'd) View of Front of the bldg Along Endo Blvd Facing ~~North East~~ ~~South~~ ~~West~~ 1417 South E 6/21/90

4P/4S View of North corner of Front of the bldg Along Endo blvd Facing North East ~~South West~~ 1419 E 6/21/90

[signature] 6/21/90 [signature] 2/31/90

FRAMM PAPER 02-500432
6/21/90 3

The following notes will be recorded by J. Filosa, [illegible] 6/21/90

OFF Site Reconnaissance

Personnel on Site
Joe Filosa SM JF 6/21/90
Tom Varner SSO TV 6/21/90
Rich Serrino SUV RS 6/21/90

Cameras used 307128/469774

1413 Arrived by Site

Weather Conditions Cloudy 70°F Chance of Rain

All Photos Taken by Rich Serrino And Tom Varner

1P1/1S P View of Rear of building 1415 Facing ~~South West~~ North 6/21/90 NO STRESSED BIOTA Site paved or covered by grass Building occupies Area No Storm Sewers Seen No visual Signs of ~~contam~~ Contamination NASSAU CTR FOR Ambulatory Surgery Adjacent To building

2P/2S View of Front of Building Along Endo Blvd Facing ~~North~~ 1418 North East South ~~East West~~ 6/21/90 6/21/90

Joe Filosa 6/21/90 [illegible] 7/31/90

Franz Paper 02-9004-32 6/21/90

1421 (cont'd) 6P/6S View of northern side of the bldg facing south

Photo log cont'd

Roll #	Picture/Slide #	Time	Description
1	2P/2S	1417	View of ~~southern~~ southwestern corner of front of the building along Endo blvd facing ~~south~~ & North East ~~[illegible]~~ 6/21/90
1	4P/4S	1419	View of northern corner of front of the building along Endo blvd facing NE-SW.
1	6P/6S	1421	View of northern side of the bldg facing south

Joe [illegible] 6/21/90 [illegible] 7/31/90

Framm Paper 02-4004-32 6/21/90

1419 Site now occupied by STAHL Eye Associates

1420 5P/5S View of Northern Side of The building & Parking Lot Along Endo BLVD Facing SOUTH ~~East~~ E 6/21/90

PHOTO LOG
All photos Taken by Tom Varner And Rich Settino

Roll #	Picture/Slide #	Time	Description
1	1P/1S	1415	View of Rear of building Facing North ~~South West~~ E 6/21/90
1	3P/3S	1418	View of Front of building Along Endo BLVD Facing North East ~~South East~~ E 6/21/90
1	5P/5S	1420	View of northern side of the building + Parking Lot Along Endo Blvd Facing South ~~East~~ E 6/21/90

All future notations in this field log will be done by J Filson (taking over as SM) John Rudolph 7/12/90

Joe Filson 6/21/90 [illegible] 7/31/90

Frann paper 02-9004-32
7/12/90

ON-site Reconnaissance.

Personell on site			Responsibilities
Joe Filosa	[illegible]	7/12/90	Site manager
Steve Okulewicz	[illegible]	7/12/90	Site Safety officer
Winthrop Frame	WF	7/12/90	Surveillance

All of the above personell have read and understood the workplan

Instruments used on site			Background Readings
OVA #	A	469758	0 ppm
HNU #	K	469744	0 ppm
MINI RAD #		428604	20 cpm
CAMERAS #		307126/469756	
COMPASS #		684176	

Weather conditions:
Cloudy 65°F Chance of Rain winds 0-5 mph out of SW.

1335 Arrive on site prepare ~~to~~ meet with michael white Attorney for STAHL EYE ASSOCIATES.

1337 met m. white.

[illegible] 7/12/90 [illegible] 7/31/90

1337 continued Site Safety officer Steve Okulewicz holds TAlgate Safety meeting. Topics discussed - Route to Hospital, Former Chemical Hazards

All personnel have understood the Health & Safety Lig.

Joe Filosa SM [signature] 7/12/90

Steve Okulewicz SSC [signature] 7/12/90

Winthrop Frame Surv. Winthrop Frame 7/12/90

It was determined that a dry decon will be conducted At level D Respiratory + PPE will be utilized

1400 (continued) Facility is flat slope is estimated to be less than 1 percent. The site is located in an industrial / commercial area. No residential properties observed around the SHP.

[signature] 7/12/90 [signature] 7/3/90

Frann Paper 02-5004-32
7/12/90

1345 m white Showed Steve + I
The Boundaries of Former Frann Site
he said the Bldg was renovated + parking lot
was expanded all work was circa 1982
No readings ova/hnu

1347 Building looks clean also parking lot saw
Backup generator + Transformer for STAHL Eye
perimeters are landscaped - NO Stressed Biota
No readings ova/hnu

1354. met Dr STAHL - owner he pointed out
where Drum Corral was
1981-82 - Frann rented out to Creative Fulfillment Inc.

Viewed Some Sheds on NW Corner of the Site
They contain storage equipment for use inside 1 Shed
Contained medical wastes that are regularly removed.
OFF Site monitoring well located in
property next door. No readings on ova/hnu
MW-6

1400 1P1/1S1 view of generator In rear of bldg
Facing South west

1402 1P2/1S2 view of Storage Sheds in NE corner of Facing Site
North East.

1403 1P3/1S3 view of Rear Boundary Facing South

1405 1P4/1S4 View of Rear Parking lot Facing
South

[signature] 7/12/90 [signature] 7/31/90

Frann Paper 02-9004-32
7/12/90

7

[redacted] 7/12/90

1410 - No readings on/Hnu in Former Area of Drum Carrale

1415
No readings in Area where Sheds are located.

1430 leaving Site observed Arrowler monitoring well next Door MW-5

[signature] 7/12/90 [signature] 7/31/90

Frann Paper 02-9004-32 7/12/90

Photo Log
On Site Reconnaissance.

All Photos Taken by Steve Okulewicz

Roll number	Picture/Slide #	Description	Time
1	1P/1S	View of Generator in rear of the building Facing South West	1400
1	2P/2S	View of Storage Sheds in North east Corner of Site Facing North East.	1402
1	3P/3S	View of Rear Site boundary Facing South.	1403
1	4P/4S	View of Rear Parking lot Facing South	1405

Joe Aubert 7/12/90 [illegible] 7/31/90

REFERENCE NO. 10

NUS CORPORATION

TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-9004-32	7/24/90	4:45

DISTRIBUTION:

Frann Paper

BETWEEN:	OF:	PHONE:
Charles Guthrie	NYSDEC	(516) 751-7900

AND:

Joe Filosa

DISCUSSION: (NUS)

I asked Mr Guthrie what the NY STATE surface water quality classification for the East Meadow Brook was. He told me that the classification is: Class C from muller pond to the source. He also said that from the Freeport Reservoir to muller pond is class C standard Ct. Freeport Reservoir is no longer used it was used by NYC but no longer.

Class C means non contact recreation.

t means trout maintenance + propagation

~~The~~ He also told me that there are no surface water intakes along the East meadow brook which are used for potable water sources or irrigation.

ACTION ITEMS:

NUS 087 REVISED 0581

REFERENCE NO. 11

40072-A1-EI-250

New York

N. Y.—CONN.—N. J.

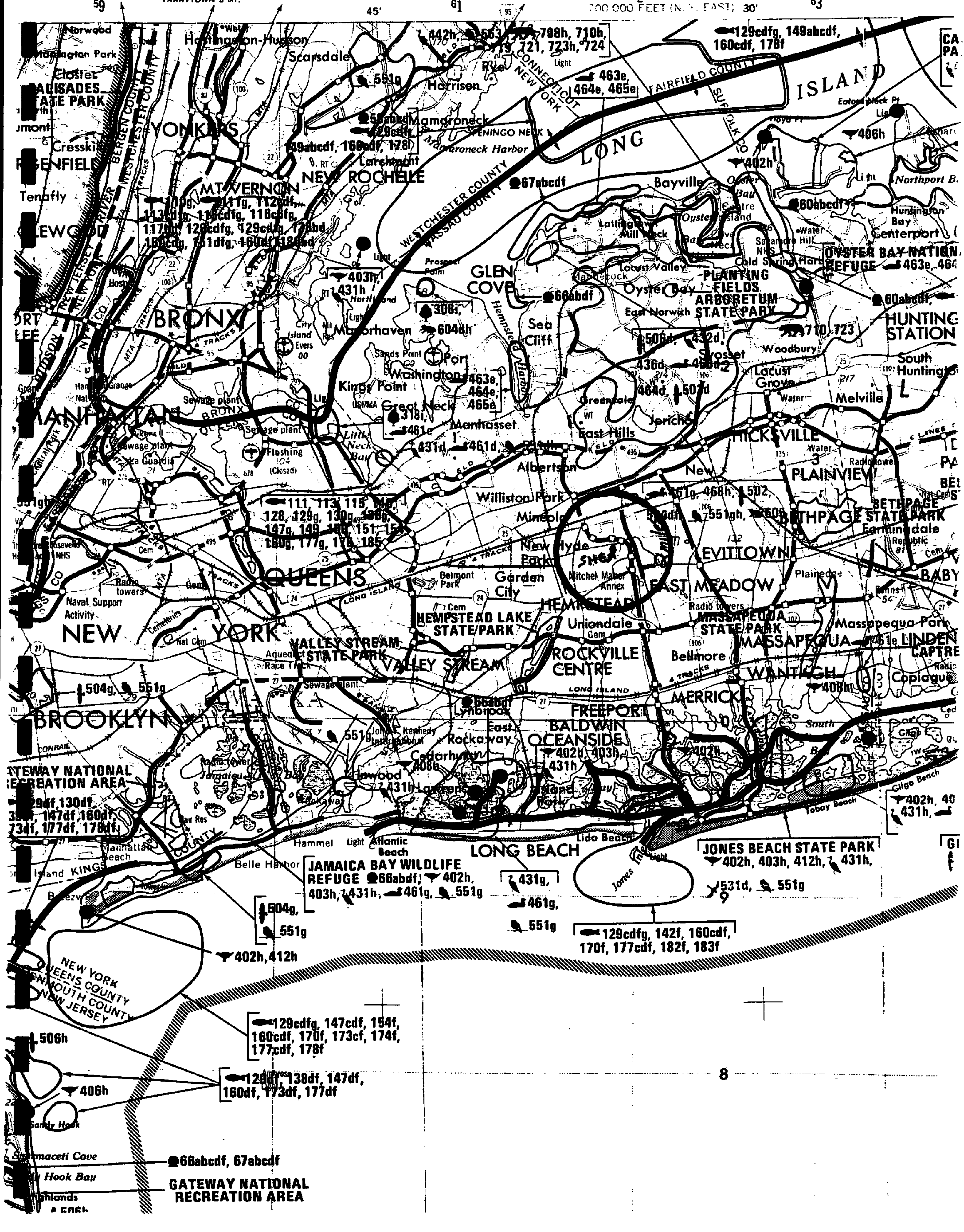
1:250 000-scale map of

Atlantic Coast Ecological Inventory

Produced by

U. S. FISH AND WILDLIFE SERVICE

1980



Hastings-on-Hudson
Scarsdale
Harrison
Rye
Mamaroneck
Mamaroneck Harbor
Larchmont
NEW ROCHELLE
MT. VERNON
YONKERS
BRONX
MANHATTAN
QUEENS
NEW YORK
BROOKLYN
PALISADES STATE PARK
Tenafly
Cresskill
WESTCHESTER COUNTY
NASSAU COUNTY
FAIRFIELD COUNTY
CONNECTICUT
NEW YORK
SUFFOLK CO
LONG ISLAND
Bayville
Oyster Bay
Locust Valley
Mill Neck
GLEN COVE
Sea Cliff
Hempstead Harbor
Port Washington
Sands Point
Manorhaven
Kings Point
Great Neck
Manhasset
Little Neck Bay
Flushing
PLANTING FIELDS ARBORETUM STATE PARK
OYSTER BAY NATIONAL REFUGE
East Norwich
Syosset
Woodbury
Jericho
Greenvale
East Hills
Albertson
Williston Park
Mineola
New Hyde Park
Garden City
Belmont Park
HEMPSTEAD
HEMPSTEAD LAKE STATE PARK
VALLEY STREAM STATE PARK
VALLEY STREAM
Uniondale
EAST MEADOW
Mitchel Manor Annex
LEVITTOWN
HICKSVILLE
PLAINVIEW
Locust Grove
Melville
Huntington Bay
Centerport
Northport
HUNTINGTON STATION
South Huntington
BETHPAGE STATE PARK
Farmingdale
Plainedge
MASSAPEQUA STATE PARK
MASSAPEQUA
Massapequa Park
LINDENHURST
Copiague
WANTAGH
Bellmore
MERRICK
FREEPORT
BALDWIN
ROCKVILLE CENTRE
OCEANSIDE
Lynbrook
East Rockaway
Cedarhurst
Inwood
Lawrence
Island Park
Jamaica Bay
Rockaway
Atlantic Beach
LONG BEACH
Lido Beach
Jones Inlet
JONES BEACH STATE PARK
Tobay Beach
Gilgo Beach
Hammel
Belle Harbor
Manhattan Beach
Breezy Pt
JAMAICA BAY WILDLIFE REFUGE
GATEWAY NATIONAL RECREATION AREA
NEW YORK QUEENS COUNTY
MONMOUTH COUNTY NEW JERSEY
Sandy Hook
Spermaceti Cove
Sandy Hook Bay
Highlands
442h, 553, 708h, 710h, 719, 721, 723h, 724
129cdfg, 149abcdf, 160cdf, 178f
463e, 464e, 465e
551g
129cdfg
149abcdf, 160cdf, 178f
67abcdf
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308i
604dh
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318i
461e
431d, 461d
66abdf
506d, 432d
436d
464d, 507d
710, 723
402h
406h
60abcdf
463e, 464
461g, 468h, 502
551gh
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504g, 551g
551g
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402h
408h
461e
402h
431h
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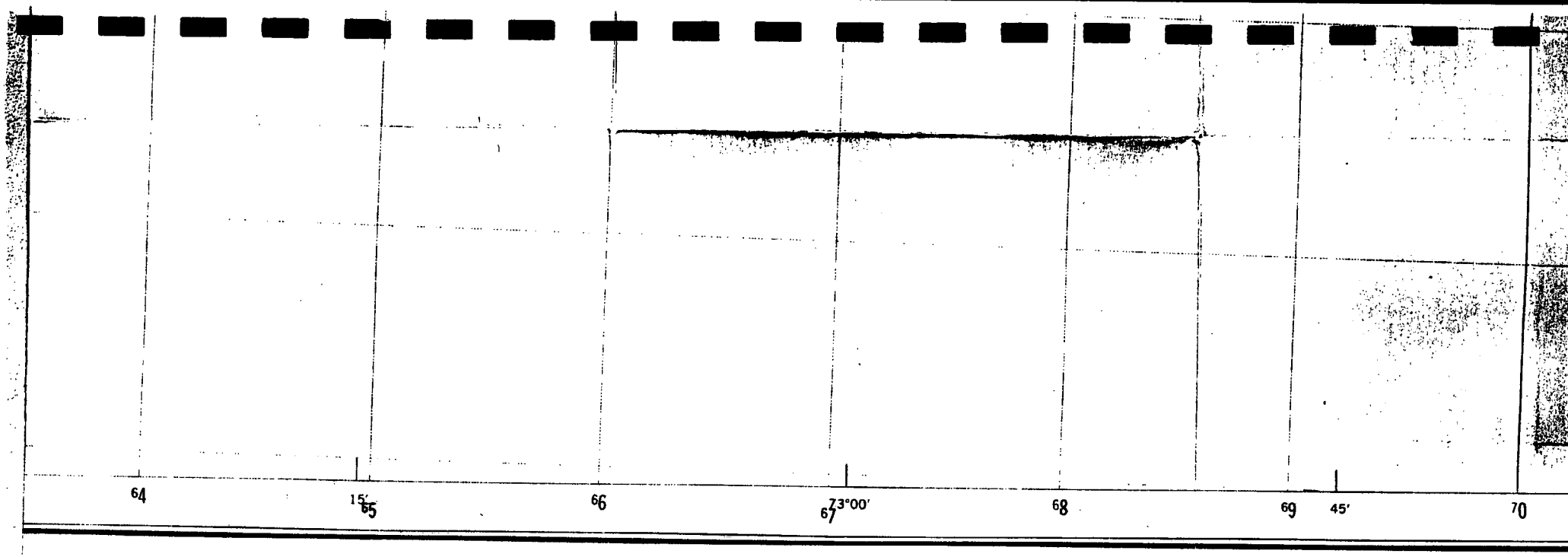
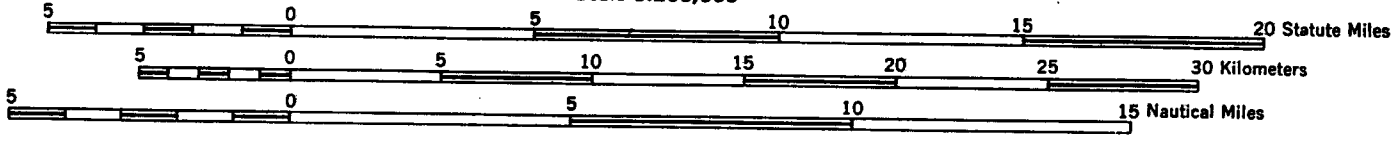
402h, 403h, 412h, 431h
531d, 551g
129cdfg, 142f, 160cdf, 170f, 177cdf, 182f, 183f
129cdfg, 147cdf, 154f, 160cdf, 170f, 173cf, 174f, 177cdf, 178f
506h
406h
129df, 138df, 147df, 160df, 173df, 177df
66abcdf, 67abcdf
8



Scale 1:250,000



TRANSVERSE MERCATOR PROJECTION

BLACK NUMBERED LINES INDICATE THE 10,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 18

FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092, OR DENVER, COLORADO 80225

e
face
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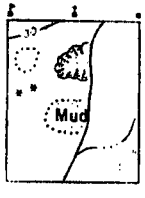
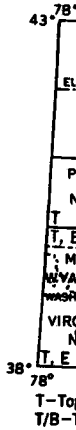
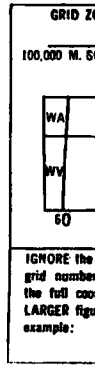






REFERENCE NO. 12

GSC-TR8645

GRAPHICAL EXPOSURE MODELING SYSTEM

(GEMS)

USER'S GUIDE

VOLUME 2. MODELING

Prepared for:

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES AND TOXIC SUBSTANCES
EXPOSURE EVALUATION DIVISION
Task No. 3-2
Contract No. 68023970
Project Officer: Russell Kinerson
Task Manager: Loren Hall

Prepared by:

GENERAL SCIENCES CORPORATION
8401 Corporate Drive
Landover, Maryland 20785

Submitted: December 1, 1986

GEMS> I

FRANN
LATITUDE 40:44:10 LONGITUDE 73:35:30 1980 POPULATION

KM	0.00-.400	.400-.810	.810-1.60	1.60-3.20	3.20-4.80	4.80-6.40	SECTOR TOTALS
S 1	0	2168	1893	53699	102031	123955	283746
RING TOTALS	0	2168	1893	53699	102031	123955	283746

GEMS> I

FRANN
LATITUDE 40:44:10 LONGITUDE 73:35:30 1980 HOUSING

KM	0.00-.400	.400-.810	.810-1.60	1.60-3.20	3.20-4.80	4.80-6.40	SECTOR TOTALS
S 1	0	127	671	16901	33505	37350	88554
RING TOTALS	0	127	671	16901	33505	37350	88554

	.25 miles	.5 miles	1 mile	2 miles	3 miles	4 miles
1980 Population	0	2,168	4,061	57,760	159,791	283,746
1980 Housing	0	127	798	17,699	51,204	88,554

REFERENCE NO. 13

NUS CORPORATION 0006-C 02-8707-05

TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8707-05 NYV8	8/25/87	9:10 am

DISTRIBUTION:

~~Allen~~ P.D. Frann Paper Corporation P.A.

BETWEEN:	OF:	PHONE:
Allen Fitzgerald	Nassau County Health Department	(516) 535-2406

AND: Pauline Doherty

DISCUSSION: (NUS)

Mr. Fitzgerald recalled his visit to Frann Paper in 1981 and his recommendation for an impervious surface and a berm. He revisited the site in 1982 and the alterations had not been made.

However, there is no suspected illegal dumping or spills of waste solvents. He stated that he did feel that there was a problem with the site.

ACTION ITEMS:

NUS 067 REVISED 0581

REFERENCE NO. 14

NUS CORPORATION AND SUBSIDIARIES — **TELECON NOTE**

CONTROL NO..	DATE.	TIME:
	5-3-90	1305

DISTRIBUTION: FRANN PAPER CORP 02-9004-32 NY U8 I$

BETWEEN.	OF:	PHONE:
Mrs Landon	NASSAU COUNTY ASSESSORS OFFICE / ~~FIELD OFFICE~~ COMMERCIAL MGR 5-3-90	(516) 535-2031

AND:

MATT MELDRIM (NUS)

DISCUSSION:

SECTION 44 BLOCK F LOT 188 WAS THE ASSESSMENT LOT THAT MRS. LANDON GAVE M. MELDRIM FOR FRANN PAPER CORP. MRS. LANDON WAS UNABLE TO SEND A TAX MAP TO M. MELDRIM AND INFORMED THAT THE MAP COULD ONLY BE GOTTEN IN PERSON.

ACTION ITEMS:

REFERENCE NO. 15

NUS CORPORATION 0007-C 02-8707-05

TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8707-05	8/25/87.	11:20 am.

DISTRIBUTION:

Flann Paper Corp.

BETWEEN:	OF:	PHONE:
	N. Hempstead Tax Accessor Office	(516) 535-2311

AND: P. Doherty

DISCUSSION: (NUS)

Owner of 450 Ludo Blvd. Garden City.

Norman O. Stahl

Section 44

Block S

Lot 188

ACTION ITEMS:

NUS 067 REVISED 0581

REFERENCE NO. 16

NUS CORPORATION AND SUBSIDIARIES — **TELECON NOTE**

CONTROL NO:	DATE:	TIME:
02-9004-32	6/29/90	1515

DISTRIBUTION:

BETWEEN:	OF:	PHONE:
Mike White	Nixon, Hargrave, Etc	(516) 222-1236

AND: Rich Feinberg

DISCUSSION:

Mr White called to tell me that he would like to schedule site recon for 7/12/90. He will send us out a letter requesting insurance certificates and a plan of what we want to do on site. I told him that we will only sign an access agreement stating our liability and that we have workmen's compensation. I told him that we would be conducting a site reconnaissance looking for evidence of FRAWN Paper's disposal practices. However, we would also note any other environmental concerns onsite. He told me that Sthal Assoc. (present owner) operations were all conducted inside the bldg. He also told me that Sthal Assoc would like to split samples, if we decide to sample the site. I told him if there were wells onsite we would probably want to open and screen them. He told me that he was not aware of any onsite. I told him we would call him next week if we knew if we were going to sample at the time of the recon. He said fine and that Mr Sthal, (the owner) would like present on the recon as well as his consultants. He was concerned about bringing consultants on site for nothing if we were not going to sample.

ACTION ITEMS:

NUS 067 REVISED 0685

REFERENCE NO. 17

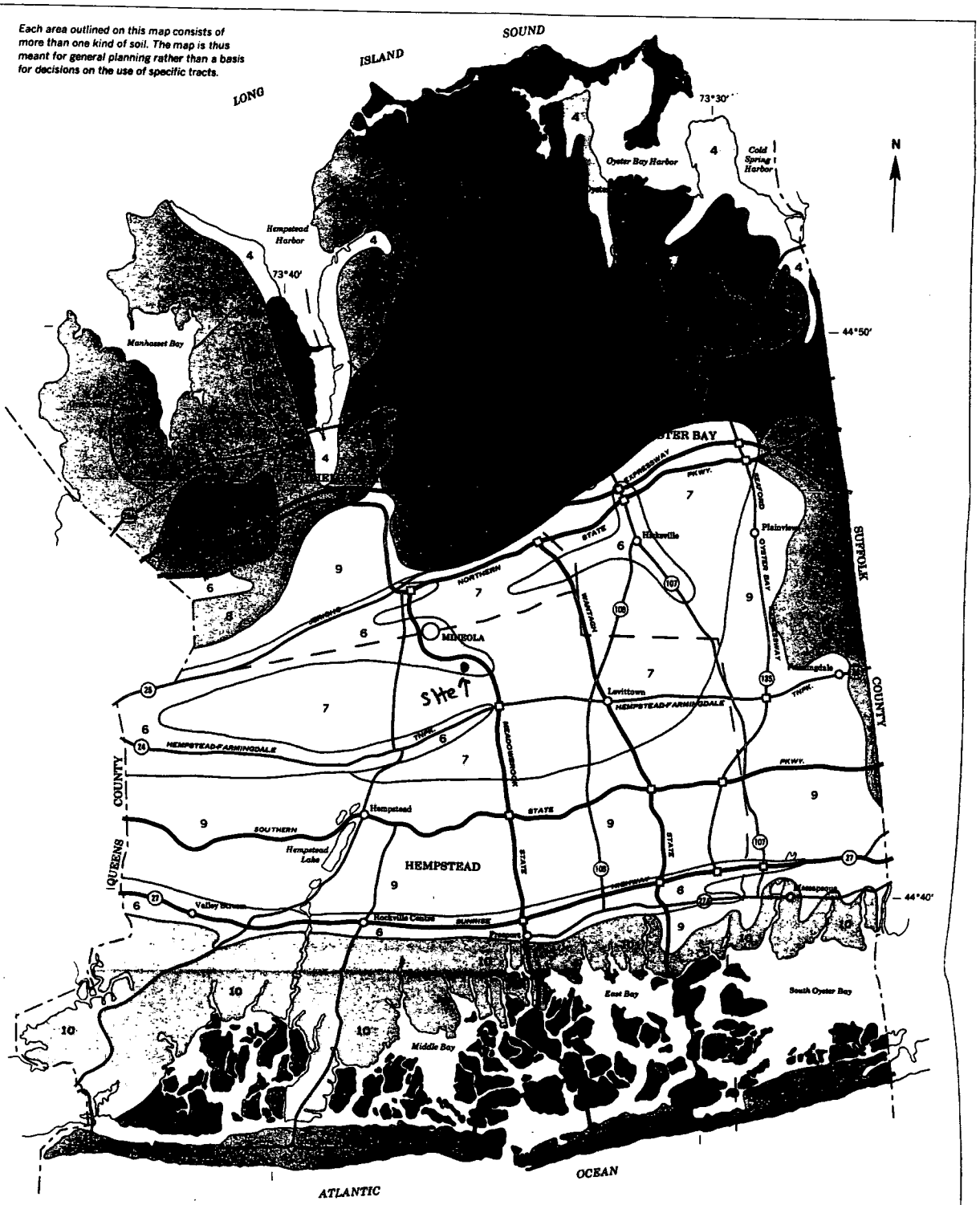
United States
Department of
Agriculture

Soil
Conservation
Service

In cooperation with
Cornell University Agricultural
Experiment Station

Soil Survey of Nassau County New York

Each area outlined on this map consists of more than one kind of soil. The map is thus meant for general planning rather than a basis for decisions on the use of specific tracts.



LEGEND

- IPSWICH-UDIPSAMMENTS: Dominantly nearly level, very poorly drained, organic soils and nearly level, moderately well drained to excessively drained, coarse-textured soils; on tidal flats
- MONTAUK-ENFIELD: Dominantly nearly level to strongly sloping, well drained, medium-textured and moderately coarse textured soils; on knolls and hills
- RIVERHEAD-ENFIELD-URBAN LAND: Dominantly nearly level to strongly sloping, well drained, moderately coarse textured and medium-textured soils and Urban land; on low hills and ridges
- 4 RIVERHEAD-PLYMOUTH: Dominantly moderately steep or steep, well drained and excessively drained, moderately coarse textured and coarse-textured soils; on hillsides
- UDIPSAMMENTS-BEACHES-URBAN LAND: Dominantly nearly level or gently sloping, excessively drained to moderately well drained, coarse-textured soils, Beaches, and Urban land; on barrier beaches
- 6 URBAN LAND: Dominantly nearly level or gently sloping areas that are covered by buildings, roads, sidewalks, and parking lots; on plains and low hills
- 7 URBAN LAND-HEMPSTEAD: Dominantly Urban land and nearly level, well drained, medium-textured soils; on plains
- URBAN LAND-MONTAUK-RIVERHEAD: Dominantly Urban land and nearly level to strongly sloping, well drained, medium-textured and moderately coarse textured soils; on low hills
- 9 URBAN LAND-RIVERHEAD: Dominantly Urban land and nearly level, well drained, moderately coarse textured soils; on plains
- 10 URBAN LAND-UDIPSAMMENTS-SUDBURY: Dominantly Urban land and nearly level, excessively drained to moder-

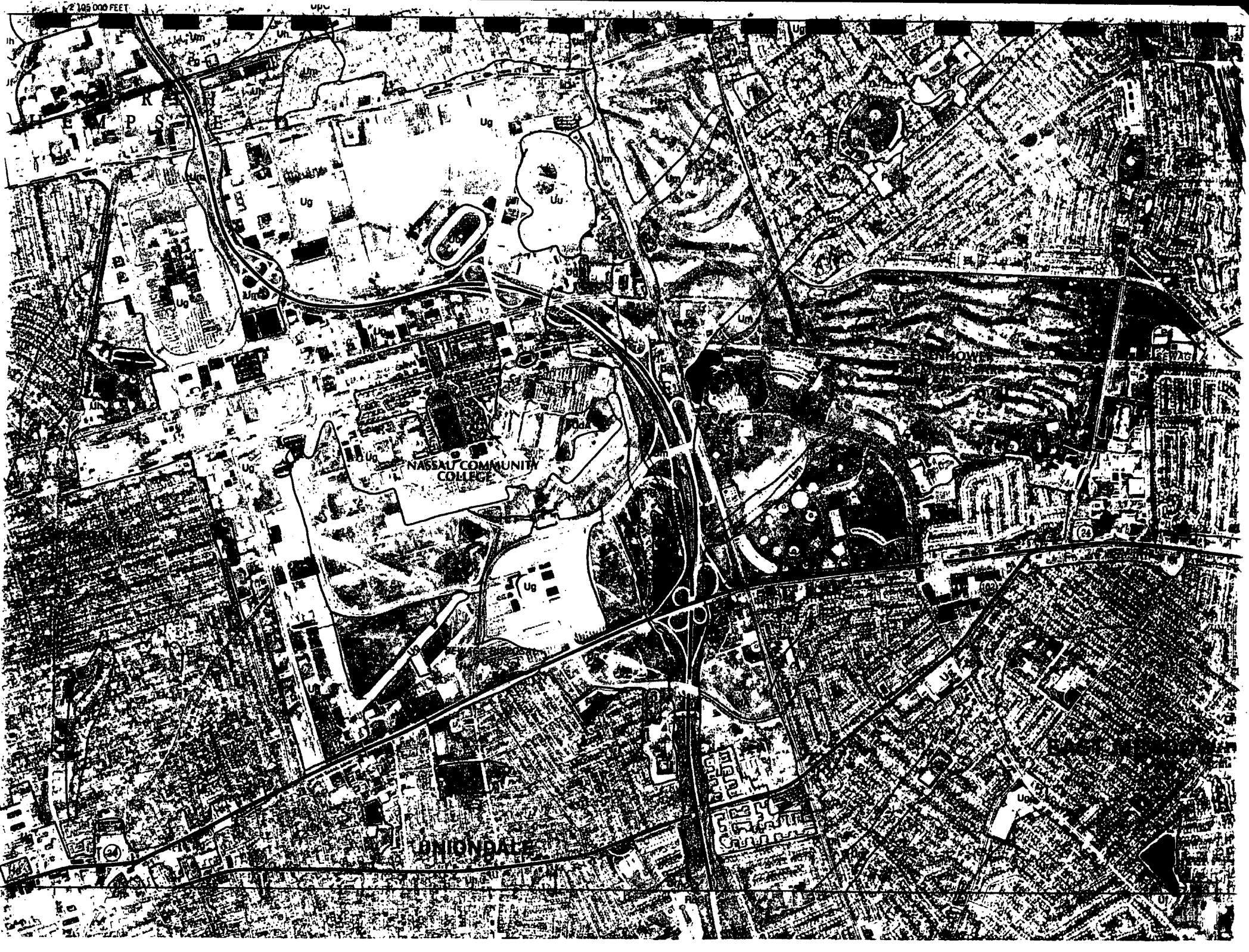
U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
CORNELL UNIVERSITY AGRICULTURAL EXPERIMENT STATION

GENERAL SOIL MAP
NASSAU COUNTY, NEW YORK

Scale 1:126,720

1 0 1 2 3 4 Miles

1 0 3 5 Km


2 105 000 FEET
NASSAU COMMUNITY COLLEGE
UNIONDALE
EISENHOWER MEMORIAL PARK
24

a hazard to the ground water or to water in adjacent tidal areas because the sandy material is a poor filter.

Settling and compaction of the organic layers limit the unit as a site for dwellings without basements, and the water table is a limitation for dwellings with basements. Some areas of these soils are limited by tidal flooding during intense coastal storms. The use of pilings helps to overcome or alleviate the settling and wetness.

Settling of the organic material is the main limitation of the soil as a site for local streets and roads. The rate of settlement varies with time and the amount of organic material.

The high sand content limits recreation use and landscaping, and settling is a limitation, especially for permanent structures. Some intensively used areas require a veneer of loamy soil to improve trafficability and to improve water holding capacity for better support of plants. Topsoil, fertilizers, and irrigation are usually needed to overcome droughtiness and low fertility when establishing lawns and shrubs, and most species must be salt tolerant.

This unit is poorly suited to all types of wildlife habitat.

Uf—Udorthents, refuse substratum. This unit consists of nearly level to steep, sandy soils in sanitary landfills that have been reworked by earth-moving and grading equipment to cover trash and other refuse. Often the refuse is partly covered or mixed with the sandy fill material. The sides of most areas are steep, and the tops are nearly level or gently sloping. The areas are mostly rectangular or irregular in shape and range from 5 to 100 acres. Slope ranges from 0 to 35 percent, and the slopes are smooth or convex.

Commonly, the upper 2 to 3 feet of this unit is mixed layers of sandy fill material. This material overlies layers of garbage and refuse which range in thickness mainly from 2 to 10 feet. Where the sandy material is used just for daily cover, it is likely to be thinner than 2 feet. Some areas of this map unit are in former sand and gravel pits, and others have been filled with the original fill material.

Properties—

Permeability: Variable but generally ranges from very rapid to moderate.

Water table: Variable, depending upon elevation of the unit and the level of the water in adjacent soils.

Available water capacity: Mainly very low.

Erosion hazard: Moderate on sloping areas; severe on steep areas.

Most active sanitary landfills do not have a plant cover. Older or abandoned landfills have varying amounts of grasses, weeds, and shrubs.

Settling of the underlying material and the instability of the material are major limitations of this unit for most kinds of development, including housing, local roads and streets, and septic effluent disposal systems.

Droughtiness and low natural fertility limit the unit for landscaping and make the use of topsoil, fertilizers, and irrigation necessary.

Onsite investigation is necessary to determine the potentials and limitations of this unit for any use.

Ug—Urban land. This map unit consists of areas where at least 85 percent of the surface is covered with asphalt, concrete, or other impervious building material. These areas mostly are parking lots, shopping centers, industrial parks, or institutional sites. Many are in the business centers in the villages and cities. Most areas are nearly level, and some are gently sloping. A few small areas, mostly in the northern part of the county, are strongly sloping. Many areas are rectangular or long and narrow and are mainly adjacent to local main thoroughfares. The areas range from about 3 acres to as much as several hundred acres.

Included with this unit in mapping are small areas of soil that has not been appreciably altered or that is not under an impervious cover. These areas are mainly in lawns or other landscaped areas. Most of the included open areas are well drained Riverhead, Hempstead, or Enfield soils or excessively drained Udipsamments.

In many areas rapid or very rapid runoff prevents adequate discharge of runoff from intense rainstorms to safe outlets. A few areas are in low spots where seasonal wetness sometimes causes temporary flooding of the surface or frost heaving and subsequent breakup of surface pavements.

Uh—Urban land-Hempstead complex. This unit consists of urbanized areas and very deep, well drained soils. It is on nearly level plains. The areas of this unit are variable in shape and are as small as 10 acres, but some areas are as much as 1,000 acres. Slope ranges from 0 to 3 percent, but in most areas that are not near drainageways or depressions it is less than 2 percent. This unit consists of about 75 percent urbanized areas, 20 percent Hempstead soils, and 5 percent other soils. The urbanized areas and Hempstead soils are so intermingled that it was not practical to map them separately.

The urbanized areas consist of buildings, roads, driveways, parking lots, and other manmade structures.

The typical sequence, depth, and composition of the layers of Hempstead soils are as follows—

Surface layer:
Surface to 11 inches, black silt loam

Subsurface layer:
11 to 15 inches, dark brown silt loam

Subsoil:
15 to 29 inches, yellowish brown silt loam

REFERENCE NO. 18

UNITED STAT
DEPARTMENT OF TH TERIOR
GEOLOGICAL S

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300
15

U.S. GEOLOGICAL SURVEY
5 AERIAL WAY
SYOSSET, NEW YORK 11791

FIRST CLASS MAIL

RECEIVED
JUN 04 REC'D
NUS CORPORATION
REGION II
SENT TO

TOWN CODES

1 = Hempstead

2 = North Hempstead ←

3 = Oyster Bay

4 = Babylon

5 = Brookhaven

6 = East Hampton

7 = Huntington

8 = Islip

9 = Riverhead

10 = Shelter Island

11 = Smithtown

12 = Southampton

13 = Southold

DESCRIPTION OF HEADER FILE RETRIEVAL INFORMATION

WELL = New York State well identification number (ex. K 2859. 1)

AQUIFER = Code of aquifer in which well is screened (ex. 112GLCLU)

STATION ID = Unique station identification number (U.S.G.S. use only)

LAT-LONG = Latitude and longitude of well

SQ = Sequence number (U.S.G.S. use only)

LSD = Land surface elevation at well, in feet from NGVD of 1929

MP = Measuring point elevation of well, in feet from NGVD of 1929

DEPTH = Total depth of well casing, in feet below land surface

SCREEN TOP = Depth to top of screen, in feet below land surface

SCREEN BOTTOM = Depth to bottom of screen, in feet below land surface

MAX DRILL = Maximum depth well was drilled, in feet below land surface

TOWN = Town code of well

COMM = Community code of well (U.S.G.S. use only)

SWDST = Sewer district code where well is located

ZON = Psysiographic zone code of well

HGSTRM = Hagstrom Atlas coordinate of well

WELUS = Primary and secondary well use code of well

AQUIFER CODES

112GLCLU = Upper Glacial Aquifer

112GRDR = Gardiners Clay

112JMCO = Jameco Aquifer

112PGFG = Port Washington Confining Unit

112PGQF = Port Washington Aquifer

112SMTN = Smithtown Clay

11220CL = 20-Foot Clay

211LLYD = Lloyd Aquifer

211MGTY = Magothy Aquifer

211MMGD = Monmouth Greensand

211RNCF = Raritan Confining Unit

400BCPX = Basement Complex (Bedrock)

999MMMMM = More Than One Unit

WELL USE CODES

1 = Observation

2 = Recharge

3 = Test

4 = Well not used

5 = Withdrawl, unspecified

6 = Destroyed

7 = Public supply

8 = Fire well

9 = Not found last time visited

D = Domestic supply

P = Plugged

COUNTY LETTER CODES
(for N.Y.S. well numbers)
(ex.- K 1234. 1)

S = Suffolk

N = Nassau

Q = Queens

K = Kings

R = Richmond

B = Bronx

M = Manhattan

MODIFYING LETTERS
(for N.Y.S. well numbers)
(ex.- K 1234. 1T)

D = Diffusion (injection) well

T = Test hole

A-Z = Replacement well with new location (except letters D or T)

User ID: ACHU   Request 11[illegible]

Project ID: DEFAULT

ACHU

Fran Paper Site

FREPORT.HT

[SPOOL Rev. 22.1.0 Copyright (c) 1989, Prime Computer, Inc.]

	WELL	AQUIFER	STATION ID	LAT-LONG	SQ	LSD	MP	DEPTH	--SCREEN-- TOP	BOTTOM	MAX DRILL	TOWN	COMM	SWDST	ZON	HGSTRM	WELUS
351 N	7673. 1	211MGTY	404519073370701	404519073370701	01	95.0	94.92	200	198	200	0	2	0	0		NF 902	6
352 N	7705. 1	211MGTY	404530073364401	404530073364401	01	97.0	0.00	65	62	65	0	2	0	0		NF 920	
353 N	7732. 1	211MGTY	404517073333901	404517073333901	01	121.0	0.00	108	97	107	0	2	0	0		NG 932	5
354 N	7764. 1		404220073353601	404220073353601	01	0.0	0.00	242	227	242	0	1	44	0		NF1182	5
355 N	7765. 1	211MGTY	404526073353401	404526073353401	01	108.0	0.00	404	330	400	0	2	0	3		NF 931	7
356 N	7790. 1		404310073334201	404310073334201	01	0.0	0.00	0	0	0	0	0	0	0		NG1036	
357 N	7797. 1	211MGTY	404310073331602	404309073332101	01	80.0	85.14	550	485	545	0	1	0	0		NH1007	7
358 N	7849. 1	211MGTY	404423073380601	404423073380601	01	106.0	0.00	251	220	250	0	2	0	0		NE 958	5
359 N	7853. 1	112GLCLU	404345073364101	404345073364101	01	80.0	0.00	0	25	30	0	1	44	0		NF1022	5
360 N	7856. 1	112GLCLU	404349073333301	404349073333301	01	0.0	0.00	70	50	60	0	0	0	0		NG1092	5
361 N	7951. 1	112GLCLU	404328073383001	404328073383001	01	86.0	86.25	68	65	68	0	1	0	0		NE1055	1
362 N	7957. 1	211MGTY	404420073353201	404420073353201	01	96.0	98.89	523	435	519	0	1	0	3		NF 996	7
363 N	8007. 1	211MGTY	404543073354901	404543073354901	01	120.0	128.82	564	490	564	0	2	0	3		NF 879	7
364 N	8039. 1	112GLCLU	404207073365301	404207073365301	01	66.0	0.00	55	49	55	0	1	0	0		NF1114	5
365 N	8050. 1	211MGTY	404422073370001	404422073370001	01	91.0	83.10	328	300	328	0	1	14	2		NF 918	5
366 N	8069. 1	211MGTY	404357073364101	404357073364101	01	79.0	70.65	291	265	291	0	1	0	3		NF1021	5
367 N	8093. 1	112GLCLU	404637073380701	404350073380101	01	109.0	0.00	90	80	90	0	2	0	0		NE 957	
368 N	8181. 1	211MGTY	404616073354501	404616073354501	01	141.0	0.00	240	230	240	0	2	0	0		NF 875	5
369 N	8235. 1	112GLCLU	404203073354603	404203073354603	03	55.0	55.18	53	50	53	0	1	0	0		NF1184	
370 N	8269. 1	211MGTY	404535073370001	404535073370001	01	111.0	111.15	64	61	64	0	2	0	0		NF 910	6
371 N	8269. 2	211MGTY	404535073370002	404535073370002	02	111.7	111.55	86	81	86	0	2	89	0		NF 910	1
372 N	8277. 1	211MGTY	404419073383001	404419073383001	01	103.0	0.00	361	331	361	0	2	0	0		NE 939	5
373 N	8305. 10	112GLCLU	404637073371001	404633073371[illegible]	02	105.0	92.57	60	51	60	0	2	0	3		NE 995	2
374 N	8311. 1		404400073375801	404400073375801	01	0.0	0.00	370	0	0	0	0	0	0		NE1051	5
375 N	8332. 1	112GLCLU	404227073361601	404227073361601	01	87.0	0.00	86	75	86	0	1	0	0		NF 946	
376 N	8395. 1	112GLCLU	404203073354705	404203073354705	03	55.0	0.00	23	20	23	0	1	0	0		NF1194	
377 N	8396. 1	112GLCLU	404203073354706	404203073354706	04	55.0	0.00	41	38	41	0	1	0	0		NF1194	
378 N	8402. 1	112GLCLU	404254073360901	404301073361[illegible]	01	79.0	0.00	38	35	38	0	0	0	0		NF1056	
379 N	8423. 1	211MGTY	404447073351901	404315073343[illegible]	01	74.0	0.00	92	77	92	0	1	0	0		NG1335	5
380 N	8457. 1	211MGTY	404457073360701	404457073360[illegible]	01	104.0	106.41	440	355	435	0	2	0	3		NF [illegible]	7
381 N	8458. 1	211MGTY	404422073364401	404422073364[illegible]	01	90.0	0.00	350	290	350	0	1	0	3		NF 925	5
382 N	8472. 1	211MGTY	404541073330901	404531073332[illegible]	01	126.0	0.00	195	135	195	0	2	0	0		NH 900	5
383 N	8474. 1T	211MGTY	404325073363101	404325073363[illegible]	03	74.0	0.00	560	0	0	0	1	0	3		NF1035	3
384 N	8474. 2	211MGTY	404325073363001	404325073363[illegible]	01	74.0	77.47	562	495	550	0	1	0	3		NF1035	7
385 N	8475. 1T	211MGTY	404325073363102	404325073363[illegible]	04	74.0	0.00	503	0	0	0	1	0	3		NF1035	3
386 N	8475. 2	211MGTY	404325073363002	404325073363[illegible]	02	74.0	77.47	480	409	451	0	1	0	3		NF1035	7
387 N	8497. 1		404519073342901	404519073342[illegible]	01	115.0	114.99	604	0	0	0	2	0	0		NG 941	3
388 N	8497. 2	211MGTY	404519073342903	404519073342[illegible]	03	115.0	0.00	544	450	539	0	2	0	0		NG 941	5
389 N	8512. 1	112GLCLU	404224073371[illegible]	404223073371[illegible]	01	53.0	0.00	52	42	52	0	1	0	0		NE1192	5
390 N	8530. 1	112GLCLU	404414073382501	404412073372[illegible]	01	98.0	0.00	96	86	96	0	1	0	0		NE 989	
391 N	8531. 1	112GLCLU	404414073382502	404412073372[illegible]	02	98.0	0.00	99	89	99	0	1	0	0		NE 999	5
392 N	8543. 10	211MGTY	404529073351402	404529073351[illegible]	02	106.0	0.00	140	134	140	0	2	0	0		NG 900	2
393 N	8550. 1		404401073322002	404401073322[illegible]	02	102.0	101.95	63	53	63	0	1	0	0		NH1050	1
394 N	8550. 2		404401073322003	404401073322[illegible]	03	103.0	102.34	61	55	61	0	1	0	0		NH1050	
395 N	8550. 3	211MGTY	404401073322004	404401073322[illegible]	04	101.0	101.30	66	61	66	0	1	0	0		NH1050	1
396 N	8598. 1	112GLCLU	404239073355502	404239073355[illegible]	02	70.0	69.83	45	42	45	0	1	0	2		NF1160	1
397 N	8601. 1	211MGTY	404505073345401	404505073345[illegible]	01	104.0	0.00	340	319	339	0	2	0	0		NG 923	5

REFERENCE NO. 19

NATIONAL WETLANDS INVENTORY

UNITED STATES DEPARTMENT OF THE INTERIOR

NOTES TO THE USER

- Wetlands which have been field examined are indicated on the map by an asterisk (*)
- Dominance type (either vegetative or sedentary animal) can be added to the map by the interested user
- Additions or corrections to the wetlands information displayed on this map are solicited. Please forward such information to the address indicated
- Some areas designated R4SB, R4SBW, or R4SBJ (intermittent streams) may not meet the definition of wetlands.

WETLAND LEGEND

U – Primarily represents upland areas, but may include unclassified wetlands such as man-modified areas, non photo-identifiable areas and/or unintentional omissions.

AERIAL PHOTOGRAPHY

DATE	4 / 81
SCALE	1:80 000
TYPE	B-W
DATE	/ /
SCALE	
TYPE	
DATE	/ /
SCALE	
TYPE	

U.S. DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

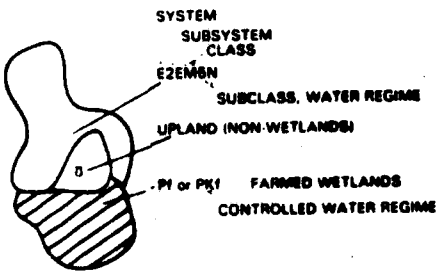
Prepared by Office of Biological Services for the National Wetlands Inventory

SPECIAL NOTE

This document was prepared primarily by stereoscopic analysis of high altitude aerial photographs. Wetlands were identified on the photographs based on vegetation, visible hydrology, and geography in accordance with **Classification of Wetlands and Deep-Water Habitats of the United States** (An Operational Draft), Cowardin, et al, 1977. The aerial photographs typically reflect conditions during the specific year and season when they were taken. In addition, there is a margin of error inherent in the use of the aerial photographs. Thus, a detailed on the ground and historical analysis of a single site may result in a revision of the wetland boundaries established through photographic interpretation. In addition, some small wetlands and those obscured by dense forest cover may not be included on this document.

Federal, State and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, State or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, State or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

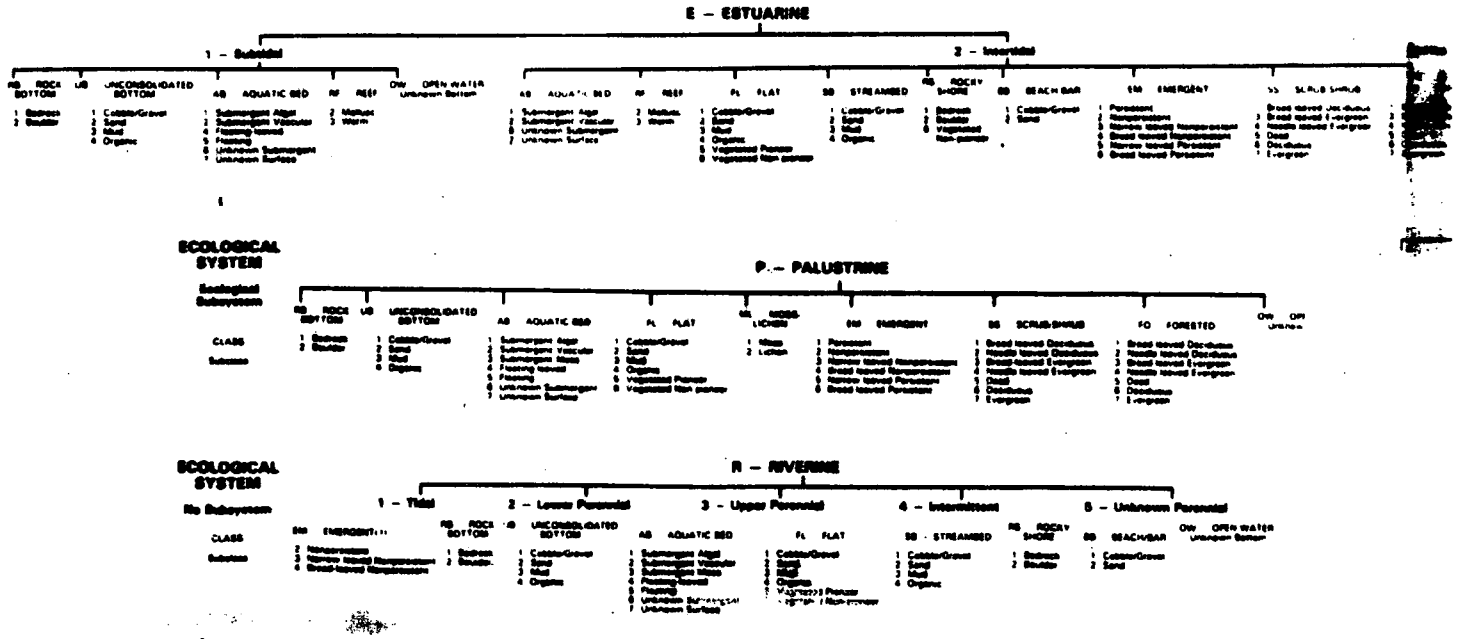
SYMBOLOGY EXAMPLE

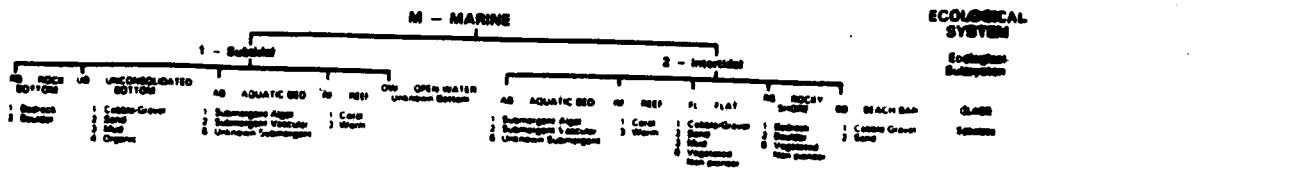


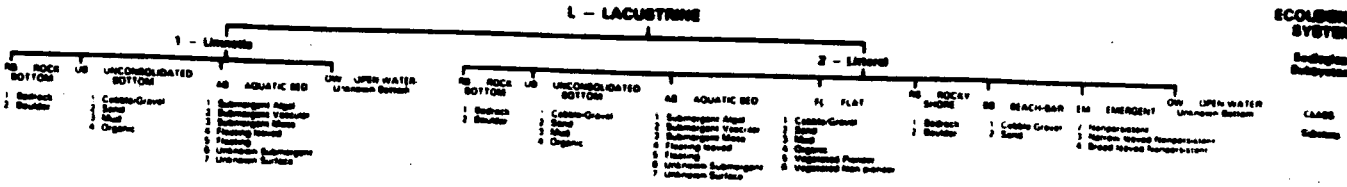
Prepared by Office of Biological Services for the National Wetlands Inventory

SCALE 1:24 000

Other information concerning the wetland resources depicted on this document may be available. For information, contact:
Regional Director (ARSD) Region V
U.S. Fish and Wildlife Service
1 Gateway Center, Suite 700
Newton Corner, Massachusetts 01258





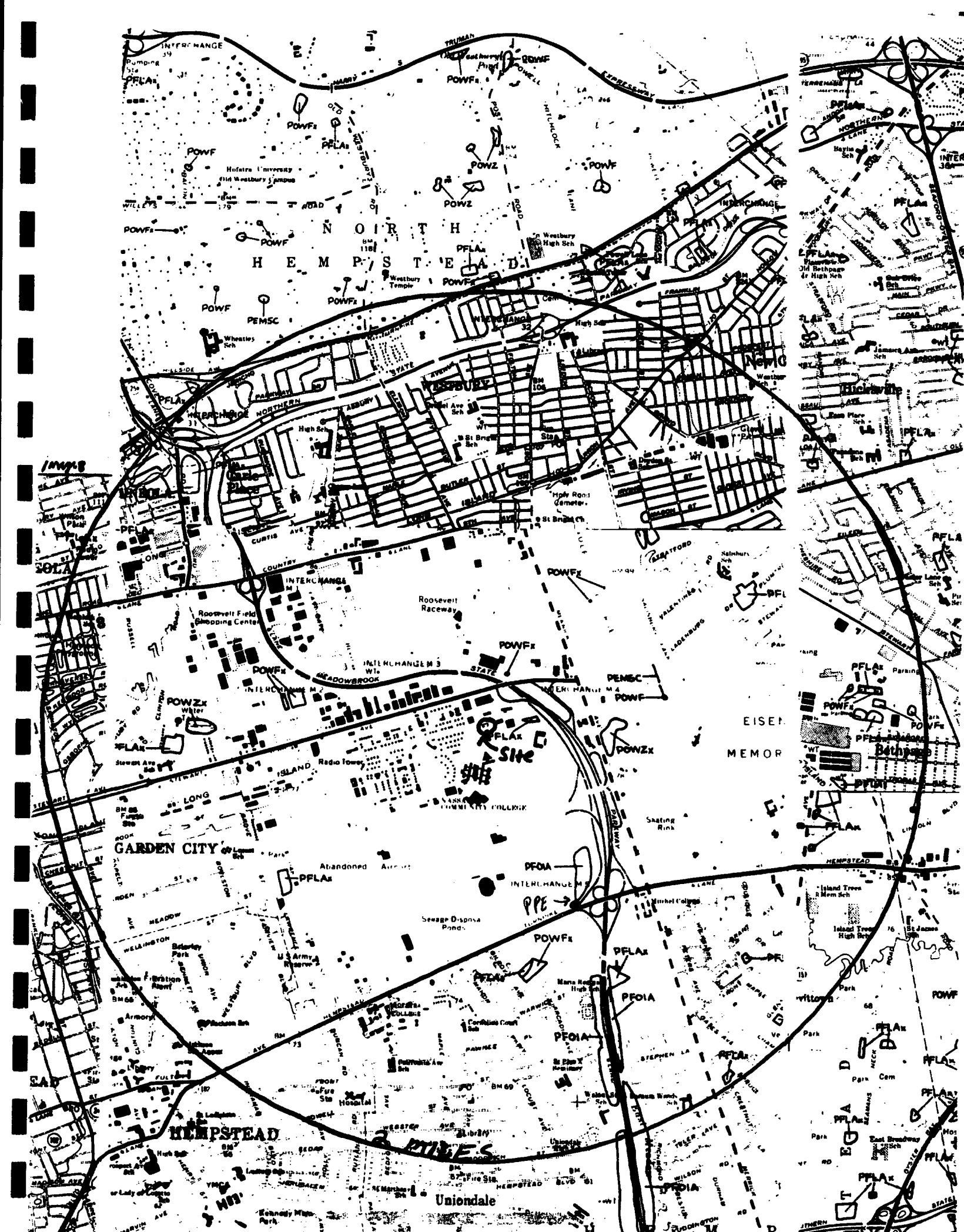


MODIFYING TERMS

In order to more adequately describe wetland and aquatic habitats one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The farmed modifier may also be applied to the ecological system.

WATER REGIME(1)				WATER CHEMISTRY			SOIL	SPECIAL MODIFIERS	
Non-Tidal		Tidal		Coastal Salinity	Inland Salinity	pH Modifiers for all Fresh Water			
A Temporary	H Permanent	K Artificial	R Seasonal Tidal	1 Hyperhaline	7 Hyperhaline	a Acid	0 Organic	b Beaver	n Diked Impounded
B Saturated	J Intermittently Flooded	L Subtidal	S Temporary Tidal	2 Euhaline	8 Euhaline	t Circumneutral	1 Mineral	d Partially Drained Ditched	o Artificial
C Seasonal	K Artificial	M Irregularly Exposed	T Semipermanent Tidal	3 Mixohaline (Brackish)	9 Mixohaline	Alkaline		f Farmed	s Spoil
D Seasonal Well drained	Z Intermittently Exposed Permanent	N Regular	V Permanent Tidal	4 Polyhaline	0 Fresh				x Excavated
E Seasonal Saturated	W Intermittently Flooded Temporary	P Irregular	U Unknown	5 Mesohaline					
F Semipermanent	Y Saturated Semipermanent Seasonals			6 Oligohaline					
G Intermittently Exposed	U Unknown			0 Fresh					

1) Information on the water regime modifiers found on this legend, but not found in the classification system, may be obtained from the above listed source.



NORTH HEMPSTEAD
WESTBURY
GARDEN CITY
HEMPSTEAD
Uniondale
Roosevelt Raceway
Roosevelt Field Shopping Center
Hofstra University Old Westbury Campus
Westbury Temple
Wheatley Sch
Holy Rood Cemetery
Radio Tower
Abandoned Airport
Sewage Disposal Ponds
Skating Rink
Mitchel College
Hicksville
Bethpage
EISEN
MEMOR
Site
PPE
2 MILES
INTERCHANGE
POWF
POWFx
POWZ
PEMSC
PFLAx
PFOIA

REFERENCE NO. 20

HICKSVILLE WATER DISTRICT

4 DEAN STREET
HICKSVILLE, N. Y. 11802

PHONE
(516) 931-0184

RECEIVED

March 22, 1988

NUS CORPORATION

NUS Corporation
1090 King Georges Post Road
Suite 1103
Edison, New Jersey

Att: Mr. E.L. Leonard

Dear Mr. Leonard:

Enclosing please find the list you requested containing well numbers, depth and aquifers used by the nineteen (19) wells operated by the Hicksville Water District.

If I may be of any further assistance please feel free to contact me at the above number.

Very truly yours,

HICKSVILLE WATER DISTRICT

John J. McCrosson
Assistant Superintendent

Enc

JJM/jps

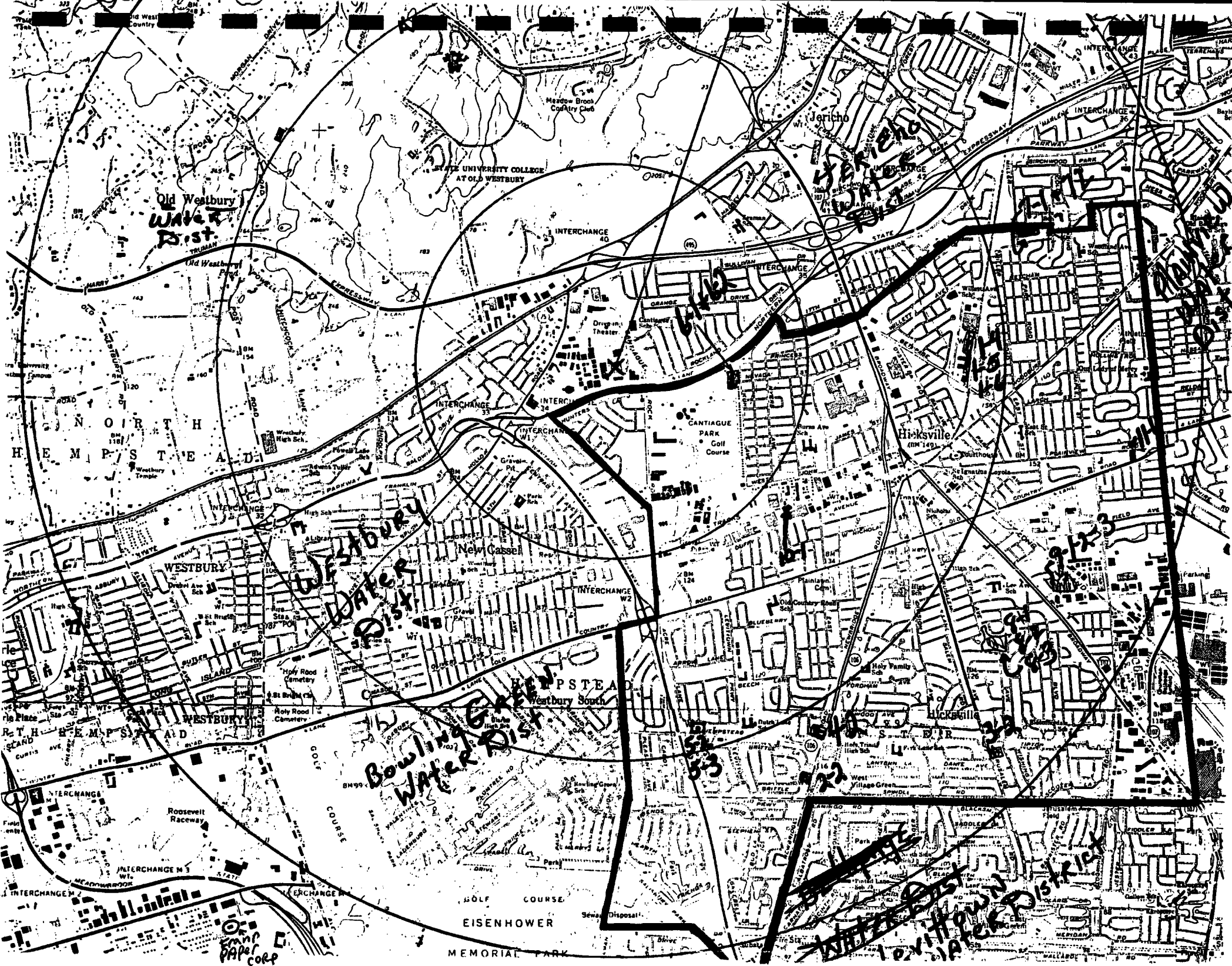
HICKSVILLE WATER DISTRICT

4 DEAN STREET
HICKSVILLE, N. Y. 11802

PHONE
(516) 931-0184

March 22, 1988

H.W.D. WELL #	COUNTY WELL #	DEPTH	AQUIFER
1-4	N-7562	545 feet	Magthoy
1-5	N-8249	495 feet	Magthoy
1-6	N-9488	583 feet	Magthoy
→ 2-2	N-5336	545 feet	Magthoy
3-2	N-8525	505 feet	Magthoy
4-2	N-8526	601 feet	Magthoy
→ 5-2	N-7561	551 feet	Magthoy
→ 5-3	N-9212	610 feet	Magthoy
6-1	N-3953	419 feet	Magthoy
6-2	N-3878	428 feet	Magthoy
7-1	N-6190	605 feet	Magthoy
7-2	N-6191	555 feet	Magthoy
8-1	N-6192	632 feet	Magthoy
8-2	N-6193	472 feet	Magthoy
8-3	N-9180	637 feet	Magthoy
9-1	N-8778	590 feet	Magthoy
9-2	N-8779	585 feet	Magthoy
9-3	N-10208	600 feet	Magthoy
10-1	N-9463	625 feet	Magthoy
**11-1	Under construction will not be in operation until early 1989.		



Old Westbury
Water Dist.
Jericho
Jericho Water Dist.
Westbury Water Dist.
Bowling Green Water Dist.
Levittown Water District
Water Dist.
Hicksville
Westbury
New Cassel
Westbury South
Hicksville
Roosevelt Raceway
Meadow Brook Country Club
STATE UNIVERSITY COLLEGE AT OLD WESTBURY
CANTIAGUE PARK Golf Course
Holy Rood Cemetery
GOLF COURSE
EISENHOWER MEMORIAL PARK
Sewage Disposal
Emmy Paper Corp

REFERENCE NO. 21

NUS CORPORATION

TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-9004-32	8/10/90	4:15

DISTRIBUTION:

Frann PAPER CO

BETWEEN:	OF:	PHONE:
Richard Peters	NASSAU County Dept OF Public works DIV. OF highways	(516) 535-4031

AND:

Joe Filosa

DISCUSSION: (NUS)

I asked mr Peters IF he had Any information Regarding the Storm Sewers near Frann Paper. He Told me That the sewers Run Along Endo Blvd, Through NASSAU Community College And The Meadow Brook Parkway To a discharge point at the interchange with The Hempstead Turnpike. The water is Discharged into the East Meadow Brook

ACTION ITEMS:

Joe Filosa
8/10/90

NUS 087 REVISED 0581

REFERENCE NO. 22

LEVEL: REG 02 0)
SELECTION:
SEQUENCE: REGION, STATE, SITE NAME
EVENTS: ALL

U.S. EPA SUPERFUND PROGRAM

** C E R C L I S **

LIST-8: SITE/EVENT LISTING

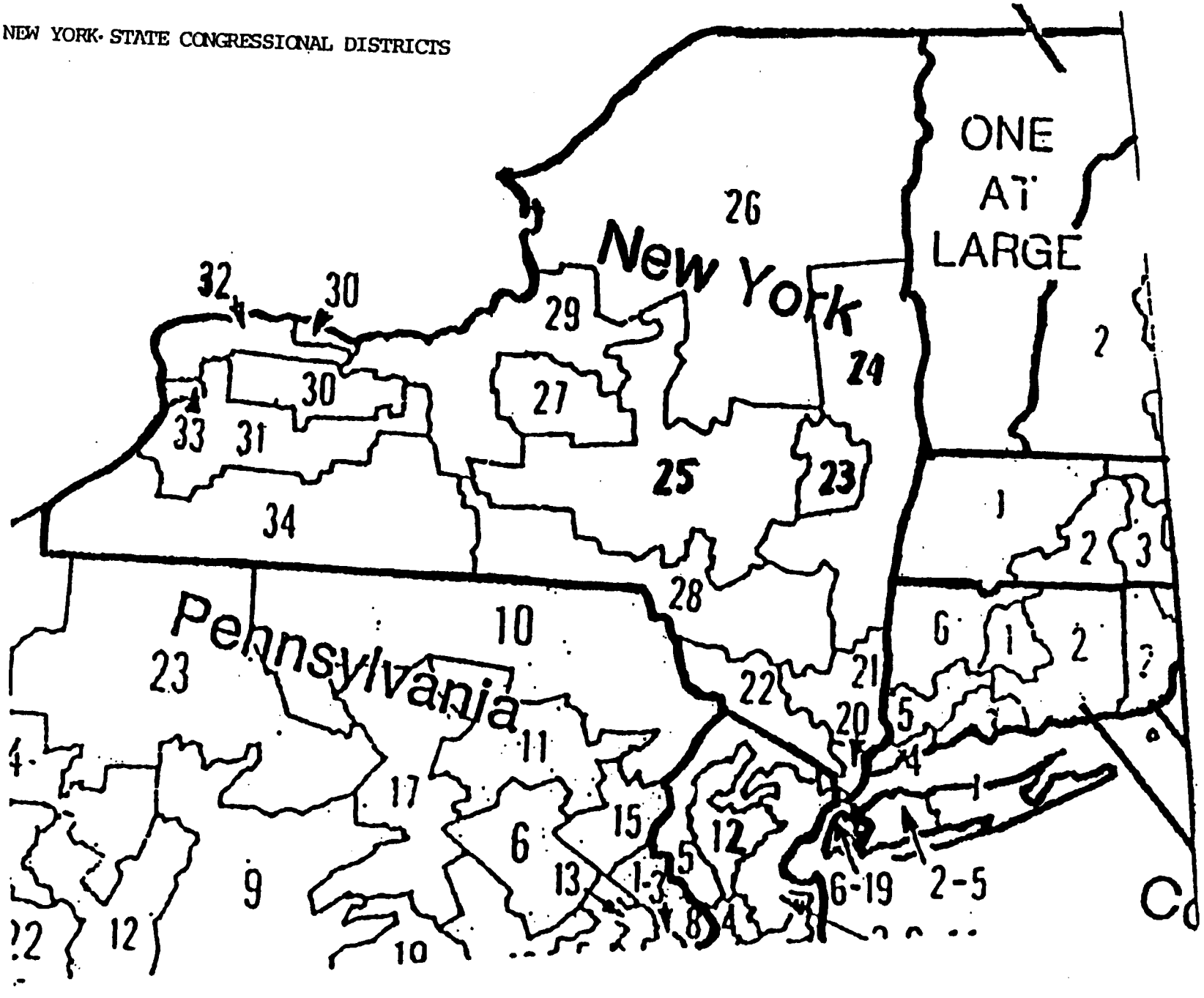
RUN DATE: 06/07/90
RUN TIME: 09:42:40

VERSION: 1

EPA ID NO.	SITE NAME STREET CITY COUNTY CODE AND NAME	STATE ZIP CONG DIST.	NFA. FLAG	OPRBLE UNIT	EVENT TYPE	ACTUAL START DATE	ACTUAL COMPL DATE	CURRENT EVENT LEAD
NYD062525043	FRANN PAPER CORP 450 ENDO BLVD GARDEN CITY 059 NASSAU	NY 11530		00	DS1 PA1	09/22/87	05/01/81 09/22/87	EPA (FUND) EPA (FUND)
NYD002225597	FRAZER & JONES 3000 MILTON AVE SOLVAY (TOWN) 067 ONONDAGA	NY 13209	NFA	00	DS1 PA1	02/25/87	05/01/79 03/05/87	EPA (FUND) STATE(FUND)
NYD980506943	FRESH KILLS LF BRKFLD & ARTHUR KILL STATEN ISLAND 085 RICHMOND	NY 10314		00	DS1 PA1		04/01/79 09/01/80	EPA (FUND) EPA (FUND)
NYD982271512	FRIENDSHIP DRIVE FRIENDSHIP DRIVE ROCKY POINT 103 SUFFOLK	NY 11778		00	RV1	03/26/86	02/28/89	EPA (FUND)
NYD002105823	FRONTIER BRONZE CORPORATION 4870 PACKARD ROAD NIAGARA FALLS 063 NIAGARA	NY 14304	NFA	00	DS1 PA1 PA2 SI1	08/01/85	06/01/85 08/01/85 05/24/90 09/09/85	EPA (FUND) EPA (FUND) STATE(FUND) EPA (FUND)
NYD000514133	FRONTIER CHEM WASTE TOWN LINE & BEACH RD PENDLETON 015 CHEMUNG	NY 14904		00	DS1 PA1		03/01/79 10/23/79	EPA (FUND) EPA (FUND)
NYD043815703	FRONTIER CHEM WASTE 4626 ROYAL AVE NIAGARA FALLS 063 NIAGARA	NY 14303		00	DS1 PA1 PA2 SI1	11/01/85	09/01/85 11/01/85 03/15/86 12/01/85	EPA (FUND) EPA (FUND) EPA (FUND) EPA (FUND)
NYD000512624	FT MILLER LF PATERSON RD FT MILLER 115 WASHINGTON	NY 12828		00	DS1 PA1		11/01/78 11/01/79	EPA (FUND) EPA (FUND)

REFERENCE NO. 23

NEW YORK STATE CONGRESSIONAL DISTRICTS



NEW YORK

Congressional District Identification—Continued

Table 1. MUNICIPALITIES—Continued

Municipality	County	Congressional district
[illegible]	NASSAU	3
[illegible]	CATTARAUGUS	34
[illegible]	MONROE	30
[illegible]	NASSAU	4
[illegible]	ONONDAGA	27
[illegible]	NASSAU	3
[illegible]	ST. LAWRENCE	26
[illegible]	GENESEE	30
[illegible]	ONONDAGA	27
[illegible]	ESSEX	26
[illegible]	ULSTER	28
[illegible]	CATTARAUGUS	34
[illegible]	JEFFERSON	26
[illegible]	CHEMUNG	34
[illegible]	CHEMUNG	34
[illegible]	WESTCHESTER	22
[illegible]	BROOME	28
[illegible]	SCHOHARIE	25
[illegible]	JEFFERSON	26
[illegible]	ONONDAGA	27
[illegible]	CAYUGA	29
[illegible]	MONROE	30
[illegible]	CHAUTAUQUA	34
[illegible]	NASSAU	4
[illegible]	ERIE	31
[illegible]	ONONDAGA	27
[illegible]	ALLEGANY	34
[illegible]	DUTCHESS	21
[illegible]	DELAWARE	25
[illegible]	NASSAU	1,5
[illegible]	ORANGE	22
[illegible]	NASSAU	3
[illegible]	MONTGOMERY	25
[illegible]	CHAUTAUQUA	34
[illegible]	WASHINGTON	24
[illegible]	WASHINGTON	24
[illegible]	MONTGOMERY	25
[illegible]	MONTGOMERY	25
[illegible]	HERKIMER	26
[illegible]	DELAWARE	25
[illegible]	CATTARAUGUS	34
[illegible]	CHAUTAUQUA	34
[illegible]	NASSAU	4,5
[illegible]	TOMPKINS	25
FULTON CITY	OSWEGO	29
[illegible]	MONTGOMERY	25
[illegible]	WYOMING	31
[illegible]	SARATOGA	24
* GARDEN CITY VILLAGE	NASSAU	5
[illegible]	LIVINGSTON	31
[illegible]	ONTARIO	31
[illegible]	SENECA	29
[illegible]	OTSEGO	25
[illegible]	NASSAU	3
[illegible]	JEFFERSON	26
[illegible]	WARREN	24
[illegible]	FULTON	26
[illegible]	ORANGE	22
[illegible]	ST. LAWRENCE	26
[illegible]	CATTARAUGUS	31
[illegible]	ERIE	31
[illegible]	ROCKLAND	22
[illegible]	WASHINGTON	24
[illegible]	NASSAU	8
[illegible]	NASSAU	8
[illegible]	NASSAU	3
[illegible]	CHENANGO	25
[illegible]	ALBANY	23
[illegible]	SUFFOLK	1
[illegible]	WASHINGTON	24
[illegible]	ORANGE	22
[illegible]	TOMPKINS	25
[illegible]	MONTGOMERY	25
[illegible]	ERIE	31
[illegible]	MADISON	27
[illegible]	ST. LAWRENCE	26
[illegible]	STEUBEN	34
[illegible]	DELAWARE	28
[illegible]	OSWEGO	29
[illegible]	ORANGE	22
HARRISON VILLAGE	WESTCHESTER	20
HARRISVILLE VILLAGE	LEWIS	26
HASTINGS-ON-HUDSON VILLAGE	WESTCHESTER	22
HAVERSTRAW VILLAGE	ROCKLAND	22
HEAD OF THE HARBOR VILLAGE	SUFFOLK	1
HEMPSTEAD VILLAGE	NASSAU	5
HERKIMER VILLAGE	HERKIMER	26
HERMON VILLAGE	ST. LAWRENCE	26
HERRINGS VILLAGE	JEFFERSON	26
HEUVELTON VILLAGE	ST. LAWRENCE	26
HEWLETT BAY PARK VILLAGE	NASSAU	5
HEWLETT HARBOR VILLAGE	NASSAU	5
HEWLETT NECK VILLAGE	NASSAU	5
HIGHLAND FALLS VILLAGE	ORANGE	21
HILLBURN VILLAGE	ROCKLAND	22
HILTON VILLAGE	MONROE	30
HOBART VILLAGE	DELAWARE	25
HOLCOMB VILLAGE	ONTARIO	30
HOLLAND PATENT VILLAGE	ONEIDA	25
HOLLEY VILLAGE	ORLEANS	32
HOMER VILLAGE	CORTLAND	25
HONEOYE FALLS VILLAGE	MONROE	30
HOOSICK FALLS VILLAGE	RENSSELAER	24
HORNELL CITY	STEUBEN	34
HORSEHEADS VILLAGE	CHEMUNG	34
HUDSON CITY	COLUMBIA	24
HUDSON FALLS VILLAGE	WASHINGTON	24
HUNTER VILLAGE	GREENE	24
HUNTINGTON BAY VILLAGE	SUFFOLK	3
ILION VILLAGE	HERKIMER	26
INTERLAKEN VILLAGE	SENECA	29
IRVINGTON VILLAGE	WESTCHESTER	22
ISLAND PARK VILLAGE	NASSAU	4
ITHACA CITY	TOMPKINS	28
JAMESTOWN CITY	CHAUTAUQUA	34
JEFFERSONVILLE VILLAGE	SULLIVAN	28
JOHNSON CITY VILLAGE	BROOME	28
JOHNSTOWN CITY	FULTON	26
JORDAN VILLAGE	ONONDAGA	27
KEESEVILLE VILLAGE	CLINTON	26
	ESSEX	26
KENMORE VILLAGE	ERIE	32
KENSINGTON VILLAGE	NASSAU	8
KINDERHOOK VILLAGE	COLUMBIA	24
KINGS POINT VILLAGE	NASSAU	8
KINGSTON CITY	ULSTER	28
KIRYAS JOEL VILLAGE	ORANGE	22
LACKAWANNA CITY	ERIE	33
LACONA VILLAGE	OSWEGO	29
LAKE GEORGE VILLAGE	WARREN	24
LAKE GROVE VILLAGE	SUFFOLK	1
LAKE PLACID VILLAGE	ESSEX	26
LAKE SUCCESS VILLAGE	NASSAU	3
LAKEWOOD VILLAGE	CHAUTAUQUA	34
LANCASTER VILLAGE	ERIE	33
LANSING VILLAGE	TOMPKINS	25
LARCHMONT VILLAGE	WESTCHESTER	20
LATTINGTOWN VILLAGE	NASSAU	3
LAUREL HOLLOW VILLAGE	NASSAU	3
LAURENS VILLAGE	OTSEGO	25
LAWRENCE VILLAGE	NASSAU	5
LEICESTER VILLAGE	LIVINGSTON	31
LE ROY VILLAGE	GENESEE	30
LEWISTON VILLAGE	NIAGARA	32
LIBERTY VILLAGE	SULLIVAN	28
LIMA VILLAGE	LIVINGSTON	30
LIMESTONE VILLAGE	CATTARAUGUS	34
LINDENHURST VILLAGE	SUFFOLK	2
LISLE VILLAGE	BROOME	28
LITTLE FALLS CITY	HERKIMER	26
LITTLE VALLEY VILLAGE	CATTARAUGUS	34
LIVERPOOL VILLAGE	ONONDAGA	27
LIVONIA VILLAGE	LIVINGSTON	31
LLOYD HARBOR VILLAGE	SUFFOLK	3
LOCKPORT CITY	NIAGARA	32
LODI VILLAGE	SENECA	29
LONG BEACH CITY	NASSAU	5
LOWVILLE VILLAGE	LEWIS	26
LYNBROOK VILLAGE	NASSAU	5
LYNDONVILLE VILLAGE	ORLEANS	32

* - Names Retraced w Ink for better clarity.

REFERENCE NO. 24

0008C
02-9004-32

NUS CORPORATION AND SUBSIDIARIES

TELECON NOTE

CONTROL NO.:

DATE: 5-4-90

TIME: 1430

DISTRIBUTION: FRANN PAPER CORP FILE 02-9004-32/NYV8I8

BETWEEN: CARLOS PARENTES

OF: NASSAU COUNTY HEALTH

PHONE: (516) 535-3690

AND: MATT MELORIM (NUS)

DISCUSSION:

MR. PARENTES CALLED ~~TO~~ BACK IN REGARDS OF DISCUSSION WITH M. MELORIM ON COMPLAINTS FILED AGAINST FRANN PAPER. MR. PARENTES INFORMED M. MELORIM THAT THERE WAS NO RECORDS OF COMPLAINTS FILED AGAINST FRANN PAPER.

ACTION ITEMS: