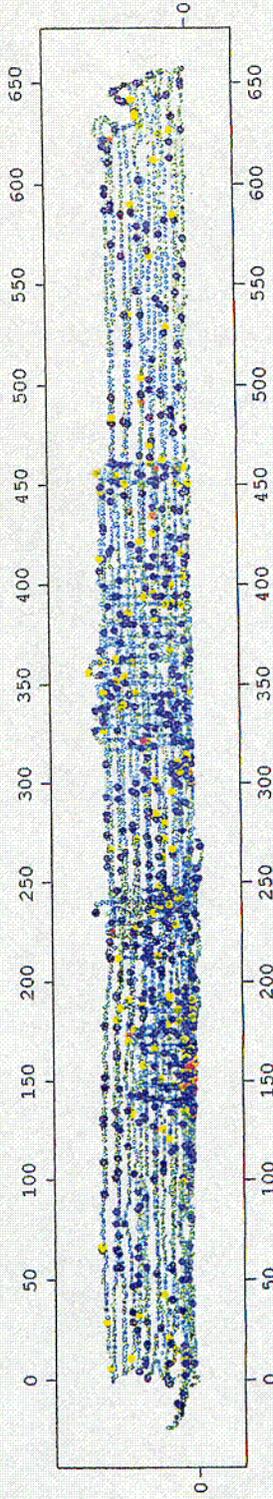


**Radiation survey NavTracMaps**

Threshold:  
> 10000



NYSDEC Radiation Survey  
Cantiague Park Golf Driving Range



Do Not Cite or Quote  
 Prepared by NYS DEC Radiation Section 11/19/97  
 WTV  
 NASSAU CO DRIVING RANGE  
 CANTIAGUE PARK

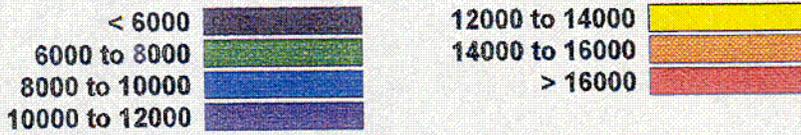
USRADS Analyze v1.49i Track Map

Site: GT01 (B)

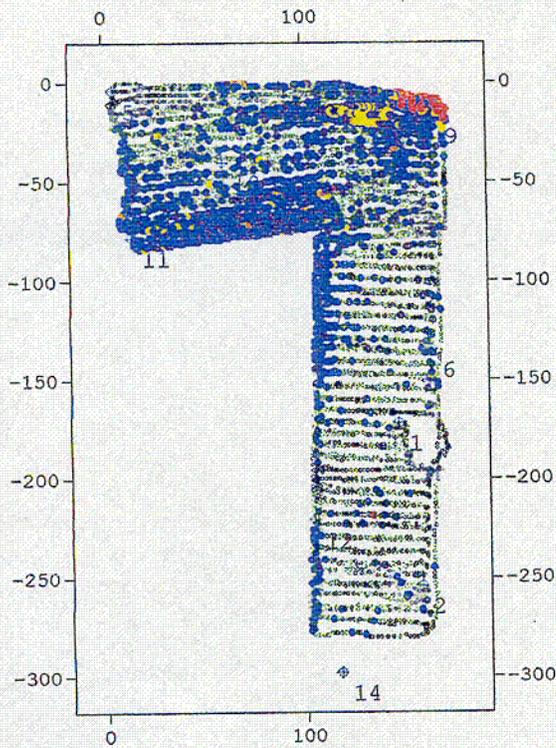
Signal: 2221/2x2/7 (cpm)

Time: 15:27:01 11/17/97

Threshold:  
> 8000 \*



NYSDEC Radiation Survey  
Gilbert Displays Property



Do NOT Cite or Quote  
Prepared by NYSDEC Radiation Section  
Gilbert Display properties

10184.2272

wtv  
11/19/97

1 of 1

COZ

USRADS Analyze v1.51b Track Map

Site: H\_ALL\_1 (N)

Signal: NaI (cpm)

Time:

Threshold:  
> 3669 ●

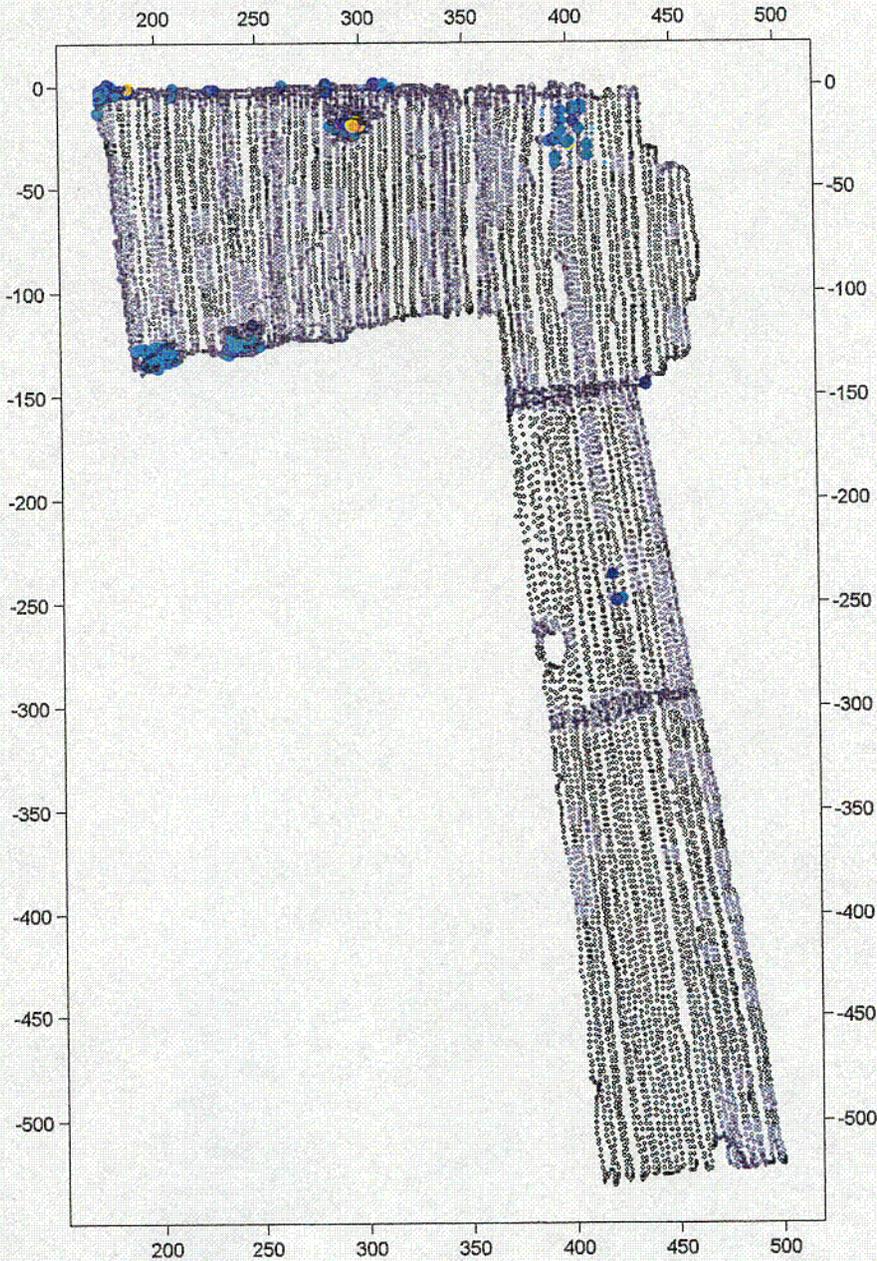


FIGURE 1 - Color NavTrac map for the GTEOSI site.

10269.5126

1 of 1

Chemrad Radiation Survey  
MDI Property

C03

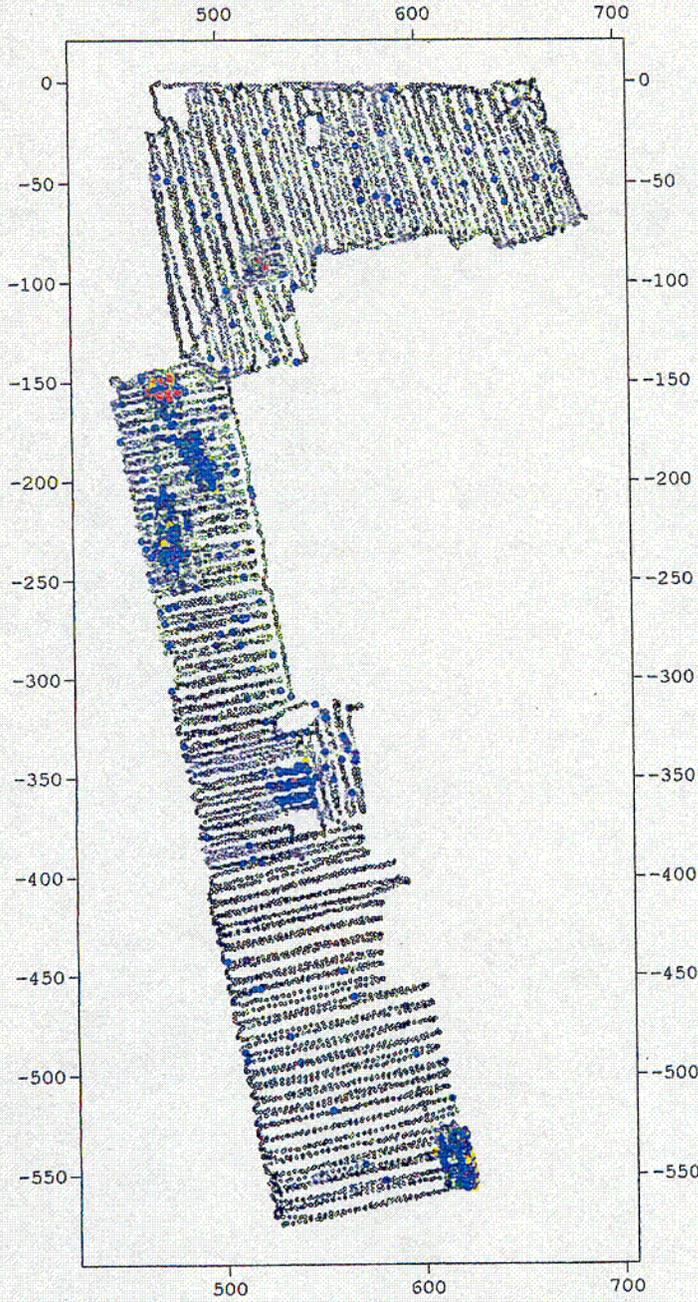
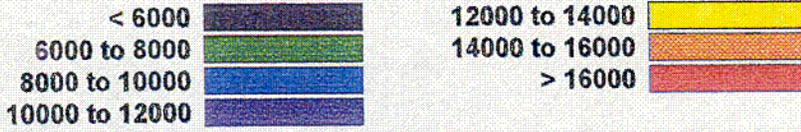
USRADS Analyze v1.49i Track Map

Site: GTAIR (B)

Signal: 2221/2x2/7 (cpm)

Time: 16:57:33 11/18/97

Threshold:  
> 8000 •



NYSDEC Radiation Surve  
Air Techniques Property

10184.2229

Do NOT Cite or Quote  
Prepared by NYSDEC Radiation Section 11/19/97  
Air Techniques WTV

1 of 1

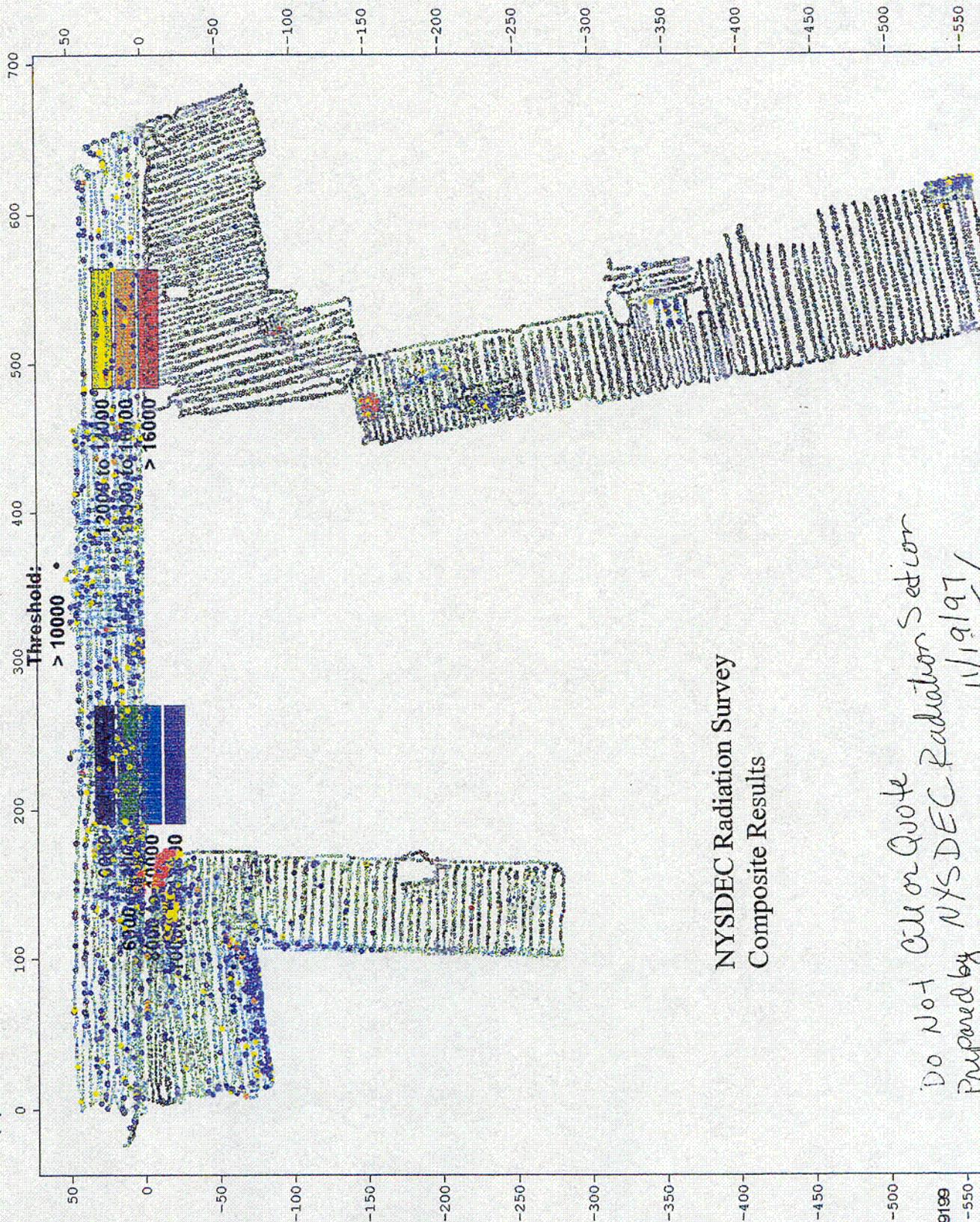
C04

USRADS Analyze v1.49i Track Map

Time: 13:12:19 11/19/97

Signal: 2221/2x217 (cpm)

Site: GTFINAL (A)



NYSDEC Radiation Survey  
Composite Results

Do Not Cut or Quote  
Prepared by NYSDEC Radiation Section  
11/19/97

C05

10184.9199

**Final Report - Radiological  
Characterization of the GTEOSI Site  
Hicksville, NY, February 1998**

**Radiological Characterization of the  
GTEOSI Site  
Hicksville, New York**

**FINAL REPORT**

**Prepared for O'Brien & Gere Engineers, Inc.  
5000 Brittonfield Parkway  
P.O. Box 4873  
Syracuse, New York 13221-4873**

**by  
CHEMRAD Tennessee Corporation  
733 Emory Valley Rd  
Oak Ridge, Tennessee 37830**

**February 9, 1998**

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## 1. INTRODUCTION

This report documents the + Advantage surveys conducted for the Radiological Survey of the GTEOSI Site in Hicksville, New York. The survey was conducted by Chemrad Tennessee Corporation under contract from O'Brien & Gere Engineers, Inc. The objective of the survey was to identify any gamma emitting radioactive process residuals that may still exist at the Magazine Distributors portion of the former Sylvania Electric Products Incorporated (Sylvania) facility. The site is located at 100 Cantiague Rock Rd. in Hicksville, New York.

The survey was required to evaluate the presence of process residuals, including uranium and thorium, reported to have been utilized by GTEOSI's (as successor in interest) predecessor companies. Uranium and thorium were recently identified by the NYSDEC and Nuclear Regulatory Commission (NRC) in exposed surface soils at the northeastern portion of the site at levels above background.

The primary historical manufacturing processes and disposal practices associated with the site processes during the period when nuclear fuel elements were manufactured included:

- Melting of enriched uranium-molybdenum and enriched uranium-aluminum in graphite and ceramic crucibles in vacuum furnaces,
- Sintering of uranium oxide-powdered stainless steel in hydrogen atmosphere sintering furnaces,
- Rolling of uranium-stainless steel billets in hydrogen atmosphere rolling furnaces,
- Iso-static pressing of uranium pellets-aluminum tubing involving argon gas,
- Chemical cleaning of all products involving hot and cold acid, caustics, solvents, water and anodizing solutions in cleaning tanks, hoods and degreasers.

Residuals may have been disposed in four on-site recharge basins, leaching pools, or cesspools (circa 1959).

This report describes the survey methods and presents the survey findings for the GTEOSI Site.

## **2. + ADVANTAGE SURVEY INSTRUMENT CONFIGURATION**

### **2.1 Description of the + Advantage System**

The + Advantage System for this survey incorporates four technologies:

- 1) radio frequency (RF) communications are utilized for system timing and data transfer,
- 2) Global Positioning Satellite (GPS) and Ultrasonic Ranging and Data System (USRADS) Technology is used to determine the detectors geographical position,
- 3) microcomputers are used to collect, display, store, and reduce the data,
- 4) Ludlum radiological survey ratemeters coupled to a 2" x 2" Sodium Iodide detector was used to measure the radiological activity in counts per minute (cpm) .

The + Advantage System automatically correlates survey instrument data with the geographical location of that data during walkover type surveys. The survey team consisted of a minimum of two personnel. One person, the "surveyor", performed the actual walkover wearing a backpack containing radiological instrumentation and electronic data gathering and positioning equipment (the "Data Pack"). A second person, the "operator", operated a mobile base station consisting of a host microcomputer and a Master Controller. The radiological and positional data collected by the Data Pack were transmitted to the base station Master Controller via a radio frequency (RF) link each second. The location and corresponding data value is then plotted on a grid map displayed on the host computer. The data are also posted at the top of the computer screen. The plotted position remains on the computer screen while the data collected are replaced each second to conserve screen space for plotting the track of the surveyor. At any time during the survey, the operator may look at the surveyor's track lines to determine if any areas have been missed. The surveyor may return to any missed areas and obtain the necessary coverage.

Once proper survey coverage has been accomplished, the operator runs the data reduction routines on the microcomputer. Several software routines enable the operator to review coverage and identify anomalies or other points of interest. This enabled monitoring of the position correlated data in near real time and the ability to immediately increase survey coverage in areas of elevated survey readings. The detector assembly used in the exterior area survey was a Bicon 2" x 2" Sodium Iodide detector coupled to a Ludlum Model 3 radiological survey ratemeter. the radiological activity was collected in raw data units of counts per minute (cpm).

The positioning system utilized for data collection was the USRADS 2200 Ultrasonic System. USRADS positions the detectors by utilizing an ultrasonic signal emitted from the surveyor's Data Pack at one second intervals. At the same instant, an RF transmission is broadcast from the surveyor's Data Pack to the Master Controller. Since RF transmissions travel at approximately the speed of light and are essentially instantaneous as compared to the speed of sound, the RF

transmission is used to mark the start of the ultrasonic signal. Each Stationary Receiver has an ultrasonic receiver and an RF transmitter. When the Stationary Receiver receives the ultrasonic pulse, it transmits an RF signal. This RF signal is received by the Master Controller and is used as a stop signal for that particular Stationary Receiver, thus establishing the time-of-flight of the ultrasonic signal from the Data Pack to that Stationary Receiver's location. The microcomputer can then determine the distance between the surveyor and each Stationary Receiver's location. Through this method, the surveyor's exact location is established each second throughout each walkover.

## **2.2 NavTrac™ Maps**

NavTrac Maps are graphic illustrations of survey coverage produced during the + Advantage surveys. The NavTrac Maps correlate the detector signals to the surveyor's location as the survey is occurring using changing colors to designate instrument reading levels. A symbol is displayed on the NavTrac Map when an established threshold value is reached. The color NavTrac Maps show the path taken by the surveyor as a series of small dots. For locations with data exceeding the selected threshold value, the surveyor's position is indicated by larger color-filled circles on the NavTrac Map.

The color NavTrac Maps are generated on the computer display in real-time during the conduct of each + Advantage walkover survey. The color Track Maps are valuable tools in identifying general trends and providing verification of findings while the survey is in progress. A copy of the Consolidated color NavTrac is included with this report. Quality controls such as thoroughness of coverage, clustering of color changes, and verification of suspect findings by adjacent tracks are performed visually by the computer operator during the conduct of the survey.

At the conclusion of the survey, the survey data are replayed to verify data integrity.

Color NavTrac nomenclature is as follows:

<u>Survey</u>	<u>Abbreviation</u>	<u>Meaning</u>
Radiological	"cpm" "NaI"	Counts Per Minute Sodium Iodide Probe

## **2.3 Radiological Survey Instrumentation**

### **2.3.1 Exterior Man-Carried Survey Instrumentation**

The walkover radiological characterization of the GTEOSI site was conducted with the following detector:

- 1) A Bicon 2" x 2" Sodium Iodide detector (NaI scintillation crystal) coupled to a Ludlum Model 3 radiological survey ratemeter for near-surface gamma radiation detection. The radiological activity was collected in raw data units of counts per minute (cpm). The probe was attached to a wheeled survey staff so to remain in close proximity to the ground surface and maintain a constant minimal height above the ground surface. The ratemeter was interfaced to the Data Pack and data accumulated for a one second interval, then transmitted at the same instant as the ultrasonic signal.

#### **2.4 Instrument Calibration, Background and Response Checks**

The radiation instrumentation was calibrated using a Cesium-137 NIST traceable source. Calibrations were coordinated by Chemrad and records are retained at Chemrad's Oak Ridge office. Each radiation survey instrument received a daily response check prior to use in the field and at the end of the survey day. This daily response check included battery checks, background checks and a source check. All daily response checks were performed at the GTEOSI Site using a Cs 137 source for the NaI probe. All instruments were within  $\pm 20\%$  for the duration of the survey.

### **3. RADIOLOGICAL SURVEY RESULTS**

#### **3.1 Explanation of Exterior Radiological Data**

The exterior radiological surveys were collected while traversing the area at a rate of approximately 2.0 feet per second on parallel transects. All of the side and rear parking lot of the business location at 100 Catiague Rock Road was surveyed with the minor exclusions of the area covered by the building, and an area where miscellaneous material was stored in one corner of the survey area.

Surveys were typically conducted in the following manner:

- 1) Chemrad survey teams arrived on site and performed the morning Health and Safety tailgate briefing;
- 2) The USRADS system was set up and tested ;
  - a.) The Stationary Receivers were deployed in a manner that adapts for obstacles that were site specific;
  - b.) Stationary Receiver coordinates on fixed reference points were entered into the host computer;
  - c.) Site setup was then performed to determine the location of Stationary Receivers with 60 second counts at each stationary receiver
- 3) Survey personnel set up the surveyors radiological instruments and data pack and performed background and source checks on the radiological detectors to ensure the instrument readings were within +/- 20% throughout the entire project ;
- 4) Survey Personnel analyzed the site to be surveyed for the best approach with the survey equipment;
- 5) The walkover survey was performed;
- 6) The data were monitored to determine the quality and completeness of the data,
- 7) After data collection was concluded, the data was copied onto a 3-1/2" floppy diskette for backup purposes and further processing at the Chemrad offices;
- 8) A NavTrac map of the area of coverage was reviewed for usage by the survey crew;

- 9) The survey crew then moved to a new area to be surveyed ;
- 10) Return to step 4 until the lunch break or the end of the day;
- 11) Equipment 'teardown' was performed;

The data were collected on two separate mobilizations with two different NaI probes and the data were normalized to correct for any offset between these two calibrated probes. The data plot identifies any areas that exhibit a generally acceptable rate of increase in count rates. This refers to readings that increase as a surveyor approaches a radioactive source and decrease as the surveyor passes the source. The readings are confirmed by a gradual increase/decrease of count rates on adjacent tracks. Suspect readings are normally indicated by individual spikes in the count rate data with no gradual increase/decrease with distance from the high reading nor confirmation on adjacent survey tracks. The Threshold level for the NavTrac map for the NaI results were determined by using the mean value of all the data points collected for this survey as the local area background and doubling this value ( $2 \times 1834.366 \text{ cpm} = 3669 \text{ cpm}$ ). Each successive color zone was increased by 500 cps which approximated the standard deviation for the entire data set (540.6086 cps). These statistics are located in Appendix B.

Figure 1 displays a color NavTrac map for the site. Nine small areas of slightly elevated readings corresponding to greater than twice the local area background values for the site were recorded. Five of these are located in the dirt along the back fence line of the property. Two of these correspond to the asphalt ramps constructed to allow the trucks access into the building. One other small area is located beside the building in the center of the parking lot with the ninth small area located in the corner of the "L" shape of the parking lot. No obvious source for these last two elevated readings was observed at the site.

One area located in the dirt of the back corner of the site exhibited values greater than three times the local area background value, and the highest reading recorded was on the pavement in the very back of the property and was more than four times the local area background value for the site.

Thirteen bias point readings were collected at these elevated areas. Bias points are static readings collected for 60 seconds at areas that showed elevated readings during the scanning surveys. The bias point readings are used to help confirm if the elevated reading collected during the scanning survey were real or a random spike that should be rejected. A data plot identifying the location of the bias point readings and the printouts of the bias point results are located in Appendix C. The points identified by Q01-Q04 are quality points which are part of CHEMRADs internal QC checks and are collected at the beginning and ending of the survey to ensure that the surveying

equipment operated properly during the entire survey. The bias points are labeled P01-P13. The bias point results indicate that only two areas approach values of three times the local area background. These are at bias points 02 and 03 in the vicinity of East 297', South (-) 19.5' and the second area at bias point 09 at approximately East 176.5 and South (-) 1.9'.

USRADS Analyze v1.51b Track Map

Site: H\_ALL\_1 (N)

Signal: NaI (cpm)

Time: 12:00:30 12/06/97

Threshold:  
> 3669 •

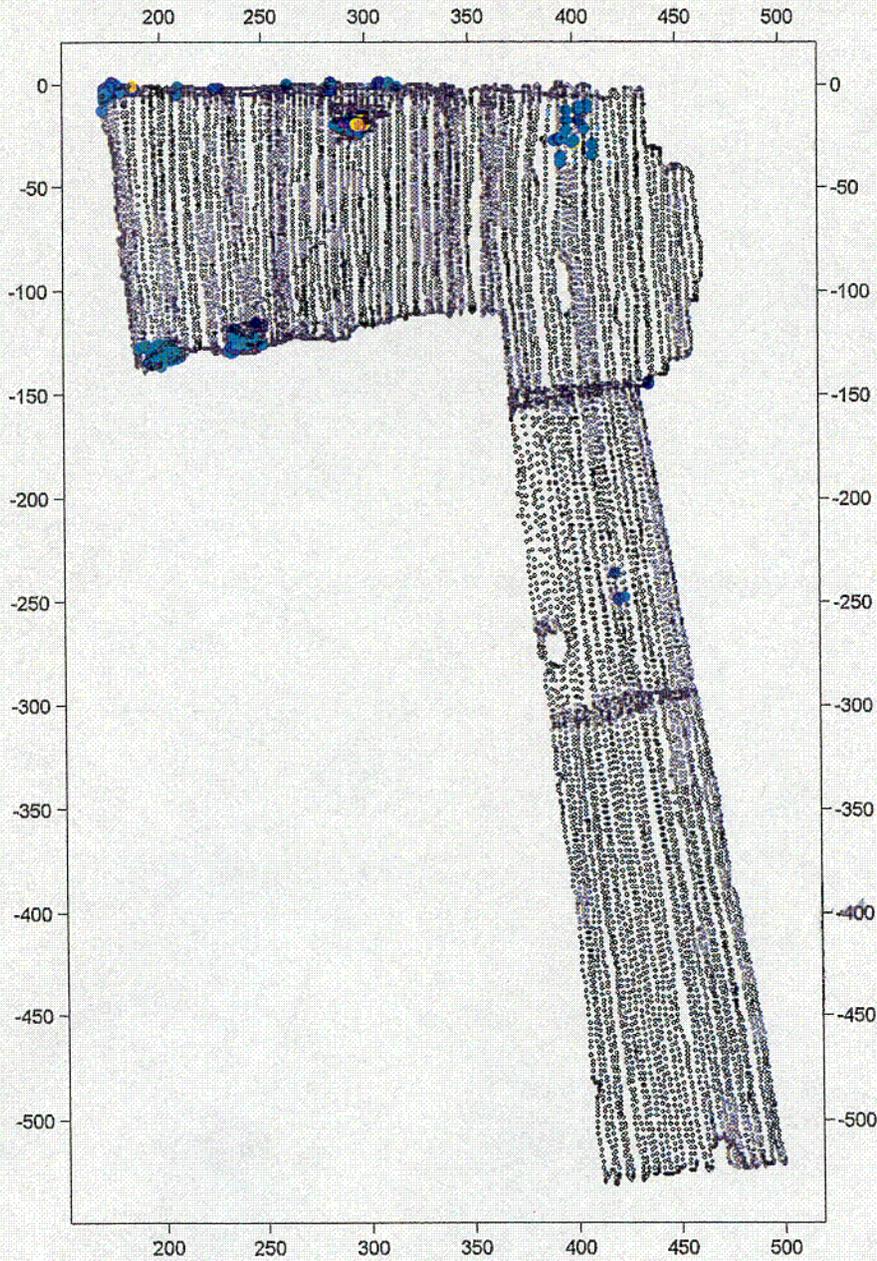


FIGURE 1 - Color NavTrac map for the GTEOSI site.

#### 4. CONCLUSION

The GTEOSI Site was extensively surveyed for potential Gamma radioactive contamination. Nine small areas of slightly elevated readings corresponding to approximately twice the local area background values for the site were recorded. One small area exhibited values greater than three times the local area background value, and the highest reading recorded during the survey was more than four times the local area background value for the site.

## APPENDIX A. QUALITY CONTROL

### A.1 General Considerations and Quality Objectives

Data quality objectives for the GTEOSI project were established to meet particular contractor requirements, in addition to Chemrad's own in-house requirements. Quality Control measures were implemented throughout the Chemrad survey process to prevent the introduction of unreliable data. Some particular organizational objectives of the Chemrad QA/QC program were designed to:

- 1) identify problems that effect quality of the Chemrad survey results;
- 2) prepare a systematic process to provide solutions for any problems relating to quality issues;
- 3) ensure implementation of solutions, with monitoring of problem resolution until corrected.

Some specific Quality Control measures that were taken throughout the GTEOSI survey included:

- 1) real-time, ongoing monitoring of the survey and the individual data channels by the computer operator to note as soon as possible any discrepancies in the data;
- 2) analysis of the survey data generated to determine any failure of the Chemrad survey routine;
- 3) review and analysis of the data after processed by Chemrad's staff.

#### A.1.1 Precision

According to Environmental Protection Agency guidelines, precision is defined as the measure of mutual agreement among individual measurements of the same property, usually under prescribed similar conditions. Precision is best described in terms of standard deviation. Various measures of precision exist depending upon the "prescribed similar circumstances."

The + Advantage operator observed the incoming data stream along with the graphic display of the NavTrac data during the conduct of the surveys. In this manner, data taken sequentially and on adjacent paths were readily compared to assure the mutual agreement among the individual measurements along a path, on adjacent paths, and in regions where clustering may be indicative of findings of interest.

### **A.1.2 Accuracy**

According to Environmental Protection Agency guidelines, accuracy is defined as the degree of agreement between the observed measurement value and the true value.

Positional accuracy was assured by use of the initial + Advantage System setup procedures that automatically align the USRADS transponders and provide continuous monitoring of the status of each transponder and the data pack. If any of these parameters degrade to the point where positional accuracy cannot be maintained, the computer program alerts the surveyors to the problem and data collection is halted until the problem is resolved and the data is received within acceptable parameters.'

### **A.1.3 Completeness**

According to Environmental Protection Agency guidelines, completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under correct normal conditions.

Chemrad attempted to meet or exceed all standards of completeness for its data collection. Data readings were recorded each second during the survey to provide a very complete characterization of the areas surveyed. Omissions of data occurred in areas where access was handicapped by geographic or physical obstacles (heavy undergrowth, large metallic debris piles, metal building structures, etc.) that had to be circumvented, or areas where it was deemed hazardous to the health and safety of the surveyor.

Chemrad determined completeness of data by requiring a prescribed survey methodology as determined in the Statement of Work, Chemrad's own internal requirements, and frequent discussions with the prime contractor. Data were monitored in the field and as it was being processed. Some specific actions taken by Chemrad included:

- 1) analysis of each grid site prior to each survey by a trained Field Team member to determine necessary and applicable survey procedures to ensure complete and thorough surveys of each site;
- 2) review of the survey tracks by the survey operator as they were generated during the survey;

#### **A.1.4 Representativeness**

According to Environmental Protection Agency guidelines, representativeness expresses the degree to which data represent the medium/environment where samples/measurements were obtained. Chemrad's methodology ensures representativeness by taking readings every second during the survey. When the color NavTracs are assembled, adjacent tracks produce readings to confirm the representativeness of the survey information.

#### **A.1.5 Comparability**

According to Environmental Protection Agency guidelines, comparability expresses the confidence with which one data set may be compared to another:

- 1) survey methodology was consistent throughout the GTEOSI survey;
- 2) data reduction software routines were consistent throughout the GTEOSI survey.

**APPENDIX B.**

**SURVEY SITE STATISTICS**

**Analysis Limits**

X 172.5575 to 500.1593  
Y -530.2255 to 1.555512

**Signal Statistics**

<b>Signal</b>	<b>Low</b>	<b>High</b>	<b>Mean</b>	<b>Std Dev</b>
Nal	660	7380	1834.366	540.6086

**APPENDIX C**  
**BIAS AND QUALITY POINT RESULTS**

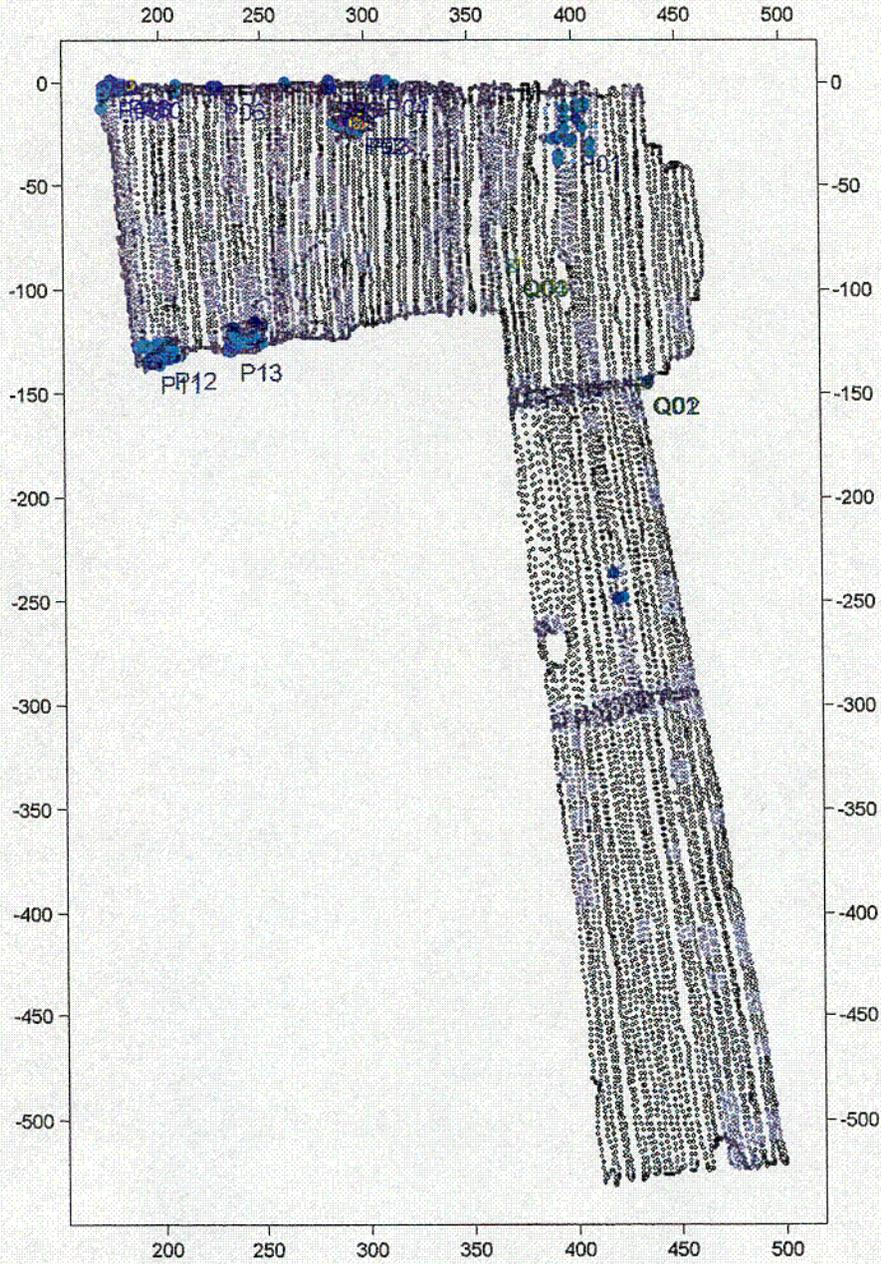
USRADS Analyze v1.51b Track Map

Site: H\_ALL\_1 (N)

Signal: NaI (cpm)

Time: 12:00:30 12/06/97

Threshold:  
> 3669 ●



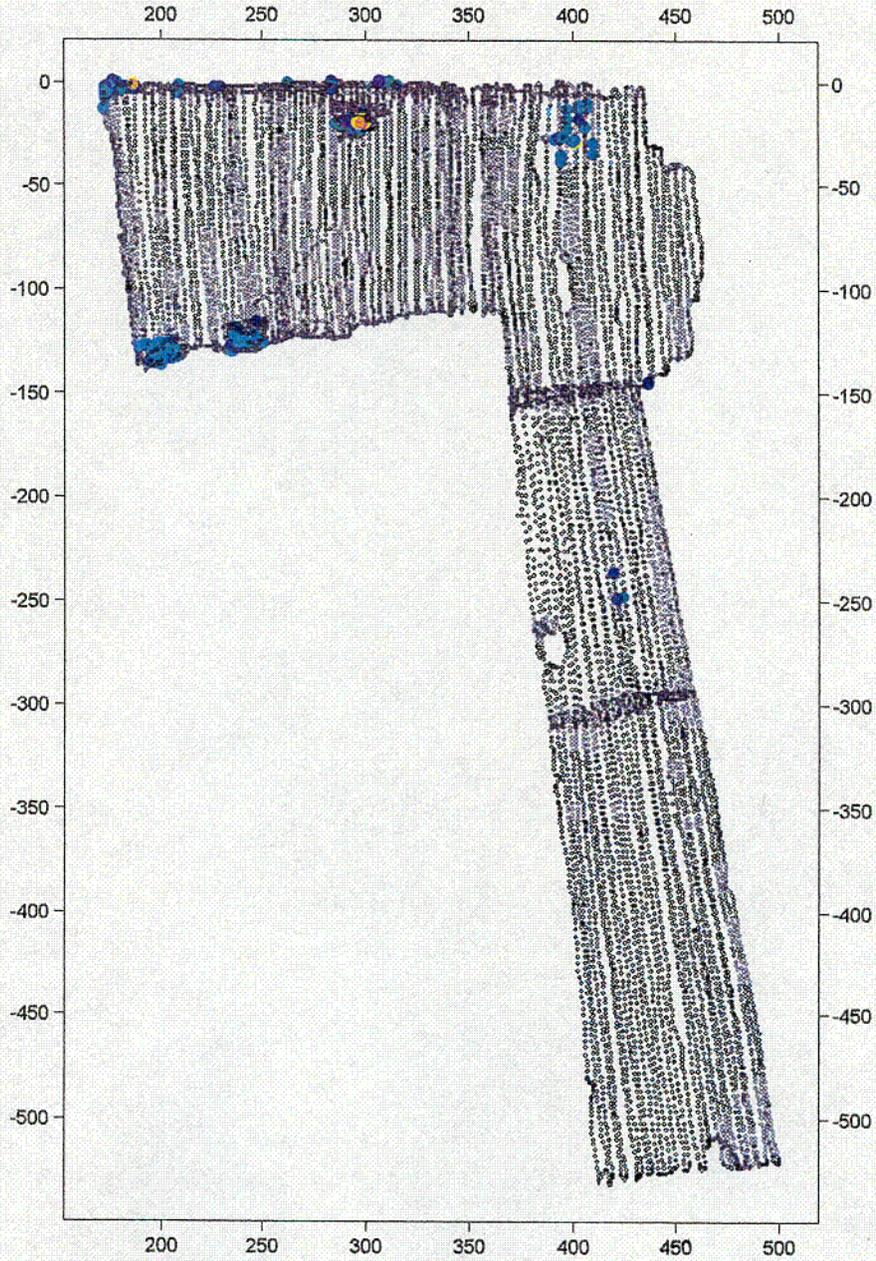
USRADS Analyze v1.51b Track Map

Site: H\_ALL\_1 (N)

Signal: NaI (cpm)

Time: 12:00:30 12/06/97

Threshold:  
> 3669 •



**Point: Q01**

**Type: QUALITY**

**Samples: 56 (56)**

**Point Statistics**

	<b>Low</b>	<b>High</b>	<b>Mean</b>	<b>Std Dev</b>
X	433.81135	434.18814	433.95651	0.090179875
Y	-145.24683	-144.5214	-144.78299	0.1491735
Nal	1200	2400	1833.2142	249.07976

**Point: Q02**

**Type: QUALITY**

**Samples: 56 (56)**

**Point Statistics**

	<b>Low</b>	<b>High</b>	<b>Mean</b>	<b>Std Dev</b>
X	434.06193	435.00877	434.71593	0.22265434
Y	-145.77334	-144.8909	-145.38334	0.24435208
Nal	1080	2700	1914.6428	344.44159

Point: P01

Type: BIAS

Samples: 56 (56)

Point Statistics

	Low	High	Mean	Std Dev
X	399.92628	400.21834	400.0745	0.081701847
Y	-28.864798	-28.306576	-28.55759	0.12513387
Nal	2820	4440	3560.3572	425.3782

Point: Q03

Type: QUALITY

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	371.50064	372.03852	371.71456	0.11913569
Y	-88.22839	-87.512605	-87.858008	0.14922769
Nal	1140	3180	2195	380.80237

Point: Q04

Type: QUALITY

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	371.1928	371.81528	371.42441	0.1371455
Y	-88.190496	-87.575168	-87.978542	0.10573922
Nal	1200	2880	2107	337.26398

Point: P02

Type: BIAS

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	295.82656	296.34339	296.04831	0.10044539
Y	-20.049095	-19.324187	-19.773796	0.15206294
Nal	3660	6960	5404	689.15472

Point: P03

Type: BIAS

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	297.85699	298.29885	298.10692	0.096253417
Y	-20.740618	-19.807644	-20.190093	0.30299335
Nal	3900	6660	5427	536.23773

Point: P04

Type: BIAS

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	306.03158	306.55211	306.41297	0.10372363
Y	-1.6399454	-1.0609256	-1.2961848	0.10280744
Nal	2880	5100	4104	457.76523

Point: P05

Type: BIAS

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	282.75557	283.16381	282.99297	0.10167798
Y	-2.7172894	-2.0960745	-2.4460282	0.1621714
Nal	2760	4860	3713	436.60321

Point: P06

Type: BIAS

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	226.95292	227.41745	227.1893	0.12721592
Y	-3.4549542	-2.8358024	-3.2016844	0.13677337
Nal	3180	5220	4281	490.53302

**Point: P07**

**Type: BIAS**

**Samples: 60 (60)**

**Point Statistics**

	<b>Low</b>	<b>High</b>	<b>Mean</b>	<b>Std Dev</b>
X	183.60612	184.63996	183.97783	0.192466
Y	-3.6247596	-2.7669921	-3.3987107	0.19471349
Nal	2760	4860	3637	431.26239

**Point: P08**

**Type: BIAS**

**Samples: 60 (60)**

**Point Statistics**

	<b>Low</b>	<b>High</b>	<b>Mean</b>	<b>Std Dev</b>
X	180.12602	182.11392	181.46054	0.58355938
Y	-2.4553656	-1.213872	-1.4867331	0.25790198
Nal	2400	4740	3693	557.66388

Point: P09

Type: BIAS

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	174.70683	177.84669	176.58519	1.0987593
Y	-2.4254622	-1.4736013	-1.9302857	0.28581792
Nal	3840	7380	5683	631.61115

Point: P10

Type: BIAS

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	186.56041	187.3444	186.97447	0.19034586
Y	-2.3170697	-1.7309409	-2.1268118	0.092679639
Nal	2700	4980	3795	520.09595

**Point: P11**

**Type: BIAS**

**Samples: 60 (60)**

**Point Statistics**

	<b>Low</b>	<b>High</b>	<b>Mean</b>	<b>Std Dev</b>
X	194.82196	196.73316	195.81174	0.40428337
Y	-135.84907	-134.3167	-134.7374	0.32304148
Nal	1860	3960	2943	485.73636

**Point: P12**

**Type: BIAS**

**Samples: 60 (60)**

**Point Statistics**

	<b>Low</b>	<b>High</b>	<b>Mean</b>	<b>Std Dev</b>
X	201.85048	203.01247	202.38278	0.26934052
Y	-133.62325	-132.25135	-132.92067	0.3391483
Nal	2280	4380	3429	488.16779

Point: P13

Type: BIAS

Samples: 60 (60)

Point Statistics

	Low	High	Mean	Std Dev
X	234.29355	234.9332	234.58082	0.15097549
Y	-129.26222	-128.66654	-129.01223	0.14584719
Nal	2100	4080	3282	418.65643



**EXHIBIT B**

**Historical Information**



GTE Operations Support Incorporated  
One Stamford Forum  
Stamford, CT 06904

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

July 11, 1996

Robert Stewart  
New York State Department of Environmental Conservation  
Building 40 SUNY  
Stony Brook, NY 11790-2356

Subject: Former Sylvania-Corning Nuclear Corporation Facility  
Cantiague Rock Road, Hicksville, NY  
Town of Oyster Bay  
Tax Map Nos. - Section No. 11/Block No, 499/  
Lots No. 94, 99 & 100

Dear Mr. Stewart:

R. K. Rusinko's 06/03/96 information request to Vincent Gallogly (the Rusinko letter) has been forwarded to me for reponse. Please direct all future correspondence and notices regarding this matter to my attention, with copies to A. E. Ludwig, at the above letterhead address.

Please be advised that GTE Operations Support Incorporated is the successor in interest in this matter to Sylvania Electric Products Incorporated, Sylvania-Corning Nuclear Corporation, GT&E Sylvania Incorporated, GTE Sylvania Incorporated, and GTE Products Corporation.

The corporate genealogy of the above entities is as follows: Sylvania Electric Products Incorporated (Sylvania), in existence since 1942, merged with General Telephone Corporation 03/05/59 to form General Telephone & Electronics Corporation (now GTE Corporation) with Sylvania becoming a wholly owned subsidiary.

In 03/57 the Sylvania-Corning Nuclear Corporation (Sylcor) was incorporated, owned in equal shares by Sylvania and Corning Glass Works (Corning). In 04/60 Sylvania bought out Corning's interests in Sylcor. Ownership of the subject facility was transferred to Sylvania and Sylcor was dissolved and liquidated into Sylvania 12/31/60.

July 11, 1996  
Robert Stewart  
Page 2

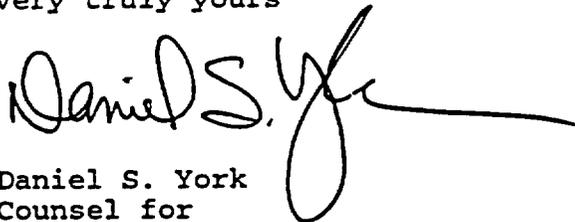
Sylvania changed its name to GT&E Sylvania Incorporated 12/23/70 and to GTE Sylvania Incorporated (GTE Sylvania) 01/01/71. On 01/09/80 GTE Sylvania became GTE Products Corporation.

On 01/29/93, the sale by a wholly-owned subsidiary of GTE Corporation of all of the stock of GTE Products Corporation to OSRAM Acquisition Corporation, a wholly-owned subsidiary of Siemens Corporation, was completed. In accordance with the terms of the Stock Purchase Agreement, certain preclosing matters were retained by the selling entity including those relating to the subject of the Rusinko letter. Responsibility for said matters has been assumed by GTE Operations Support Incorporated (GTEOSI).

Enclosed is GTEOSI's response to the numbered questions in the Rusinko letter.

Please forward to my attention copies of the information on the subject Facility referred to the Rusinko letter as in your possession, so that I may have a more complete file.

Very truly yours



Daniel S. York  
Counsel for  
GTE Operations Support Incorporated

DSY:amr  
Enclosures

cc: V. Gallogly  
A. E. Ludwig

GTE Operations Support Incorporated (GTEOSI)'s Response to  
New York State Department of Environmental Conservation (NYSDEC)'s  
Information Request of 06/03/96

**1. The former facility's name and address**

The addresses of Lots 94 (the southern parcel, henceforth PARCEL S) and Lots 99 and 100 (the northern parcels, henceforth PARCEL N) on the Town of Oyster Bay Plot Map Section 11 Block 499 enclosed with NYSDEC's 06/03/96 information request are shown variously in files available to GTEOSI as "Cantiague Road, Hicksville, NY" and "Cantiague Rock Road, Hicksville, NY."

The names of the former facility were determined by the occupancy of said Lots over time:

Sylvania Atomic Energy Division Facility.....circa 1952-1957  
Sylvania-Corning Nuclear Corporation Facility.....circa 1957-1960  
Sylvania Sylcor Division (aka Nuclear Division) Facility.circa 1960-1967  
Sylvania Parts Division Facility (PARCEL S only).....circa 1967-1970  
Sylvania Chemical & Metallurgical Division, High  
Temperature Composites Laboratory (PARCEL S only).....circa 1970

**2. The facility's property boundaries (tax map numbers and site location maps, if available), building locations, building plans, and any other aids in your possession that could be used in locating future sampling locations.**

Please refer to Enclosures A, B, C, D, and H hereto. Enclosures H1-H-9 are sections reproduced from larger aerial photographs taken by:

Lockwood Kessler & Bartlett  
One Aerial Way  
Syosset, NY 11791

AeroGraphic Corp.  
PO Box 248  
Bohemia, NY 11716

The full-sized photographs will be made available for examination upon request.

Please note that in the 10/06/59 Survey (Enclosure A) Lots 99 and 100 are shown as Lot 80 and Lot 94 is shown as Lot 79.

To GTEOSI's best knowledge and belief, manufacturing Buildings #1 and #2, as well as most of the smaller buildings on PARCEL N, were already on site when Sylvania first occupied the property in 1952. In 1957 Sylvania constructed on PARCEL S for the purpose of manufacturing atomic fuel elements for reactors used in research and electric power generation the building shown in files available to GTEOSI as both Building #4 (see the attachment to NYSDEC's 06/03/96 information request) and Building #9 (see Enclosure B-4). The small building to the west of Building 2 on PARCEL N sometimes referred to as "2 sty fr building" or "farmhouse", also appears in files available to GTEOSI as both Building #9 and Building #4.

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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**3. Please indicate the location of significant facility features including but not limited to the four site site sumps, any underground tanks, any leaching pools, other subsurface or surface features that received liquid wastes, nuclear material storage areas, solvent storage areas, waste storage areas, and any known waste burial locations.**

Please refer to Enclosures A, C, D, and H hereto.

The attachment to NYSDEC's 06/03/96 information request identifies four recharge basins as follows:

Basins #1 and #2: at the southeast corner of PARCEL N, along the lot line, Basin #1 being to the west of Basin #2;

Basin #3: in the northeast corner of PARCEL N to the east of Building #2; and,

Basin #4: on PARCEL S, to the west of Building #4.

For convenience this response will use the same Basin numbering.

Records available to GTEOSI show Basins #1 and #2 as being constructed 1956-1957.

Enclosures H-1 thru H-4 show the existence of Basins #1 and #2 circa 1957-1962, their elimination by 05/05/66, and the paving over of Basin #1 by 04/11/69. Enclosures H-1 thru H-9 show the continued existence of Basin #4 03/22/62 thru 03/21/86.

Re waste burial locations, please refer to the responses to Questions 7.a and 7.b.

**4. The date the facility commenced operation.**

The earliest Sylvania operating presence at this facility appears to be circa 1952 in the form of a pilot plant and metallurgical laboratory for atomic fuel elements. Records available to GTEOSI show that in 12/51 Sylvania contracted (Contract AT(30-1)-1293) with the Atomic Energy Commission for the production of nuclear fuel rods involving the use and occupancy of the land and buildings of Sylvania at Cantiague Road, Hicksville, NY. Please refer also to the response to Question 5 below.

**5. The date you acquired ownership or operation of the facility and from whom you acquired the facility.**

Absent a title search, records available to GTEOSI indicate the following:

On 02/28/52 Jefferson Standard Broadcasting Company conveyed to Sylvania property identified as Section 11 Block C, Lot 132, Hicksville, Town of Oyster Bay, NY. Lot 132 appears to have become Lot 732 then Lot 80 in Block 499. As indicated above, Lot 80 subsequently became Lots 99 and 100 (PARCEL N).

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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The property had been acquired 10/16/42 by Press Wireless Manufacturing, Inc. (Press), who on 06/24/48 conveyed it to Jefferson Standard Life Insurance Company (who apparently leased it back to Press). Jefferson Standard Life conveyed the property to Jefferson Standard Broadcasting 12/05/51. To GTEOSI's best knowledge and belief, Press used the property from at least 1942 to manufacture radio and electronic equipment and to carry out a pilot plant operation in the field of physical metallurgy. Press appears to have moved to Commack or Centereach in 1957. Most if not all of the remaining former Press acreage (100+ acres) surrounding the above property appears to have been subsequently acquired by Nassau County.

Building #3 and adjacent parking area had been occupied by the U.S. Department of Agriculture under an existing 08/01/48 lease which Sylvania terminated 01/05/53.

Files available to GTEOSI indicate that the Lot 94 (PARCEL S) was acquired 06/25/57 by Sylvania-Corning Nuclear Corporation (Sylcor) from the estate of George H. Hauser. Sylcor constructed Building #4 (also shown in our files as Building #9) on PARCEL S circa 1957-1958 (expanded by approximately 80% in 1959) for operation of a commercial nuclear fuel element manufacturing plant.

**6. The date that operations ceased.**

With the 06/10/66 sale to National Lead Industries, Inc., of Sylvania Sylcor/Nuclear Division's assets (equipment, tooling and licenses), the production of nuclear fuel elements and components at the facility ceased.

Sylvania operations on PARCEL S, non-nuclear in nature, ceased completely in 1972 with the sale of the southern parcel to Dewiant Corporation (see the response to Question 9 below). During the period 1967-1970, Sylvania used Building #4 and PARCEL S as a metallurgical laboratory for its Chemical & Metallurgical Division and as a machine shop to develop manufacturing equipment for its Parts Division. In addition to being used by Sylvania, all or part of Building #4 on PARCEL S was leased 01/15/68-07/31/70 to PRD Electronics, a subsidiary of Harris Intertype Corporation and manufacturer of microwave and electronic test equipment, and for some period starting in 1970, to Barson Composites Corporation, a metallurgical concern,

**7. Details on the plant closure. Please include a copy of any reports on this closure and the results of any samples collected for closure.**

In 1967, six buildings and their foundations located on PARCEL N were removed. Sylvania employees removed the above ground portions of these buildings. A contractor, one Fallacara, filled in Basin #1 and installed a parking lot along the lot line of PARCEL N and PARCEL S (see Enclosure H-4). Fallacara also performed the foundation removal of the above six buildings.

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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Also in 1967, on PARCEL S, Building #4 (aka #9) was decontaminated and all the Sylvania property and the former AEC facilities on Cantiague Road were certified by New York Department of Labor, Division of Industrial Hygiene, as fit for use as other than a radiation installation. However, the certification excluded Basin #4 on PARCEL S still being used by Sylvania.

Please refer to Enclosures E, F, and G herein.

**a. Were any of the demolished buildings buried at the facility?**

To GTEOSI's best knowledge and belief the foundations of three of the six demolished buildings may have been disposed of somewhere on the Sylvania property.

**b. Were any of the chemical or radioactive wastes from plant operations buried during closure?**

To GTEOSI's best knowledge and belief, the above three foundations exhibited low levels of radioactivity.

**c. Are there any subsurface features such as concrete slabs, underground tanks, etc., still present at the facility?**

GTEOSI is not aware of any such subsurface features.

**d. If any wastes had been buried at the site, please describe the nature of the wastes.**

Please refer to the response to Question 7b above.

**e. Is there any data that indicate whether any of the remaining features are radioactive?**

GTEOSI could find no such data.

**8. If you possess records from former owners/operators of the SCNC facility, please submit a copy of the portion of these records that would be useful in answering the questions in this information request.**

GTEOSI is not aware of any such records.

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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9. The identity of any owners or operators of the facility subsequent to you and the times during which each such entity owned or operated the facility.

In 1967, PARCEL N was transferred to Canway Company, Inc., under a 12/09/66 Agreement of Sale via Nanlyn Realty Corp.

Circa 1968-1972 PRD Electronics and Barson Composites (see response to Question 6. above), occupied all or parts of Building #4 on PARCEL S under leases from Sylvania. Sylvania sold PARCEL S in 1972 to Dewiant Corporation, predecessor in interest to AT Realty.

10. The identity of any owners or operators of the facility prior to you and the times during which each such entity owned or operated the facility.

Please refer to the responses to Questions 5 and 6 above.

11. List the products manufactured at the facility.

For the period 1952-1957 the Sylvania Atomic Energy Division operated under contract with U.S. Atomic Energy Commission (AEC) to perform research and to develop and construct engineering equipment and to operate a pilot plant in the field of physical metallurgy. For the period 1957-1966, the Sylvania-Corning Nuclear Corporation (Sylcor) and the Sylvania Sylcor/Nuclear Division used the facility for the manufacture of nuclear fuel elements for the AEC and for commercial nuclear reactors as well as high-temperature coatings and composite alloys for the space and aircraft industries.

See also the response to Question 6 above.

12. Identify each person who served as the manager of operations, or the functional equivalent of that title, and state the dates during which each such persons served in that capacity.

AEC (US Atomic Energy Commission) Operations  
Donald Boyd Metz (Deceased)...circa 1952-1960  
William R. Mandaro.....circa 1959-1966

Commercial Operations  
John C. Robinson.....circa 1957-1960  
Grant W. LaPier.....circa 1959-1966  
Herbert E. Watts (Deceased)...circa 1966-1967

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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13. Identify each person whose job duties included assisting with, overseeing, and/or coordinating waste disposal programs or operations. State the job title in which each person served in each such position, and describe with specificity the responsibilities of each such person with respect to waste disposal programs or operations.

To GTEOSI's best knowledge and belief, the managers identified in the response to Question 12 above had the responsibility for proper waste disposal. Interviews conducted by GTEOSI have identified the following persons with some knowledge of and familiarity with such waste disposal programs and operations:

E. Carr, Manager, Plant Engineering Department/Maintenance & Machine Shop  
Henry E. Grieb, Safety Engineer  
John A. Miele\*, Safety Engineer

\*It is GTEOSI's understanding that Miele left the employ of Sylvania circa 1966 and took a position as Associate Radiophysicist with the State of New York, Department of Labor, Division of Industrial Hygiene.

14. Name(s) and address(es) of individual(s) consulted or interviewed for purposes of preparing information on this facility.

Henry E. Grieb  
View Point Estates  
Cogan Station, PA 17728  
(717) 494-1817

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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15. For each product manufactured, answer the following questions:

- a. Type of process(es) used at this facility to manufacture this product.
- b. During what years was each process operated.
- c. Describe the byproduct(s) and wastes(s) from the manufacturing of this product.

Commercial Production Unit circa 1957-1966:

- (1) Melting of enriched uranium-molybdenum and enriched uranium-aluminum in graphite and ceramic crucibles in vacuum melting furnaces
- (2) Vacuum heat treating of uranium-molybdenum and depleted uranium in heat-treating furnaces
- (3) Sintering of uranium oxide-powdered stainless steel in hydrogen atmosphere sintering furnaces
- (4) Annealing of uranium oxide-stainless steel fuel plates and aluminum fuel plates in hydrogen atmosphere sintering furnace
- (5) Brazing of stainless steel and aluminum fuel elements in hydrogen atmosphere brazing furnaces
- (6) Rolling of uranium-stainless steel billets in hydrogen atmosphere rolling furnaces and rolling mills and uranium-aluminum fuel plates in air heating furnaces and hot and cold rolling mills
- (7) Swaging (shaping by hammering) of clad and unclad uranium rods and pins
- (8) Sodium loading of uranium rod-stainless steel tubing involving argon gas and special furnaces, sodium metal dispenser and vacuum pumps
- (9) Iso-Static pressing of uranium pellets-aluminum tubing involving argon gas in iso-static pressure vessel and compressor
- (10) Vacuum dessicators of uranium oxide-stainless steel powder compacts using vacuum and chemical dessicators and vacuum pumps
- (11) Chemical cleaning of all products involving hot and cold acid, caustic, solvents solutions and vapors, water and demineralized water and anodizing and alodizing solutions using cleaning tanks, hoods, exhaust blowers, and vapor degreaser
- (12) Machining of uranium bearing alloys and non uranium-bearing fuel element plates, pins, assembled fuel elements and fuel element components using milling machines, lathes and centerless grinders
- (13) Compacting of uranium oxide-powdered stainless steel in hydraulic presses and dies

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GTEOSI could not locate records describing at the same level of detail the processes circa 1952-1966 that produced the products sold to the Atomic Energy Commission (AEC). It also appears from the records available to GTEOSI that a small amount of beryllium processing and research was performed at this facility in the 1960s.

Wastes and by-products generated

According to correspondence circa 1952:

Nitric acid in the form of 50% solution of nitric with less than 1% hydrocarbons. Such waste was run thru a 300 gallon capacity neutralization chamber and the waste emptied into a leaching pool. The maximum quantity of acid disposed of at one time was to be 180 gallons, emptied over a two-hour period every four or six weeks under full operation.

According to correspondence circa 1959:

	Basin #1	Basin #2	Disp. Cpool <sup>1</sup>	Bld.2 Cpool <sup>2</sup>	Bld.9 Sump
Molybdenum Disulphide	X	X	-	-	-
Trisodium Phosphate	X				
Aluminum	X			X	X
Uranium	X	X	X	X	X
Nickel	X	X	X	X	
Copper		X			
Carbon		X			
Silicon		X			
Iron				X	X
Silver					X
Hydrochloric Acid	X	X			X
Hydrofluoric Acid	X				X
Nitric Acid	X	X			X
Sulphuric Acid	X				X
Caustic	X			X	X
Potassium Chromate					X
Sodium Sulphite					X

<sup>1</sup>Cesspool south of the Dispensary (believed to be near Bld.1)

<sup>2</sup>Cesspool east of Bld.2

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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According to correspondence circa 1960:

Depleted uranium sludge

Contaminated clothing, sweepings and dirt - accumulated behind the "farmhouse" (the original Building #9 on the PARCEL N) in barrels and disposed of.

Uranium alloy scrap chips from the milling processes. These scrap chips were disposed of by burning (an 01/05/60 memo indicates the accumulation of 186 drums of scrap chips before an effective approach to burning the chips was developed).

Wastewater dumped in Basins after treatment.

Cooling water, according to a 1952 memo, not open to the manufacturing process and unable to pick up contamination, was emptied directly into a leaching pool.

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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16. Identify and describe in detail which of the following wastes were generated at the facility:

- a. Contaminated soils or other spill cleanup materials
- b. Off-specification product
- c. Discarded process equipment
- \*d. Radioactive waste
- e. Sludges from cleanout of plant process drainage ditches
- f. Wastewater treatment sludge
- g. General plant trash (office, lunchroom, etc.)
- h. Used chemical containers
- i. Solvents
- j. Waste oils
- k. Filter cartridges
- \*l. Construction debris
- m. Combustion waste products
- n. Petroleum waste products
- o. Chemical waste of any kind
- p. Sludges of any kind
- q. (No NYSDEC entry for q.)
- \*r. Materials in drums
- s. Materials in containers
- t. Wastes containing metals
- u. Wastes containing liquids
- v. (No NYSDEC entry for v.)
- \*w. Other wastes of any kind
- x. Other byproducts of any kind
- y. Compressed gas cylinders
- z. Used containers for radioactive materials
- aa. Laboratory wastes

\*Other than information provided in the responses to Questions 7 and 15 above, records available to GTEOSI do not provide the information requested in items a. thru aa.

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17. For each waste identified in Question 16, provide the following details:

a. How was the waste managed?

b. For any wastes that were discharged at the facility, identify the location of the wastes, how they were discharged, any methods used to treat the wastes prior to disposal, and any methods used to prevent migration of the wastes (solidification, capping, encapsulation, containerization, clay liners, etc.).

c. Indicate the quantities per year generated.

d. For waste disposed of off-site, identify the facility that received the waste.

e. Identify whether the waste exhibited any of the following characteristics: ignitability (flash point less than 140 degrees F), corrosivity (pH <2 or pH >12.5), or reactivity.

f. Was the waste an oxidizer, pyrophoric, a compressed gas, water-reactive, explosive or radioactive?

g. Would the waste pose a health hazard by very short exposure?

h. Identify any past or present environmental or health impacts due to the waste (i.e., groundwater contamination, wildlife impacts, injuries to plant workers).

i. Identify the transporter(s) for the wastes removed from the facility.

j. Identify individuals who have knowledge of the facts relating to off-site disposal.

Other than information provided in the response to Questions 7 and 15 above, records available to GTEOSI do not provide the information requested in items a. thru j.

Documentation in the records available to GTEOSI indicate that circa 1958 plant rubbish was removed by a firm called Miravel & De Cabia.

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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**18. Identify any spills, accidents, significant vapor releases, or significant chemical or radiation exposures. Did any of these incidents result in personal injury or environmental impacts?**

Correspondence circa 1955 in files available to GTEOSI indicates:

(1) Wastewater overflowing leaching wells south of Building #1 appeared to have entered on to PARCEL S. GTEOSI believes Basins #1 and #2 were constructed to avoid a reoccurrence. In 1967, all the Sylvania property and the former AEC facilities on Cantiague Road were certified by New York Department of Labor, Division of Industrial Hygiene, as fit for non-radioactive use (Please refer to Enclosures E and F).

Correspondence circa 1960 in files available to GTEOSI indicates:

(1) Spontaneous combustion of depleted uranium sludge which had accumulated in a cylindrical grinder which was held in check by the automatic sprinkler system until extinguished by the plant safety department. Decontamination was undertaken.

(2) Basin level problems (not further defined) and "confusion" as to "permissible standards" (not further defined) resulting in State inspection and sampling of wastewater effluent and in submission of application for approval and permit for waste water disposal system.

(3) Fire in a ventilation system where metallic uranium particles ignited (no further information).

Records available to GTEOSI do not indicate any resulting personal injury or environmental impact.

**19. Identify any remedial measures undertaken at the facility to address any environmental contamination.**

In 1967 Building #4 on PARCEL S was decontaminated and the Sylvania property and former AEC facilities on Cantiague Road certified by New York Department of Labor, Division of Industrial Hygiene, as fit for use as other than a radiation installation (see Enclosures E and F).

**20. Provide a copy of any environmental investigation report, remedial report, work plan, sampling data, radiological study, groundwater sampling results, and health studies.**

GTEOSI has not yet found the records of the decontamination mentioned in the response to Question 19 above.

A recap from correspondence in the files available to GTEOSI of sampling data constitutes Enclosure I.

GTE Operations Support Incorporated (GTEOSI)'s Response to  
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**21. Identify regulatory bodies that regulated this facility and/or have inspected this facility in the past:**

Atomic Energy Commission

New York Department of Labor, Division of Industrial Hygiene

New York State Department of Environmental Conservation

**What licenses or permits were issued for this facility?**

U.S. Atomic Energy Commission

Access Permit #1373-1

Special Nuclear Materials License SNM-82

Special Nuclear Materials Lease Agreement SNM 161

New York State

Radioactive Materials License #325-0083

Radioactive Materials Registration #R0083

Source Material License

Association of American Railroads

Bureau of Explosives Permits: 871, 955, 966, 972

**22. Please identify all areas of the facility where degreasing using PCE was performed. Include details on the degreasing operations and list other contaminants that may have been present in the spent solvents for each area identified.**

GTEOSI believes perchlorethylene may have been used in or near Building #1 on PARCEL N.

Please refer to the response to Question 15 above which describes the Commercial Products manufacturing process on PARCEL S. No similar description could be found for the manufacturing processes on PARCEL N.

**23. Identify the location of leaching fields, leaching pits, industrial leaching pools, cesspools, and septic systems. Please identify any drains that were connected to these features.**

Please refer to Enclosures A, C, D, and H hereto.

**If they received radioactive wastes, were the pipes cleaned at closure?**

To the best of GTEOSI's knowledge and belief, they were cleaned.

GTE Operations Support Incorporated (GTEOSI)'s Response to  
New York State Department of Environmental Conservation (NYSDEC)'s  
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**24. Identify piping and drains that were connected to the former lagoons. If they received radioactive wastes, were the pipes cleaned at closure?**

Please refer to GTEOSI's above response to Question 23.

**25. Was there a laboratory present at the facility? If so, please indicate its location.**

Please refer to Enclosures B-1 and B-4 which shows a process control laboratory, an engineering laboratory and chemical analysis unit. In addition correspondence circa 1960 speaks of expansion of a beryllium laboratory.

**26. Was any portion of the facility used for research? If so, please provide details on any experiments and the wastes generated.**

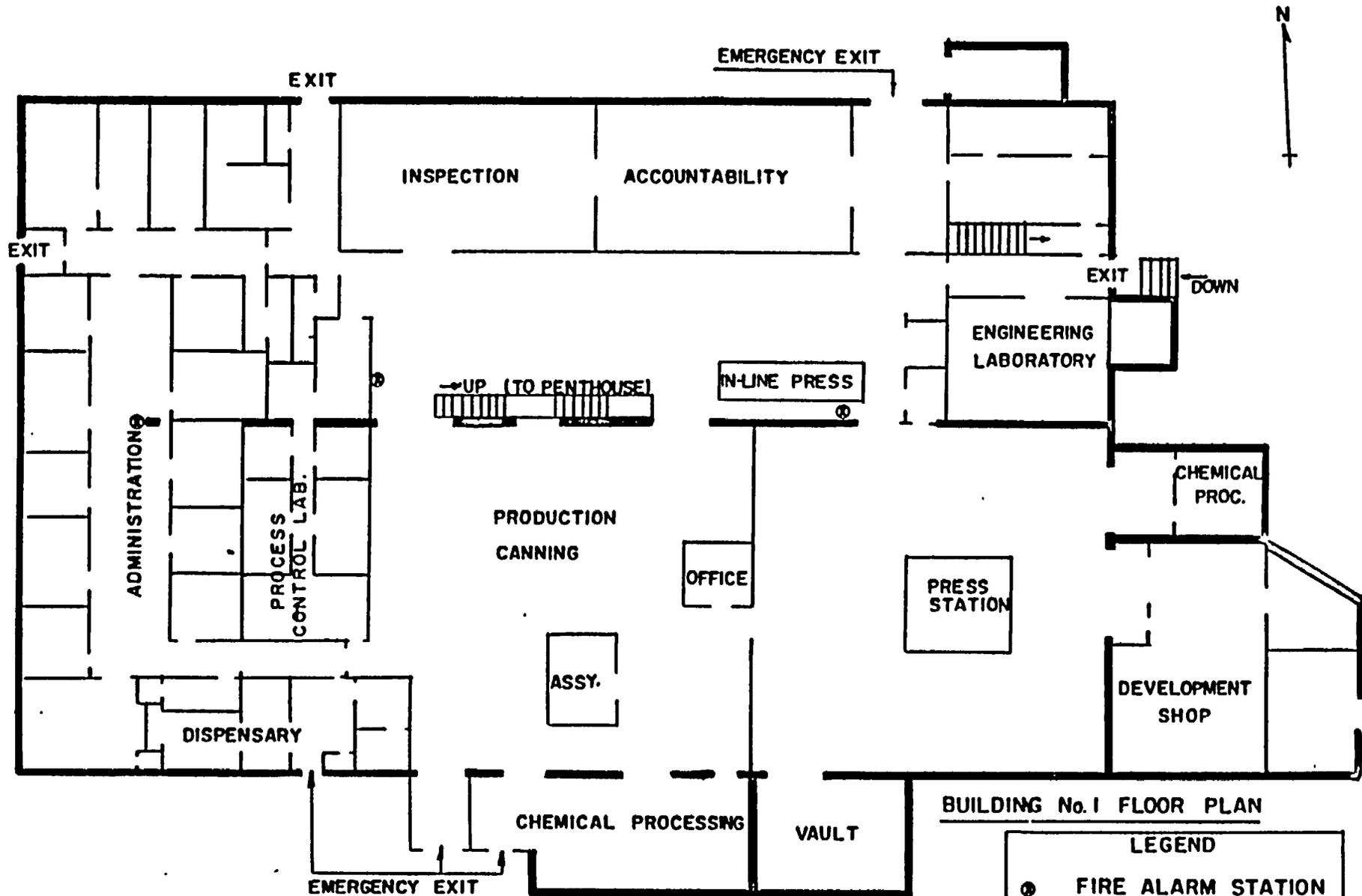
To GTEOSI's best knowledge and belief metallurgical and other nuclear-related research was conducted at the facility 1952-1966 under contract with the AEC. GTEOSI is as yet unable to find records or material relating to the details of such research or the wastes generated therefrom.

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OVERSIZED DRAWING OR  
FIGURE,  
THAT CAN BE VIEWED AT THE  
RECORD TITLED:  
ENCLOSURE A,  
"SURVEY FOR CERTIFICATE OF  
OCCUPANCY PROPERTY ON  
CANTIAGUE ROCK RD,  
HICKSVILLE, L.I., NY"**

**WITHIN THIS PACKAGE**

**NOTE:** Because of these page's large file size, it may be more convenient to copy the file to a local drive and use the Imaging (Wang) viewer, which can be accessed from the Programs/Accessories menu.

**D-01**

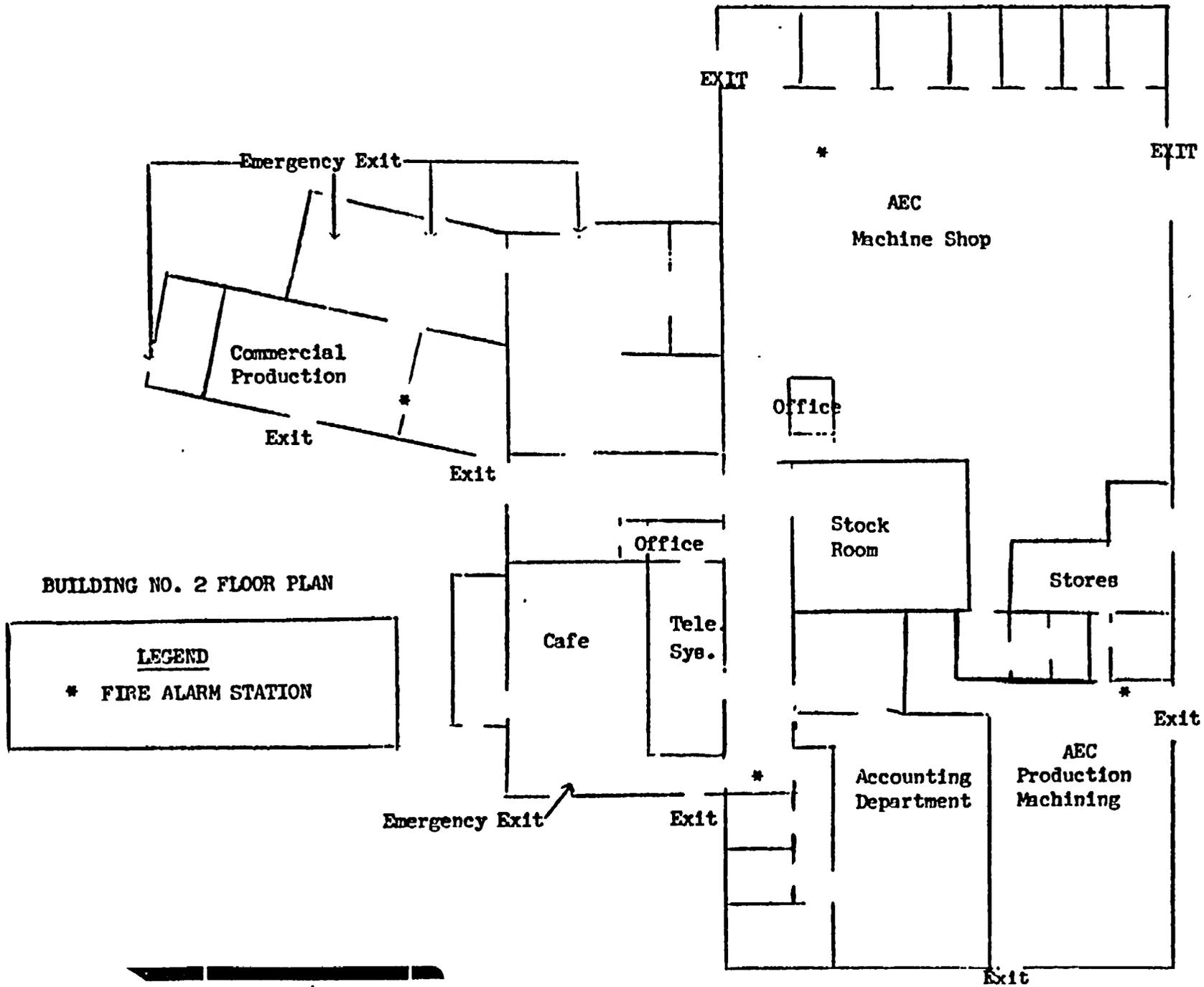


BUILDING No. 1 FLOOR PLAN

**LEGEND**

● FIRE ALARM STATION

MANUFACTURING  
HICKSVILLE, LONG ISLAND



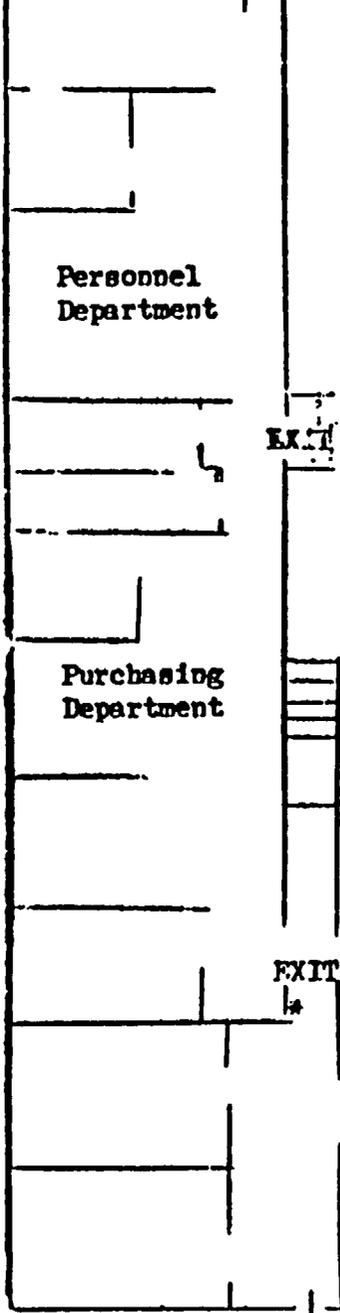
BUILDING NO. 2 FLOOR PLAN

LEGEND  
 \* FIRE ALARM STATION



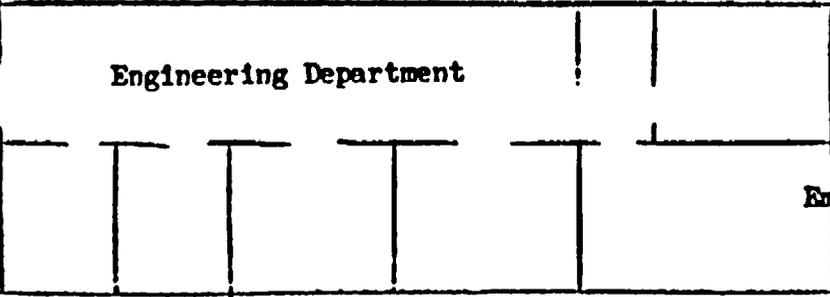
Figure B-2

Emergency Exit

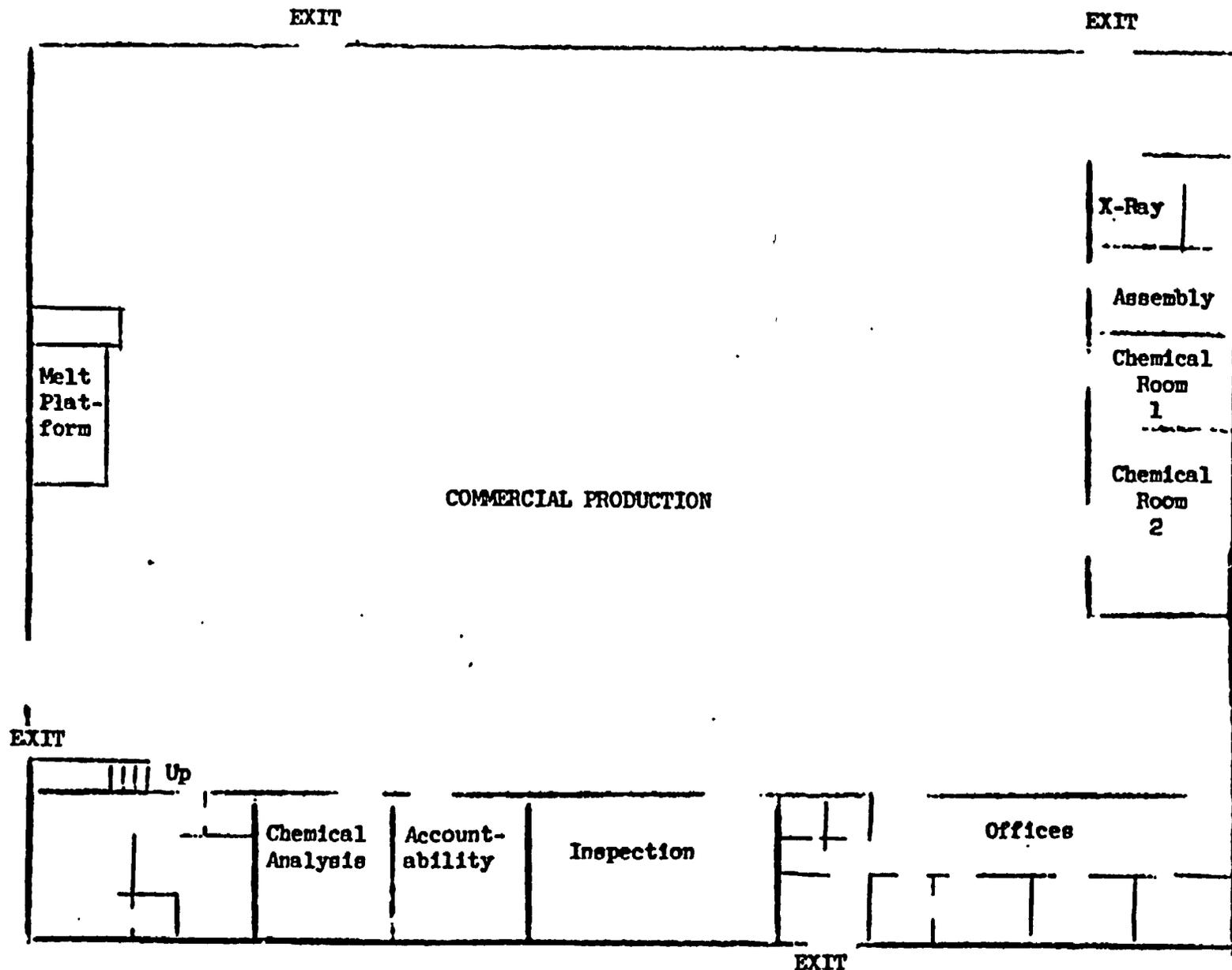


Building No. 3 Floor Plan

LEGEND  
\* FIRE ALARM STATION



Emergency Exit



Building No. 9 Floor Plan

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FIGURE,  
THAT CAN BE VIEWED AT THE  
RECORD TITLED:  
ENCLOSURE D,  
"SYLVANIA ELECTRIC PRODUCTS,  
INC,  
METALLURGICAL LABORATORY  
CANTIAGUE RD, HICKSVILLE, L.I.,  
NY"**

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**D-02**

**THIS PAGE IS AN  
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FIGURE,**

**THAT CAN BE VIEWED AT THE  
RECORD TITLED:**

**DRAWING NO. E-4, ENCLOSURE C,  
"PLOT PLAN, LOCATION OF SEWAGE  
DISPOSAL,  
SYLVANIA ELECTRIC PRODUCTS,  
INC,  
METALLURGICAL LABORATORY  
CANTIAGUE RD, HICKSVILLE, L.I.,  
NY"**

**WITHIN THIS PACKAGE**

**NOTE:** Because of these page's large file size, it may be more convenient to copy the file to a local drive and use the Imaging (Wang) viewer, which can be accessed from the Programs/Accessories menu.

**D-03**

STATE OF NEW YORK  
DEPARTMENT OF LABOR  
DIVISION OF INDUSTRIAL HYGIENE

*cc: Mr. H. 2/8/66*

FEB 8 1966

80 CENTRE STREET  
NEW YORK, N. Y. 10013

February 1, 1966

ADDRESS REPLY TO:

~~Mr. Harry Grieb~~  
Sylcor Division  
Sylvania Electric Products, Inc.  
Cantiague Road  
Hicksville, Long Island, N.Y.

Dear Mr. Grieb:

In accordance with the statements contained in your letter of January 27, 1966, the Certificate of Decontamination by Mr. F. J. Bradley of Isotopes, Inc., dated January 3, 1966, and the subsequent findings of Messrs. K. E. Herde, Chief of Radiation, and Health Branch, Safety and Technical Service Division, Savannah River Operations Office of the Atomic Energy Commission, Aiken, South Carolina, J. A. Miele, Associate Radiophysicist, and R. Blais, Associate Radiochemist, of my staff, the former AEC Facilities at the above address is hereby declared fit for use as other than a radiation installation and you are hereby deemed to have complied with Industrial Code Rule 38-29.

However, any sumps on the property which are still used by your Commercial Facilities to receive contaminated liquids such as Sump No. 1 as noted by Mr. Miele during his investigation on January 4, 1966, are excluded from this declaration. Therefore, your company shall continue to perform the required surveys to insure compliance with Industrial Code Rule 38-23 and all other applicable provisions of the Code.

Very truly yours,

*Morris Kleinfeld*

Morris Kleinfeld, M.D.  
Director

JM/v

cc: Mr. K. E. Herde  
S. Davies



2-1  
9/6/67

STATE OF NEW YORK  
DEPARTMENT OF LABOR  
DIVISION OF INDUSTRIAL HYGIENE

80 CENTRE STREET  
NEW YORK, N.Y. 10013  
September 19, 1967

ADDRESS REPLY TO:

Mr. Herbert Watts  
Parts Division  
Sylvania Electric Products Inc.  
Hicksville, N.Y.

REFER TO:  
My letters of Feb. 17, 28  
and May 3, 1967

Dear Mr. Watts:

Based on the analysis of soil samples by Atcor, Inc. collected from the sump east of your building #4, and corroborative analyses of the same and additional soil samples by our Radiochemical Lab, you have been found to be in compliance with New York State Industrial Code Rule 38-29 and your property on Cantiague Road in Hicksville is hereby deemed fit for non-radioactive use.

This letter also serves to notify you of the cancellation of your New York State Radioactive Materials License #325-0083 and your registration #R0033 as per your previous request.

I wish to again remind you of the requirements of Industrial Code Rule 38-36.2 regarding the preservation of pertinent records. These records may only be disposed of through transfer to the Industrial Commissioner.

Very truly yours,

Morris Kleinfeld, M.D.  
Director

*Robert E. Swencicki, M.D.*

By: Robert E. Swencicki, M.D.  
Chief, Radiological Health Unit

cc: S. Davies  
W. Grant

# SYLVANIA

ANIA ELECTRIC PRODUCTS INC. Subsidiary of GENERAL TELEPHONE & ELECTRONICS CORPORATION



103-1  
INTER-OFFICE CORRESPONDENCE  
MAG

SUBJECT Decontamination at Hicksville  
DATE October 24, 1967  
TO Bruce Carswell

*Sylcor Division*  
Cantiague Road  
Hicksville, N. Y. 11802

Building #4, used for the fabrication of nuclear fuel, had to be decontaminated to the satisfaction of the New York State Department of Labor. A letter certifying its clearance for non-nuclear work had to be obtained as soon as possible.

### Interior of Building

Of the three bidders, Atcor was awarded the cleaning and waste removal contract. All of this work was completed satisfactorily and a letter from New York State was received on May 3, 1967 which clears the building interior.

In order to accomplish this, it was necessary that all wall surfaces, ceilings and floor area be painted. This work was done by two contractors and Sylvania employees:

Walls and office space	Kroo Paint Contractor
Ceilings	T. C. Fitzgerald
Floors	Sylvania employees

### Outside Grounds

Six buildings and foundations had to be removed from what is now the parking lot area. Three of these had varying amounts of radioactive material. It was considered most practical to have the contractor that was awarded the parking lot contract also clear the foundations. Since there was some risk involved in dumping this rubble locally, it was decided that it be disposed of on the Sylvania property.

There was no longer a need for a recharge basin of the original size on the property. Letters from New York State Department of Labor reported high readings at the north end of the basin. A letter to the New York State Department of Labor explains the details of how this decontamination was handled in connection with the reduction in the size of the recharge basin. When the filled area was settled and rolled, it seemed particularly advantageous to extend the parking lot in this direction. Just as soon as the black topping was completed, a final letter, dated September 19, 1967, was received clearing the entire site.

Bruce Carswell

-2-

October 24, 1967

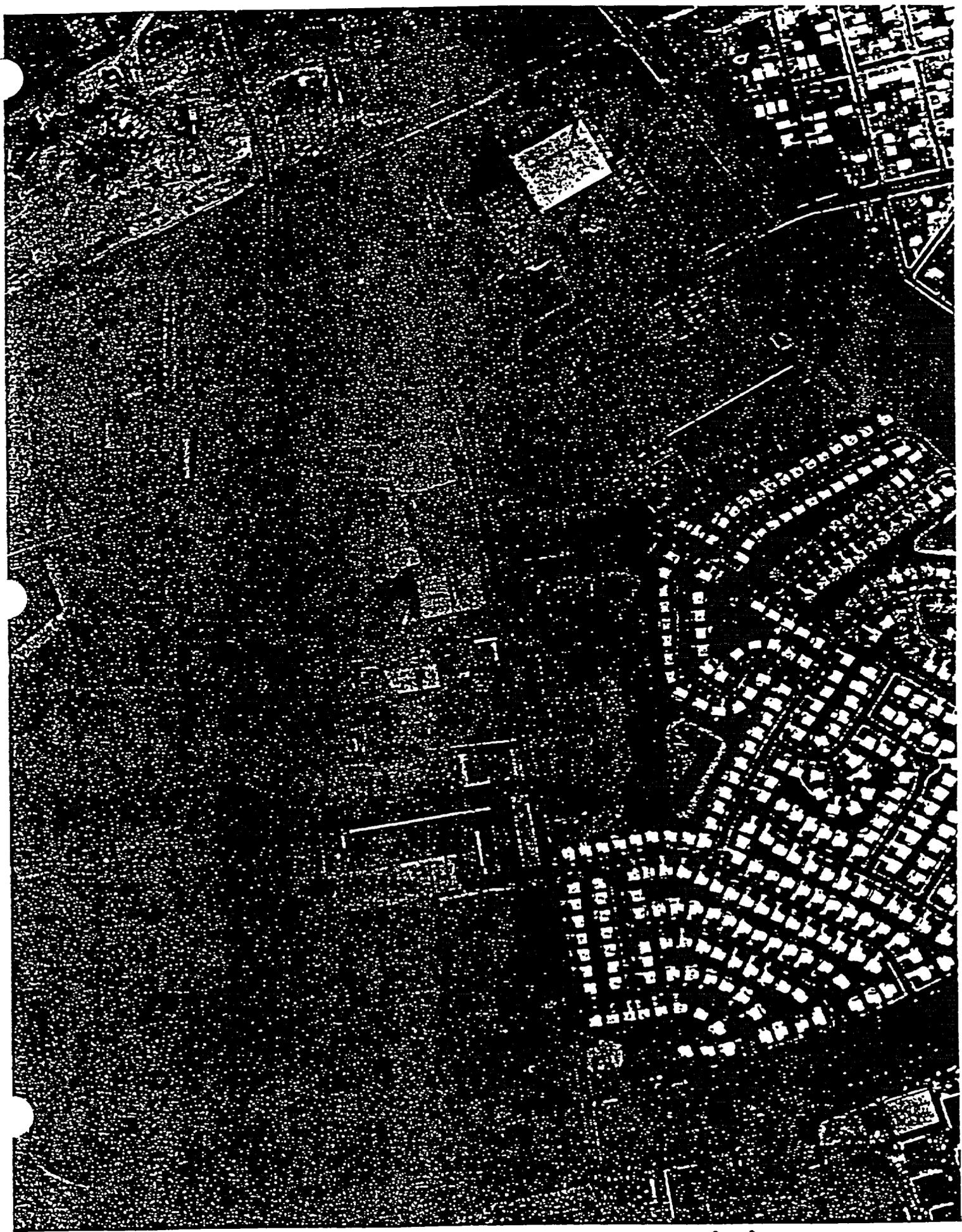
Mr. Fallacara was awarded the contract for the parking lot, foundation removal and filling of the recharge basin. Sylvania employees removed the buildings above the ground.

Original letters, contracts and purchase orders can be found in my file titled decontamination, and held by Angus MacIntyre at Towanda.

*Herbert E. Watts*  
Herbert E. Watts

HEW:fcg

cc: A. MacIntyre - Towanda  
H. Grieb - Warren  
F. Thomas - Warren

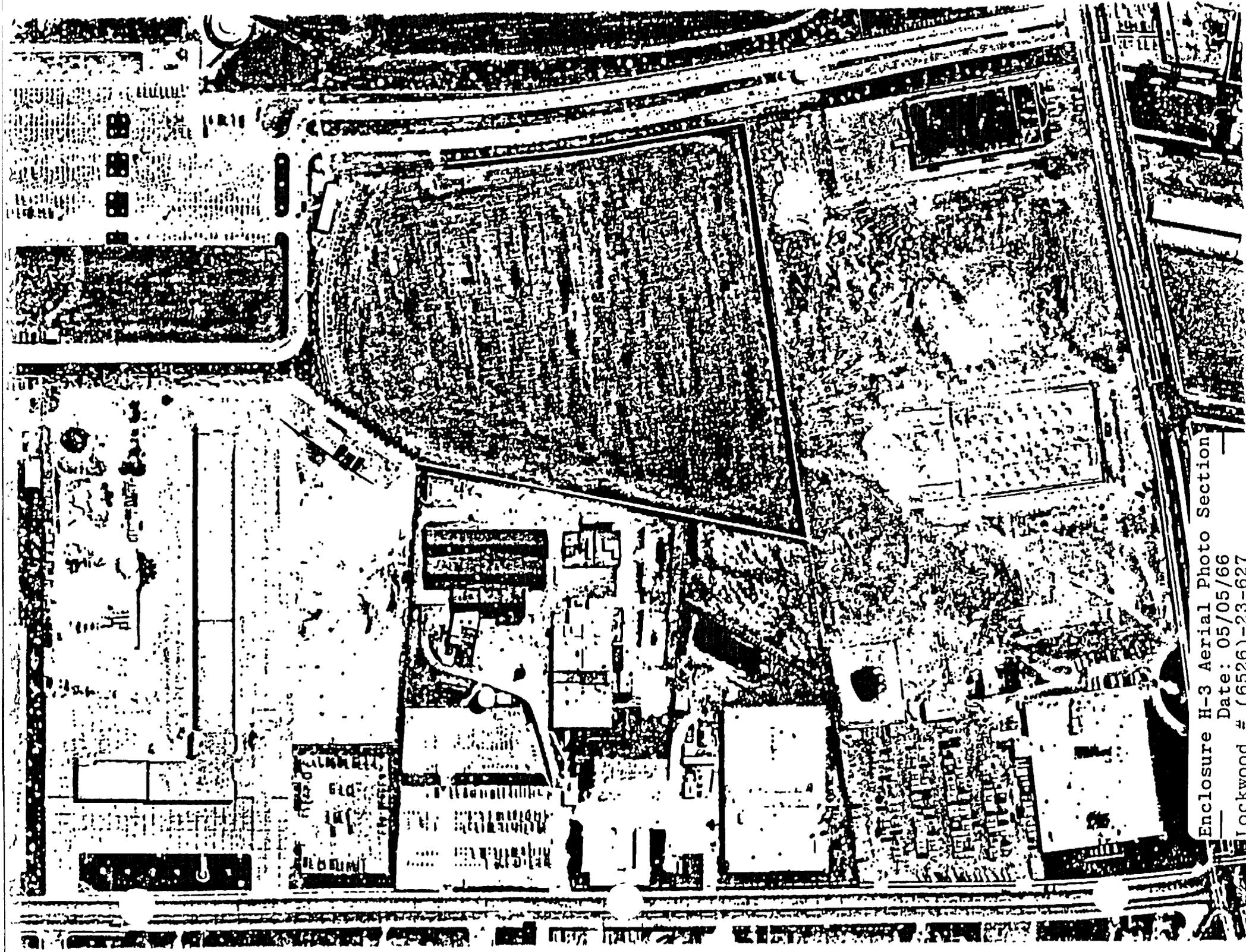




Enclosure H-2 Aerial Photo Section

Date: 03/22/62

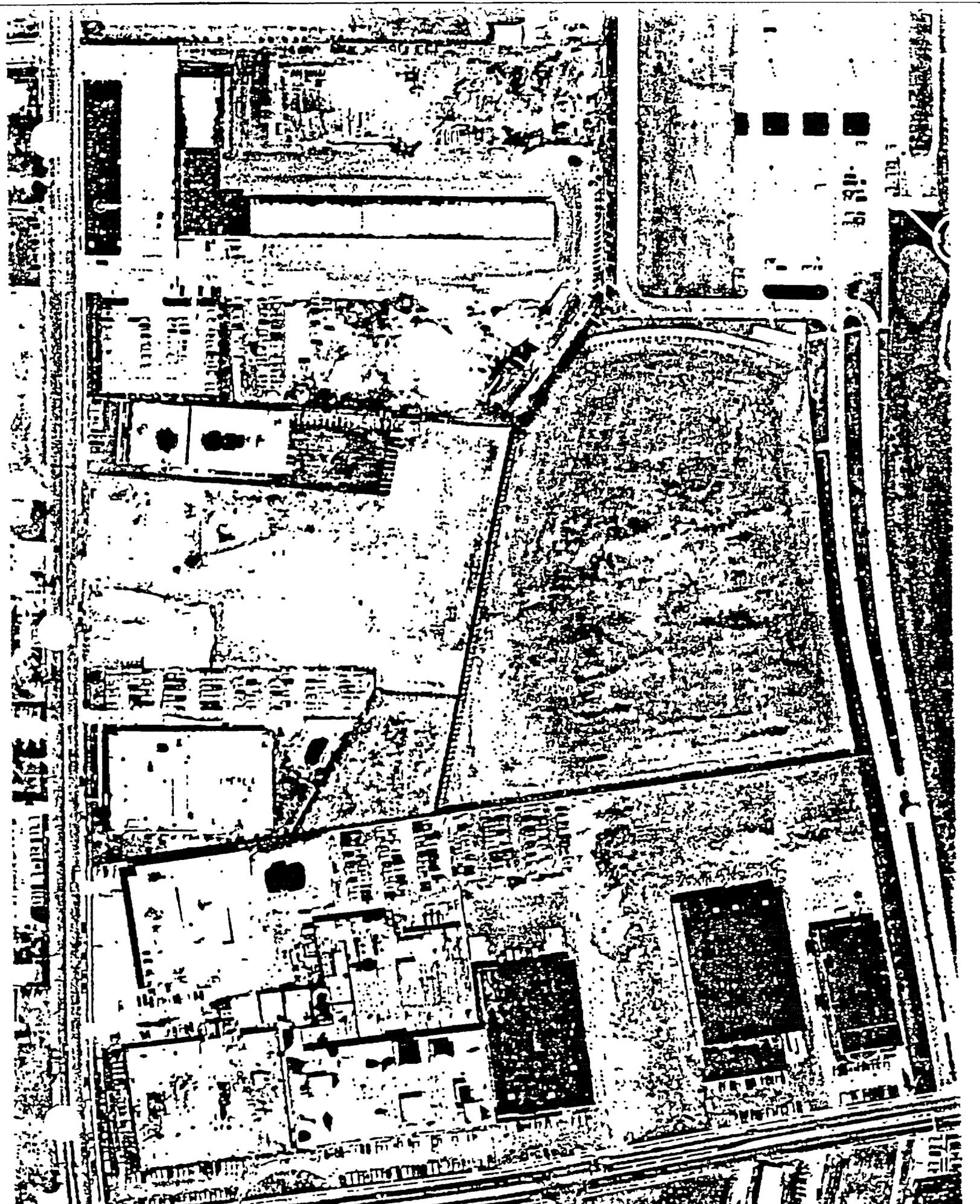
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Enclosure H-3 Aerial Photo Section

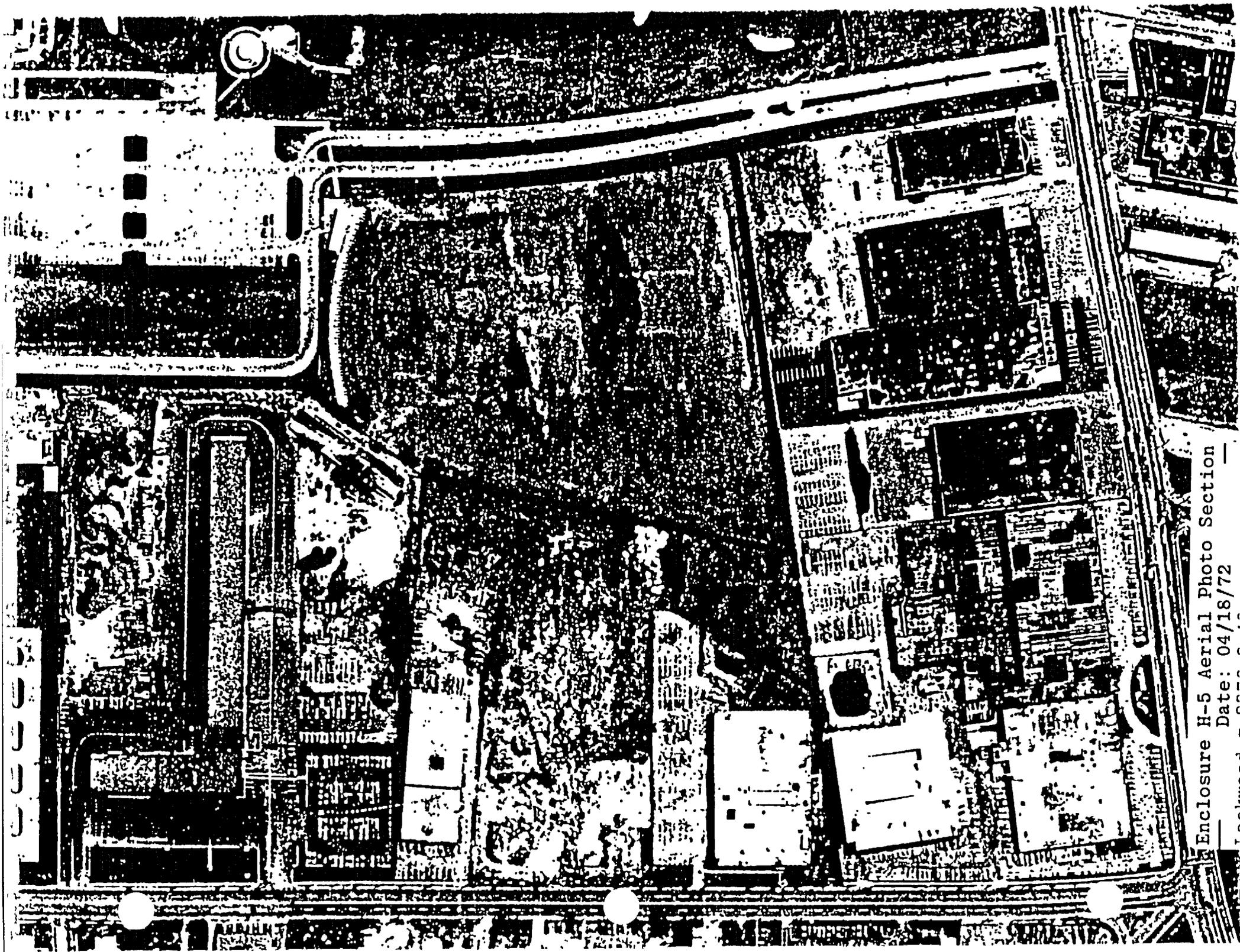
Date: 05/05/66

Lockwood # (6526)-23-627

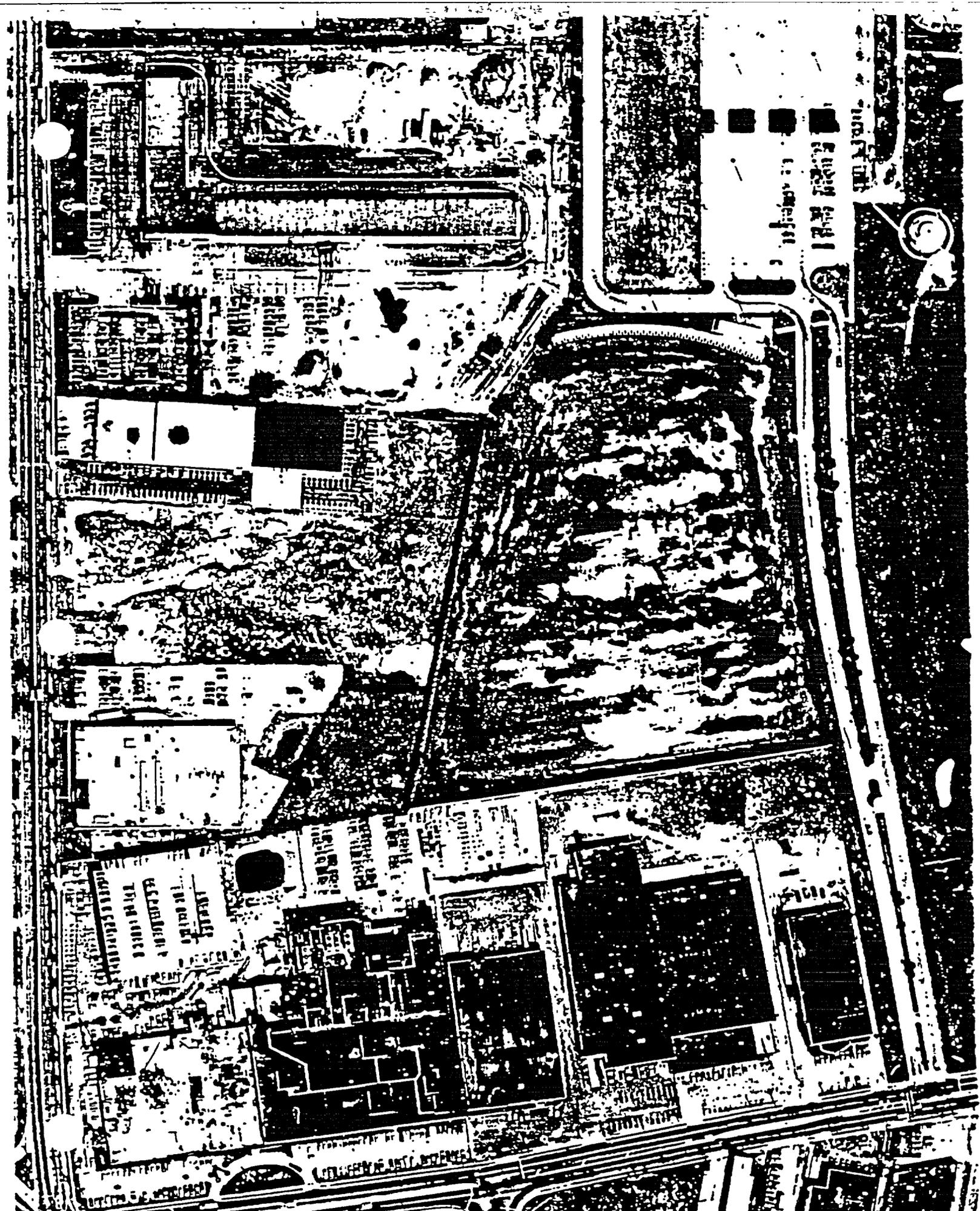


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Enclosure H-4 Aerial Photo Section  
Date: 04/11/69

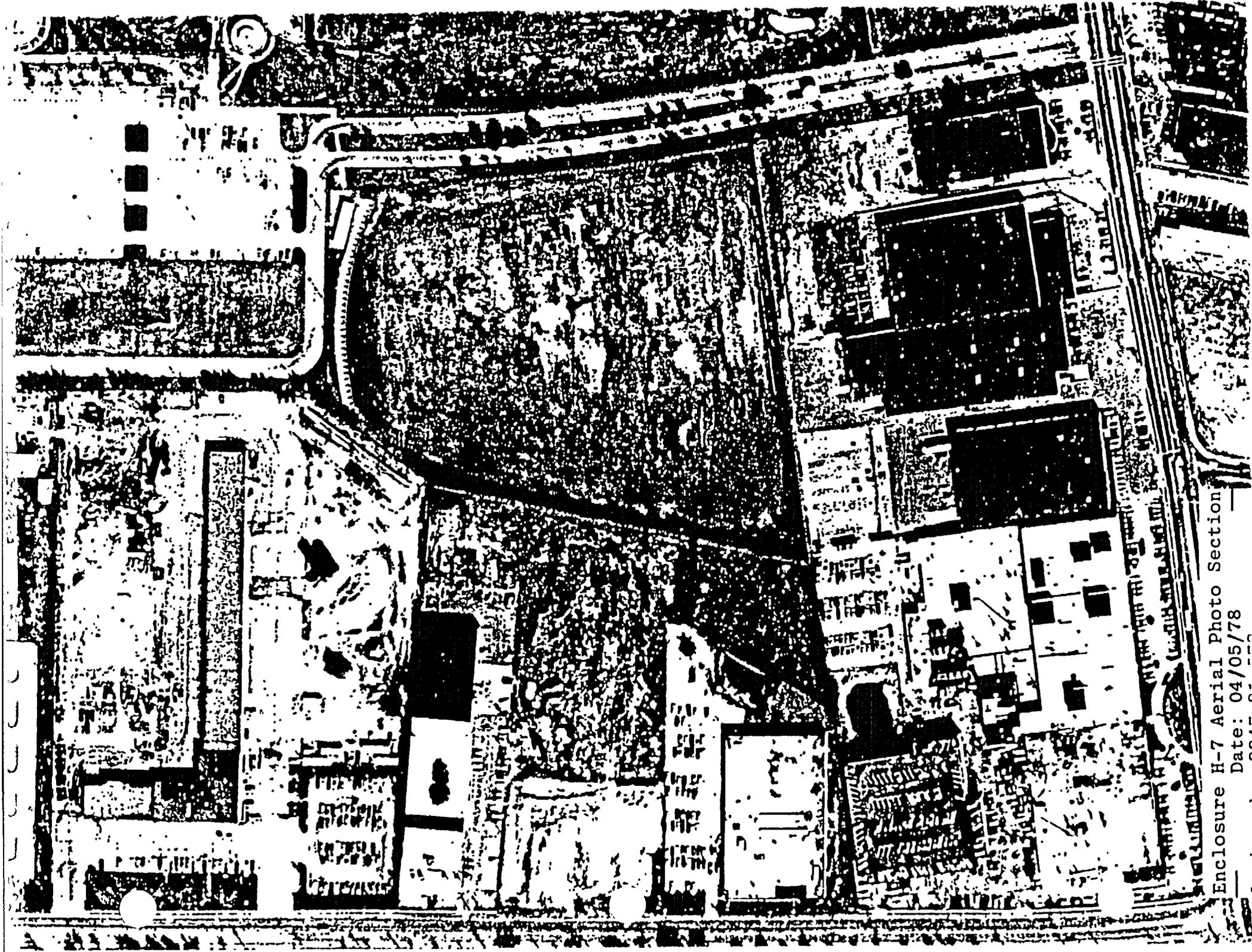


Enclosure H-5 Aerial Photo Section  
Date: 04/18/72

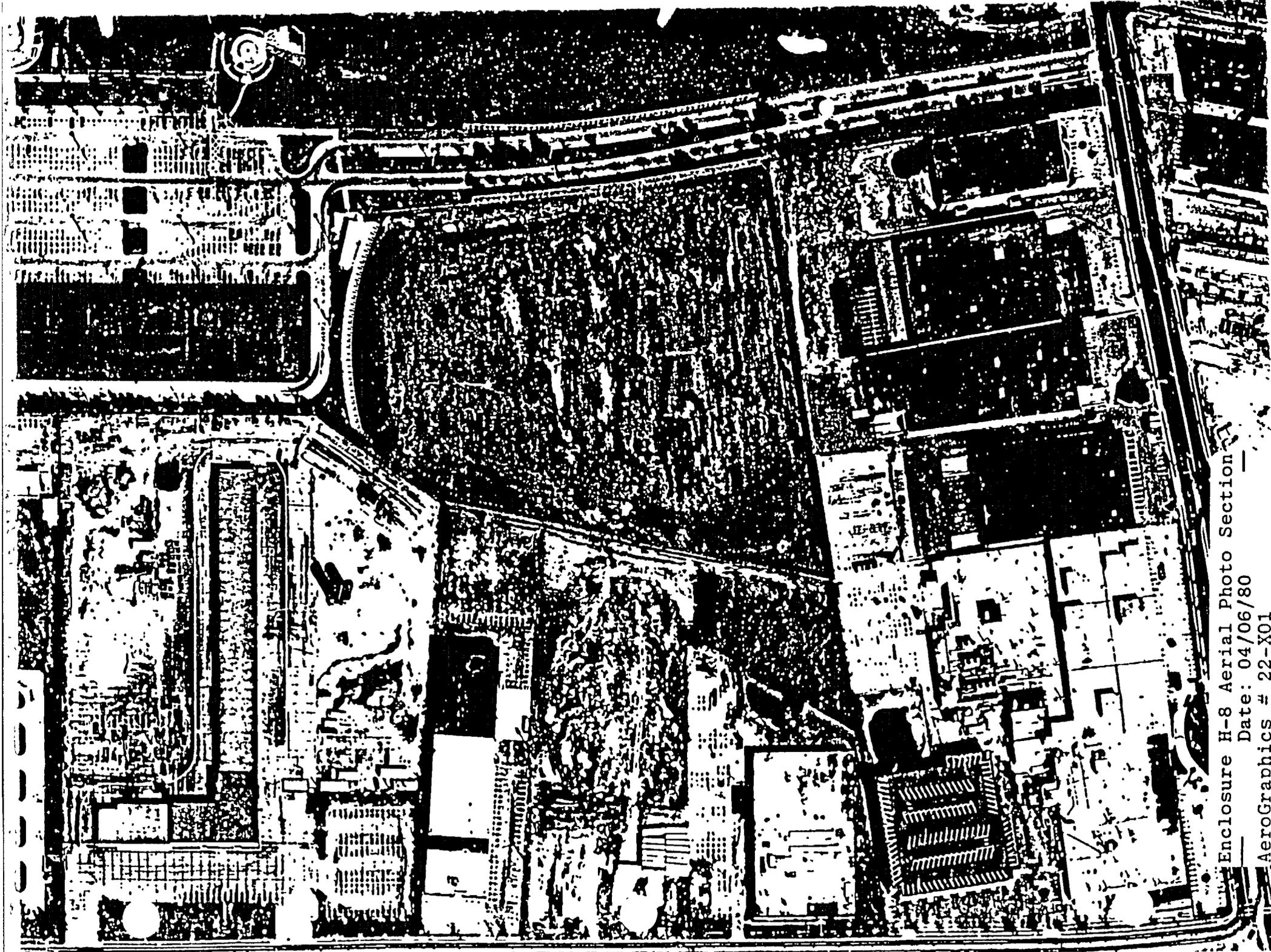


Enclosure H-6 Aerial Photo Section  
Date: 03/29/76

AeroGraphics 7 00 500



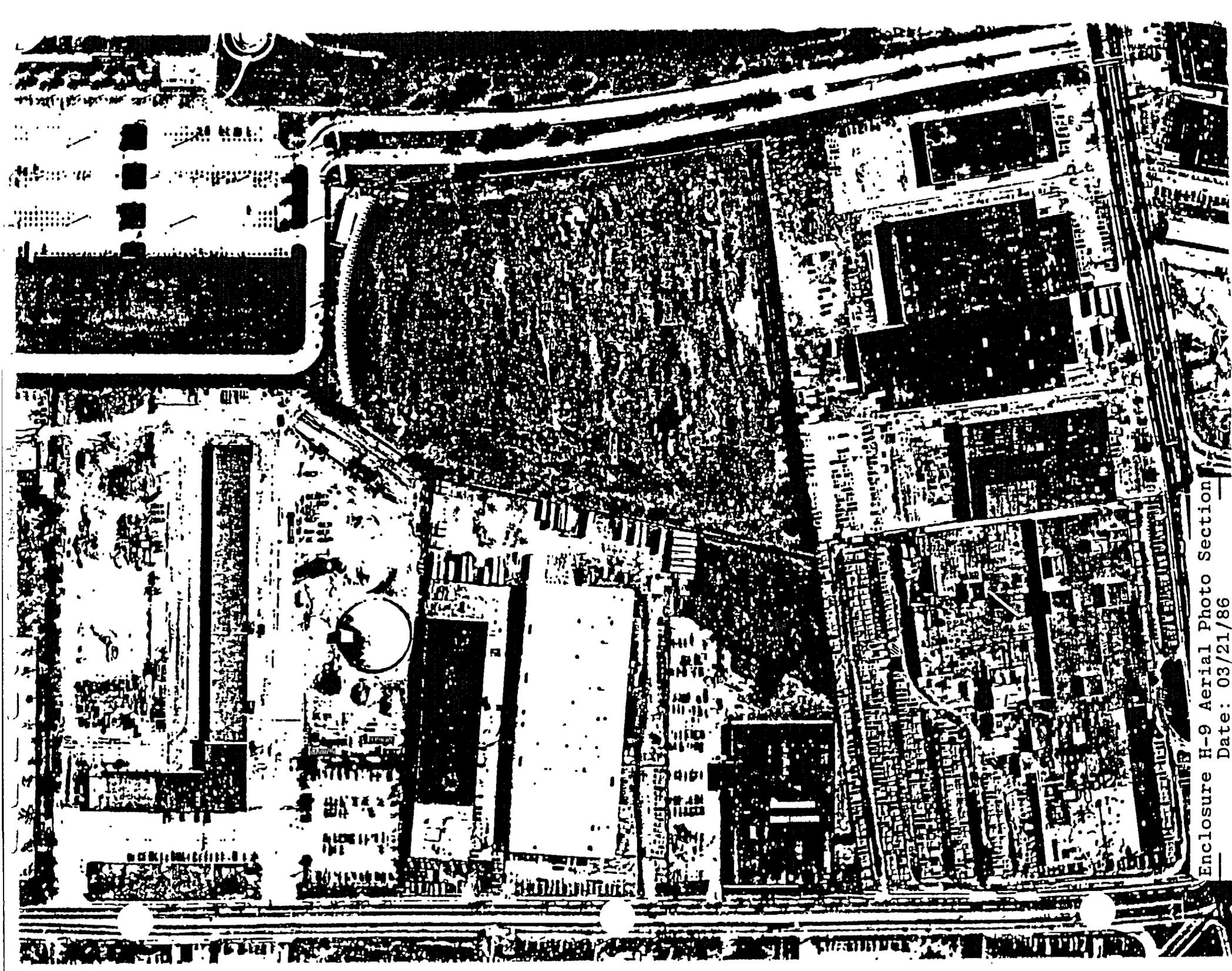
Enclosure H-7 Aerial Photo Section  
Date: 04/05/78



Enclosure H-8 Aerial Photo Section

Date: 04/06/80

AeroGraphics # 22-X01



Enclosure H-9 Aerial Photo Section

Date: 03/21/86

Sampling data extracted from core pondence circa 1959-1960

Nickel samples are in parts per million (ppm)

Uranium samples are in milligrams per liter (mg/l)

Date	Drain #1		Basin(Sump) #1		Basin(Sump) #2		Basin(Sump) #3		Basin(Sump) #4		Other	
	Nickel	Uranium	Nickel	Uranium	Nickel	Uranium	Nickel	Uranium	Nickel	Uranium	Nickel	Uranium
06/XX/59	-	-	2.600	28.500	5.000	9.220	-	-	-	-	-	-
07/XX/59	0.700	14.580	1.000	8.330	4.600	7.740	-	-	-	-	2.500	5.360**
08/XX/59	-	-	.400	4.670	1.000	2.380	-	-	-	-	-	-
09/XX/59	-	-	.500	5.600	1.200	3.830	-	-	-	-	-	-
10/XX/59	-	-	1.730	5.350	2.840	3.260	-	-	-	-	-	-
10/XX/59	-	-	1.730	5.350	2.840	3.260	-	-	-	-	-	-
11/XX/59	18.780	9.460	17.570	7.440	5.890	4.230	-	-	-	-	-	-
11/XX/59	30.870	13.980	-	-	-	-	-	-	-	-	-	-
12/XX/59	-	-	2.640	6.530	3.550	8.780	-	-	-	-	-	-
01/XX/60	-	-	3.010	7.320	4.810	10.200	-	-	-	-	-	-
02/24/60	-	-	1.450	-	-	-	.950	-	<.100	-	-	-
02/XX/60	-	-	2.230	5.940	7.620	13.400	-	-	-	-	-	-
03/02/60	2.030	2.970	.102	2.380	4.680	5.940	1.630	3.570	-	-	-	-
03/15/60	-	-	.008	.320	.570	1.090	.006	.760	.002	.060	-	-
03/15/60 (Resample)	-	-	3.500	7.220	10.900	5.040	2.500	6.530	.000	4.160	-	-

\*In 1966-67 the entire facility was sampled, reviewed, and certified as fit for non-radioactive use by the State of New York Department of Labor, Division of Industrial Hygiene (see Enclosures E and F)

\*\*Drain #2

Sampling data extracted from correspondence circa 1959-1960\*  
 Nickel samples are in parts per million (ppm)  
 Uranium samples are in milligrams per liter (mg/l)

Date	Drain #1		Basin(Sump) #1		Basin(Sump) #2		Basin(Sump) #3		Basin(Sump) #4		Other	
	Nickel	Uranium	Nickel	Uranium	Nickel	Uranium	Nickel	Uranium	Nickel	Uranium	Nickel	Uranium
03/22/60	-	-	.600	-	.450	-	-	-	-	-	-	-
03/XX/60	2.030	2.970	.102	2.380	4.680	5.940	1.630	3.570	-	-	-	-
04/05/60	-	-	-	-	-	1.050	-	-	-	-	-	-
04/10/60	-	-	1.450	.350	5.400	1.500	.950	.310	<.100	<.050	-	-
04/13/60	-	-	-	-	-	-	-	20.800	-	-	-	-
04/18/60	-	-	-	-	-	-	-	34.000	-	-	-	105.000***
04/22/60	-	-	.100	-	5.600	-	-	-	-	-	-	-
04/26/60	-	-	-	-	-	-	-	28.500	-	-	-	-
04/27/60	-	-	-	-	-	-	-	21.700	-	-	-	-
04/28/60	-	-	-	-	-	-	-	-	-	-	-	45.400****
04/29/60	-	-	-	-	-	-	-	16.200	-	-	-	-
05/03/60	-	2.360	-	-	-	-	-	-	-	-	-	-
05/06/60	-	-	-	-	-	-	-	14.200	-	-	-	37.000****
05/17/60	-	-	-	-	-	-	-	10.300	-	-	-	10.100****
05/25/60	-	-	-	-	2.500	-	-	-	-	-	-	-
05/27/60	-	-	-	-	3.050	-	-	-	-	-	-	-
06/06/60	-	-	-	-	.400- 1.000	-	-	-	-	-	-	-

\*\*\*Cesspool adjacent to Basin(Sump) #3  
 \*\*\*\*Drain #3



GTE Operations Support Incorporated  
One Stamford Forum  
Stamford, CT 06904

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

July 1, 1996

Rosalie K. Rusinko, Senior Attorney  
New York State Department of Environmental Conservation  
Division of Environmental Enforcement  
200 White Plains Road - 5th Floor  
Tarrytown, NY 10591-5805

Subject: Former Sylvania Corning Nuclear Corporation (SCNC)  
Cantiague Rock Road, Hicksville, NY  
Town of Oyster Bay  
Tax Maps Nos. - Section No. 11/Block No. 499/  
Lots No. 94, 99 & 100

Dear Ms. Rusinko:

This letter serves to confirm our telephone conversation of July 1, 1996. In that conversation at my request you agreed to extend the response date of your June 3, 1996, information request to Vincent Gallogly, received by GTE June 4, 1996, from July 3, 1996, to July 15, 1996.

Thank you for your consideration in this matter.

Very truly yours

David F. Daubenspeck  
Legal Assistant

cc: Robert Stewart  
New York State Department of Environmental Conservation  
Building 40 SUNY  
Stony Brook, NY 11790-2356

A. E. Ludwig, GTE  
D. S. York, GTE