MELICK-TULLY AND ASSOCIATES, P.C.
GEOTECHNICAL ENGINEERS AND ENVIRONMENTAL CONSULTANTS

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July 18, 2012

Borough of Madison
50 Kings Road
Madison, New Jersey 07940

Attention: Mr. Ray Codey
Township Administrator

Re: Existing Stockpile
Former Exxon Research & Engineering Company Property
Florham Park, New Jersey

Dear Mr. Codey:

This letter presents our comments related to an existing soil stockpile on the former Exxon Research & Engineering Company (Exxon) property (part of Block 1401, Lot 1) located adjacent to Route 24 in Florham Park, New Jersey. The stockpile is estimated to be approximately 40,000 cubic yards in volume.

Melick-Tully and Associates, P.C. (MTA) previously conducted a Phase I assessment of the property containing the stockpile. The information provided to us by representatives of Exxon indicated that following their acquisition of the property, the previous structures on the site were demolished. Our review of historic aerial photographs indicates that the former structures were demolished by 1954, and disturbance was visible around the former building areas, however, no additional information was provided regarding reuse of these materials. The Phase I assessment revealed that natural organic soils generated during the construction of Route 24 were placed in the current stockpile location beginning prior to 1984 and completed by 1993. The available information indicates that the material imported to the site was approved by Exxon.

MTA conducted 17 test pits in and around the stockpile. The materials encountered in the test pits performed into the stockpile consisted of organic soils (organic silt and/or peat), which ranged from 2 to greater than 23 feet in thickness. Silty sand containing minor amounts of construction debris was encountered beneath the organic soils in test pits performed in the northern and southern portions of the stockpile. The majority of the test pits were extended to natural soils encountered beneath either the

Please Reply to:
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organic soils or sandy materials. However, due to the height of the stockpile, all test pits did not extend to the underlying natural soils.

One sample of organic and sandy fill soils were collected for laboratory priority pollutants plus 40 tentatively identified compounds (PP+40) testing, which did not report any contaminants above the previous NJDEP "Residential Direct Contact" Soil Cleanup Criteria (RDCSCC) or the current NJDEP "Residential Direct Contact" Soil Remediation Standards (RDCSRS).

The available information indicates that the upper portion of the stockpile is comprised of organic soil that effectively acts as a cap over the underlying sandy materials. The stockpile is currently heavily overgrown with surface vegetation, and access to the area is limited by pedestrian-restrictive fencing along Route 24 and along the adjacent loop roadway, and woods.

We understand that it is desired to obtain Green Acres funding to acquire the property. Recognizing that only limited sampling has been completed, a portion of the Green Acres funding would be used to further characterize the environmental quality of the stockpiled fill materials and have the information reviewed by a Licensed Site Remediation Professional (LSRP) to obtain a Response Action Outcome (RAO) for the stockpiled soils.

We recommend that the current site conditions be observed to confirm that the current conditions of the stockpile are consistent with those previously observed by MTA, which did not appear to present a direct contact health threat. Using the available data, we believe we could issue a report that identifies the existing conditions as an interim remedial measure. We understand that this would allow you to obtain the balance of the Green Acres funding. The cost of this work would be approximately $1,500. Subsequently, we recommend that the stockpiled materials be further investigated in accordance with NJDEP guidance for historic fill, including soil borings and test pits at a frequency of two samples per acre to enable laboratory testing of both the organic and sandy fill materials to get an RAO for the area of concern. We estimate the cost to conduct a soil investigation, and review by an LSRP could range from $22,000 to $25,000. We would issue a formal proposal with our scope of work, if requested.

In the event that those investigations do identify impact, it is anticipated that the existing organic soils and additional fencing could act as an engineered cap, and along with administrative controls in the form of a Deed Notice, would be a remedy consistent with current NJDEP presumptive remedy guidance.

Please contact us if you have any questions concerning this information.

Very truly yours,

MELICK-TULLY and ASSOCIATES, P.C.

Richard D. Lev, C.P.G., LSRP
Senior Associate

Eugene M. Gallagher

Eugene M. Gallagher, Jr., P.E.
Vice President

EMG/elm
(2 copies submitted)

REPORT
LIMITED ENVIRONMENTAL SITE INVESTIGATION

EXXON RESEARCH & ENGINEERING CO. PROPERTY
(PART OF BLOCK 1401, LOT 1)
BOROUGH OF FLORHAM PARK, MORRIS COUNTY, NEW JERSEY
INTERNATIONAL TRADE CENTER

February 3, 1998

Prepared By:
Melick-Tully and Associates, P.C.
117 Canal Road
South Bound Brook, NJ 08880
Tel: 732-356-3400 Fax: 732-356-9054

MTA Project No. 2141-064E

February 3, 1998

International Trade Center
500 International Drive
Mount Olive, New Jersey 07828

Attention: Mr. Leslie E. Smith, Jr.
Executive Director

Report
Limited Environmental Site Investigation
Exxon Research & Engineering Co. Property
(Part of Block 1401, Lot 1)
Borough of Florham Park, Morris County, New Jersey
International Trade Center

Introduction

This report presents the results of a limited environmental site investigation conducted by Melick-Tully and Associates, P.C. (MTA) at a parcel located within the eastern portion of the Exxon Research & Engineering Company (EREC) facility. The subject property is located between Park Avenue and New Jersey State Highway Route 24, north of Ridgedale Avenue in the Borough of Florham Park, Morris County, New Jersey and is identified as a part of Block 1401, Lot 1 on the municipal tax map.

Background

MTA previously performed a Phase I environmental site assessment of the property, the results of which were presented in our report dated November 10, 1997. The Phase I assessment identified areas of environmental concern on the property, including: one, empty, unlabeled 55-

gallon drum; a large soil berm, and localized stockpiles of soil, asphalt and non-hazardous solid waste; historic agricultural land use; on-site wetlands; and use and/or storage of hazardous substances on adjacent property.

Purpose and Scope of Work

The purpose of our limited environmental site investigation was to:

1) characterize the materials in the large on-site berm and localized stockpiles;

2) investigate the soils beneath the empty 55-gallon drum;

3) investigate the surface soils in selected areas of previous agricultural land use;

4) investigate the subsurface conditions adjacent to off-site properties observed to use and/or store hazardous substances immediately adjacent to the property; and

5) submit a report to summarize the findings of the limited environmental site investigation.

The results and conclusions presented in subsequent sections of this report are subject to the limitations presented in Appendix I.

Discussion

Field Exploration and Sampling Program: The field investigation consisted of a program of supervised explorations consisting of test pits and borings conducted at the potential areas of environmental concern identified above. The locations of the explorations performed are shown on Plate 1, Plot Plan. The materials encountered in the explorations were screened in the field for volatile organic compounds using a calibrated photoionization detector (PID). Soil and ground water samples were collected from the explorations for laboratory analytical testing in accordance with NJDEP protocol outlined in the NJDEP Technical Requirements for Site Remediation

(N.J.A.C. 7:26E), the NJDEP Field Sampling Procedures Manual, and the NJDEP Alternate Ground Water Sampling Techniques Guide. All soil and ground water samples were placed in laboratory prepared containers, immediately stored on ice, and transported to an NJDEP certified laboratory (Integrated Analytical Laboratories, Randolph, New Jersey, NJDEP Certification No. 14751) under Chain-of-Custody.

A summary of the specific field exploration and sampling activities is presented below:

1) A total of 17 test pit excavations (Test Pits TP-1 through TP-17) were conducted to address the large on-site berm using a large track-mounted backhoe (Komatsu 300). The test pits extended to depths of from 3 to 23 feet below the existing ground surface.

   The test pits encountered significant thicknesses of fill materials, consisting of peat and organic silt that was reportedly generated during construction of the adjacent State Highway Route 24, overlying silty sand fill containing variable accumulations of construction and demolition debris. The encountered fill was underlain by natural soils consisting of sandy silts. Minor perched ground water seepage was encountered in the fill in Test Pits TP-2 and TP-6.

   No evidence of soil staining, product sheens, chemical odors, or elevated PID readings was encountered in the test pits.

   A summary of the conditions encountered in the test pits conducted in the on-site berm is presented on Plate 2.

   Representative samples of the peat/organic silt fill, and the underlying sandy fill containing debris were collected from Test Pit TP-3 at depths of 6 and 12 feet, respectively, for laboratory priority pollutant plus 40 tentatively identified compounds (PP+40) testing.

2) Test pit excavations were performed using a rubber tire backhoe (Case 580B) at localized areas of solid waste debris exposed in the southeastern portion of the property in the area of a former historic greenhouse structure (test pits TP-18 through TP-25). These test pits encountered a layer of fill 6 to 18 inches thick which containing solid waste debris including bricks, broken clay pots, and glass mixed with soil containing cinders and ash. The debris fill was identified in two areas, approximately 250 feet by 25 feet, and 100 feet by 20 feet in plan dimensions, respectively. Representative soil samples were collected from

the debris fill layer from test pits TP-20 (Sample GH-3), and TP-21 (Sample GH-4), for laboratory PP+40 testing.

3) Test pit excavations were also conducted within the south central and northern portions of the subject property to investigate the contents of soil and asphalt stockpiles observed on the ground surface using a rubber tire backhoe (Case 580B). Five test pits (TP-26 through TP-30) were performed in the south-central portion of the property, and four test pits (TP-31 through TP-34) were performed at stockpiles located in the northern portion of the property. These test pits indicate that the widely-scattered stockpiles consist primarily of topsoil which exhibited no staining, odors, or elevated PID readings. Test pit TP-31 was excavated in a stockpile of asphalt estimated to contain a volume of approximately 8 to 10 cubic yards. No soil sampling was performed or considered necessary to address these stockpiles.

4) Two hand auger explorations were conducted beneath the empty 55-gallon drum. The hand auger explorations extended to depths of two feet below the surrounding ground surface, and encountered natural sandy silt soils. No evidence of soil staining, chemical odors, or elevated PID readings was detected in the materials encountered in the hand auger borings. Soil samples for laboratory PP+40 testing were collected at depths from 0 to 12 inches in accordance with NJDEP protocol.

5) Surface soil samples were collected from areas of former agricultural use from depths of 0 to 6 inches, at a frequency of one sample per two acres. A total of ten soil samples were collected for laboratory priority pollutant pesticides, lead and arsenic testing.

6) Two shallow hand auger borings, and two deep test borings drilled using a truck-mounted drill rig were performed to address off-site areas of environmental concern. The hand auger borings (B-2 and B-4) were performed immediately adjacent to the property line at locations where surface water from an upgradient, off-site area of environmental concern was observed to drain onto the subject property. The hand auger borings extended to depths of three feet below the surrounding ground surface, and encountered sandy, clayey silt soils. Perched ground water was encountered in each hand auger at depths of from 1'6" (B-2) to 2'0" (B-4).

The deep test borings performed with the truck-mounted drill rig extended to depths of 24 feet (B-1) and 40 feet (B-3), respectively. Boring B-1 was drilled through silty soils to a depth of approximately 15 feet, where sandy soils were encountered. Ground water was encountered in B-1 at a depth of 19 feet below the surrounding ground surface upon completion of drilling. Boring B-3 was drilled through silty soils to a depth of 40 feet,

and ground water was not encountered to the maximum depth explored upon completion of drilling. No evidence of soil staining, odors, or elevated PID readings was encountered in the borings performed adjacent to the off-site areas of environmental concern.
Soil samples were collected from 0 to 12 inches from Borings B-2 and B-4 for laboratory PP+40 testing. Soil samples were also collected for volatile organic compounds plus 15 tentatively identified compounds (VO+15) immediately above the surface of the perched ground water in Borings B-2 (1'0" to 1'6") and B-4 (1'6" to 2'0"). Samples of the perched ground water encountered in Borings B-2 (1'6") and B-4 (2'0") were collected for VO+15 testing. A ground water sample was collected from Boring B-1 for PP+40 testing from a 2" diameter temporary wellpoint which was installed in the borehole.

Laboratory Analytical Testing: The laboratory analytical testing performed as part of our limited environmental site investigation was performed within appropriate sample holding times and achieved laboratory method detection levels below NJDEP Soil Cleanup Criteria and New Jersey Groundwater Quality Standards. Summaries of the laboratory analytical testing are included in Appendix II for reference.

Conclusions and Recommendations

Based on the results of our field investigation program and our review of the laboratory test results, we offer the following comments for your consideration:

1) The results of the test pit excavations conducted in the large berm identified approximately 40,000 cubic yards of stockpiled fill materials, consisting of approximately 25,000 cubic yards of peat and organic silt reportedly generated during construction of State Highway Route 24, and approximately 15,000 cubic yards of silty sands containing accumulations of construction and demolition debris.

   The results of the laboratory PP+40 testing conducted on representative samples of the fill materials did not detect any priority pollutant constituents above regulatory concern.

   Based on our observations, it is our opinion that the fill materials which consist of compressible organic soils, and construction and demolition debris that were encountered within the large berm are not suitable from a geotechnical viewpoint for support of structural improvements including

buildings, roadways, and paved areas, or for reuse as fill within proposed structural areas.

2) The test pits performed in the southeastern portion of the property identified a 6 to 18 inch thick layer of solid waste debris containing soil, cinders, and ash. The results of the laboratory PP+40 testing conducted on representative samples of these fill materials detected concentrations of four metals (arsenic, beryllium, selenium and thallium) above NJDEP Soil Cleanup Criteria.

Based on the available information, we estimate that approximately 200 cubic yards of contaminated debris fill is present in the southeastern portion of the property. Based on the encountered subsurface soil conditions and the nature of the metals contamination identified, we consider it unlikely that the identified contaminated fill would have impacted the underlying natural soils. We estimate that the cost to excavate and legally dispose of the contaminated fill material identified would range from approximately $25,000 to $50,000, depending upon whether the debris fill material is determined during waste classification testing as non-hazardous or hazardous, respectively.

3) The test pit excavations performed in the south-central and northern portions of the property revealed that the isolated stockpiled materials investigated consisted of topsoil and asphalt. We recommend that the stockpiled asphalt be removed and recycled off-site. No further action is recommended to further address the stockpiled topsoil at this time.

4) Our investigation of the soils located beneath the empty 55-gallon drum did not identify any stained soils, chemical or petroleum odors, or elevated PID readings. The laboratory PP+40 testing performed on the underlying soils did not detect any priority pollutant constituents in the underlying soils above regulatory concern. We recommend that the empty drum be legally disposed of off-site. Following removal of the drum, no further action is recommended to address the soil in the vicinity of the drum.

5) The investigation of former agricultural land areas did not detect any priority pollutant pesticides, lead or arsenic at concentrations above regulatory concern. No further action is recommended to further address the historic agricultural use of the property at this time.

6) Our investigation to address areas of off-site use and/or storage of hazardous substances detected concentrations of two semi-volatile base neutral compounds (benzo[b]fluoranthene and benzo[a]pyrene) and arsenic above regulatory concern in surface soils collected at Boring B-2.

Volatile organic compounds including toluene, xylene and chlorobenzene were also detected in Boring B-2, but at concentrations below regulatory concern.

The laboratory testing of soils collected from Boring B-4 did not detect concentrations of any priority pollutant constituents above regulatory concern.

The results of the ground water testing detected concentrations of four priority pollutant metals (arsenic, chromium, lead, and nickel) above regulatory concern. These metals are naturally occurring elements found in soils. The detected elevated concentrations of metals in the ground water sample are suspected to be biased high due to analysis of an unfiltered ground water sample collected from a temporary well point. We suspected that the unfiltered ground water sample contained suspended soil particles which resulted in the slightly elevated metals concentrations detected in the ground water sample.

The following Plates and Appendices are attached and complete this report:

Plate 1 - Plot Plan
Plate 2 - Summary of On-Site Berm Test Pits
Appendix I - Limitations
Appendix II - Laboratory Results Summaries

Please contact us if you have any questions concerning this report.

Very truly yours,

MELICK-TULLY and ASSOCIATES, P.C.

Richard D. Lev, CPG

Robert J. Van Orden, P.E.
Vice President

RDL:RJVO/kg
2141-064E
(3 copies submitted)

cc: Mr. Glenn Muleucis
Mr. Thomas E. Tully, P.E.

Summary of On-Site Berm Test Pits

Limited Environmental Site Investigation
68 Acre ER&E Co. Property
Borough of Florham Park, Morris County, New Jersey
International Trade Center

Test Pit	Fill Layer Thickness (ft)		Topsoil Thickness (ft)	Depth to Natural Soils (ft)	Total Depth (ft)	Groundwater Seepage (ft)
	Peat /Organic Silt	Silty Sand with Construction Debris				
TP-1	8	4	NE	12	15	NE
TP-2	8	7	NE	15	18	3
TP-3	12	6	NE	18	19	NE
TP-4	15	4	NE	19	20	NE
TP-5	14	NE	NE	14	19	NE
TP-6	>23	NE	NE	NE	23	8
TP-7	14	>8	NE	NE	22	NE
TP-8	11	5	NE	16	18	NE
TP-9	11	9	NE	20	22	NE
TP-10	13	7	NE	20	21	NE
TP-11	12	6	NE	18	21	NE
TP-12	NE	NE	0.5	0.5	3	NE
TP-13	NE	NE	0.5	0.5	3	NE
TP-14	NE	NE	0.66	0.66	3	NE
TP-15	2	NE	NE	2	5	NE
TP-16	2	2	NE	4	6	NE
TP-17	2	3	NE	5	7	NE

Note: NE = Not Encountered

JB NOTE

CONSTRUCTION DEBRIS ENCOUNTERED 2' OR MORE BELOW THE SURFACE.

APPENDIX I

LIMITATIONS

FOR ENVIRONMENTAL CONSULTING SERVICES

A. NO RELIANCE BY THIRD PARTIES

This report and any other documents or materials prepared by Melick-Tully and Associates, P.C. (MTA) in connection with the environmental consulting services performed pursuant to MTA's contract are for the benefit and use of MTA's client only, and are not intended to be nor shall be deemed to be for the benefit of any third party, including without limitation, an owner or lessee of the property.

B. LIMITATIONS ON WORK PRODUCT

All work product and reports provided by MTA in connection with the performance of environmental consulting services are subject to the following limitations:

1) The observations described in this Report were made under the conditions stated therein. The conclusions presented in the Report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client. The work described in this report was carried out in accordance with the General Terms and Conditions attached to MTA's Agreement for Consulting Services.

2) In preparing this Report, MTA has relied on certain information provided by state and local officials and information and representations made by other parties referenced therein, and on information contained in the files of state and/or local agencies made available to MTA. To the extent that such files are missing, incomplete or not provided to MTA, MTA is not responsible. Although there may have been some degree of overlap in the information provided by these various sources, MTA did not attempt to independently verify the accuracy or completeness of all information reviewed or received.

3) Observations may have been made of the site and of structures on the site as indicated within the Report. Where access to portions of the site or to structures on the site was unavailable or limited, MTA renders no opinion as to the presence of hazardous substances, wastes or petroleum and chemical products and wastes. In addition, MTA renders no opinion as to the presence of indirect evidence relating to hazardous substances or wastes, or petroleum and chemical products or wastes, where direct observation of the interior walls, floors, or ceilings of structures on a site were obstructed by objects or coverings on or over these surfaces.

4) Unless otherwise specified in the Report, MTA did not perform testing or analyses to determine the presence or concentration of asbestos, radon, methane, or polychlorinated biphenyls (PCBs) at the site or in the environment of the site.

5) Unless otherwise specified in the Report, the purpose of this Report was to assess the physical characteristics of the subject site with respect to the presence in the environment of hazardous substances or wastes, or petroleum and chemical products and wastes. No specific attempt was made to check the compliance of present or past owners or operators of the site with federal, state, or local laws, rules and regulations, environmental or otherwise.

6) If the conclusions and recommendations contained in this Report are based in part upon the data obtained from a limited number of soil samples obtained from widely spaced subsurface explorations; then the nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to re-evaluate the conclusions and recommendations of this report.

7) Except as noted in the text of the Report, no quantitative laboratory testing was performed as part of MTA's environmental consulting services. Where such analyses have been conducted by an outside laboratory, MTA has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these tests.

8) If the conclusions and recommendations contained in this report are based, in part, upon various types of laboratory analytical data; then the conclusions and recommendations are contingent upon the validity of such data. These data (if obtained) have been reviewed and interpretations made in the Report. If indicated in the Report, some of these data may be preliminary "screening" level data and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional field or laboratory analytical data become available in the future, these data should be provided to MTA for review, and the conclusions and recommendations presented herein modified accordingly.

9) Laboratory or field analytical tests may have been performed for specific parameters as described in the text of the Report. However, it should be noted that additional chemical constituents not searched for during the current study may be present in the air, soil, groundwater or other materials at the site.

10) It is recommended that MTA be retained to provide further environmental consulting services during the construction and/or implementation of any remedial measures recommended in the Report. This is to allow MTA to observe compliance with the concepts and recommendations contained herein, and to allow the development of changes in the remedial program in the event that subsurface conditions or other conditions differ from those anticipated.

11) MTA assumes no responsibility to report the findings of its environmental consulting services to any federal, state or local regulatory agency. It is MTA's understanding that the Client shall advise the owner/operator of the facility to report any contaminants which have discharged into the environment.

C. SUBSURFACE INFORMATION

1) Locations: Unless stated otherwise, the locations of explorations performed by MTA were approximately determined by tape measurement from the existing site facilities. Elevations of the explorations, if provided, were approximately determined by interpolation between contours shown on topographic plans provided to us by the owner. The locations and elevations of the explorations should be considered accurate only to the degree implied by the method used.

2) Interface of Strata: The stratification lines shown on the individual Logs of the subsurface explorations represent the approximate boundary between soil types, and the transition may be gradual. Further, the subsurface conditions may vary between the subsurface explorations.

3) Field Logs/Final Logs: A field log was prepared for each exploration by a member of our staff. The field log contains factual information and interpretation of the soil conditions between samples.

We must emphasize that our recommendations are based on the final logs and the information contained therein, and not on the field logs.

The final logs represent our interpretation of the contents of the field logs, and the results of any observations and laboratory tests of the field samples. The final logs are included in our report.

4) Water Levels: If water level readings have been made in test pits, borings, and/or monitoring wells; these observations were made at the times and under the conditions stated on the test pit, boring or monitoring well logs or in the report. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall, passage of time and other factors.

5) Additional Data: Should additional data become available in the future, these data should be provided to MTA for review, and the conclusions and recommendations presented in MTA's report modified accordingly.

D. EXCLUDED WORK

1) Unless specifically indicated to the contrary in this report, the scope of our services was limited only to investigation and evaluation of the items discussed in the "Purpose and Scope of Work" section of our Agreement for Consulting Services, and did not include any consideration of potential site pollution or contamination resulting from radon gas, methane gas, asbestos or radioactive elements.

2) Unless specifically indicated to the contrary in this report, this report does not address the following environmental considerations which may affect the site development: wetlands determinations; flora and fauna; wildlife; etc. The conclusions and recommendations of this report are not intended to supersede any of these additional environmental considerations.

E. STANDARD OF CARE

1) Services performed by MTA under MTA's Agreement for Consulting Services were conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. NO OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE.

2) Client recognizes that subsurface conditions may vary from those encountered at the locations where borings, surveys or other explorations are made by MTA and that the data, interpretations and recommendations of MTA are based solely on the information available to MTA. MTA will be responsible for those data, interpretations and recommendations but shall not be responsible for the interpretations by others of the information developed.

F. USE OF DATA

1) Unless otherwise specified in our Agreement for Consulting Services, the client acknowledges that the data developed by MTA is intended for use in design efforts only, and may not be sufficient to prepare an accurate bid or to determine the exact extent of work required. Client agrees to inform the design team and all prospective bidders that the data in our reports should not be relied on to estimate bid quantities, schedules, costs, etc. Client agrees to require all prospective bidders to perform whatever additional explorations or data gathering they deem

necessary to prepare their bids accurately, and will allow sufficient time in the bidding process for prospective contractors to do so. If Client fails to do either, Client releases and gives up all claims against MTA for extra payment related to the work and agrees to indemnify and save harmless MTA from all contractor and other third party claims for extra payment.

G. OWNERSHIP OF DOCUMENTS

1) Client agrees that all reports and other work furnished to the Client or his agents, which are not paid for, will be returned upon demand and will not be used for any purposes whatever.

H. CONSTRUCTION OBSERVATION

1) We recommend that MTA be retained to provide continuous on-site consultation services during the construction and/or remediation phases of the work. This is to observe compliance with the design concepts and to allow changes in the event that subsurface conditions differ from those anticipated prior to the start of construction and/or remediation.

APPENDIX II

INTEGRATED ANALYTICAL LABORATORIES, LLC.

ON-SITE BERM

SUMMARY REPORT
Client: Melick Tully And Associates
Project: I.T.C.
Lab Case No.: 10980-292

	Lab ID:	292-001		292-002		NJ RESIDENTIAL CLEANUP CRITERIA.
	Client ID:	TP3-6		TP3-12		
	Matrix:	Soil		Soil		
	Sampled Date:	1/15/98		1/15/98		
PARAMETER(Units)						
Volatiles (ppm)						
TOTAL VO's:		ND		ND		
TOTAL TIC's:		ND		ND		
TOTAL VO's & TIC's:		ND		ND		1000
Semivolatiles - BNA (ppm)						
Phenanthrene		ND		0.154		
Fluoranthene		0.082	J	0.314		2300
Pyrene		0.0984	J	0.419		1700
Benzo[a]anthracene		ND		0.185		0.9 .6
Chrysene		ND		0.178		9 62
Benzo[b]fluoranthene		ND		0.175		0.9 .6
Benzo[k]fluoranthene		ND		0.0981	J	0.9 .6
✓ Benzo[a]pyrene		ND		0.145		0.66 .2
TOTAL BNA'S:		0.1804	J	1.6681	J	
TOTAL TIC's:		ND		ND		
TOTAL BNA'S & TIC's:		0.1804	J	1.6681	J	10,000
PCB's (ppm)		ND		ND		0.49
Pesticides (ppm)		ND		ND		
Metals (ppm)						
Antimony		ND		ND		14
Arsenic		5.20		4.90		20 19
Beryllium		0.534		0.413		1
Cadmium		ND		ND		1
Chromium		25.6		17.2		500
Copper		18.2		22.1		600
Lead		13.4		16.1		400
Mercury		0.037		0.029		14
Nickel		14.7		13.4		250
Selenium		ND		ND		63
Silver		ND		ND		110
Thallium		0.125		ND		2
Zinc		49.8		40.4		1500
General Analytical						
Cyanide, Total (ppm)		ND		ND		1100
Phenol (ppm)		ND		ND		10000

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
All qualifiers on individual Semivolatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEBRIS FILL AT FORMER GREEN HOUSE

SUMMARY REPORT

Client: Melick Tully And Associates
Project: ITC - FLORHAM PARK
Lab Case No.: 10980-358

	Lab ID:	358-001	358-002	
	Client ID:	GH 3	GH 4	
	Matrix:	Soil	Soil	NJ RESIDENTIAL CLEANUP CRITERIA
	Sampled Date:	1/20/98	1/20/98	
PARAMETER(Units)		TP-20	TP-21	
Volatiles (ppm)				
TOTAL VO's:		ND	ND	
TOTAL TIC's:		ND	ND	
TOTAL VO's & TIC's:		ND	ND	1000
Semivolatiles - BNA (ppm)				
TOTAL BNA'S:		ND	ND	
TOTAL TIC's:		ND	ND	
TOTAL BNA'S & TIC's:		ND	ND	10,000
PCB's (ppm)		ND	ND	0.49
Pesticides (ppm)		ND	ND	
Metals (ppm)				
Antimony		3.39	ND	14
NOTE → Arsenic		308 ✓	13.3	20
Beryllium		3.48 ✓	0.622	1
Cadmium		0.762	ND	1
Chromium		26.7	7.04	500
Copper		85.4	18.2	600
Lead		159	16.2	400
Mercury		0.795	0.025	14
Nickel		35.4	14.2	250
Selenium		94.0 ✓	3.67	63
Silver		ND	ND	110
Thallium		7.52 ✓	0.179	2
Zinc		106	9.83	1500
General Analytical				
Cyanide, Total (ppm)		ND	ND	1100
Phenol (ppm)		ND	ND	10000

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Melick Tully And Associates
Project: FLORHAM PARK
Lab Case No.: 10980-293

SOIL BENEATH EMPTY DRUM

	Lab ID:	293-001	293-002	
	Client ID:	D-1	D-1	NJ
	Depth:	0-6"	6-12"	RESIDENTIAL
	Matrix:	Soil	Soil	CLEANUP
	Sampled Date:	1/15/98	1/15/98	CRITERIA
PARAMETER(Units)				
Volatiles (ppm)				
TOTAL VO's:		–	ND	
TOTAL TIC's:		–	ND	
TOTAL VO's & TIC's:		–	ND	1000
Semivolatiles - BNA (ppm)				
TOTAL BNA'S:		ND	–	
TOTAL TIC's:		ND	–	
TOTAL BNA'S & TIC's:		ND	–	10000
PCB's (ppm)		ND	–	0.49
Pesticides (ppm)		ND	–	
Metals (ppm)				
Antimony		ND	–	
Arsenic		3.92	–	20
Beryllium		0.687	–	1
Cadmium		ND	–	1
Chromium		21.5	–	500
Copper		13.8	–	600
Lead		15.0	–	400
Mercury		0.090	–	14
Nickel		13.5	–	250
Selenium		4.24	–	63
Silver		ND	–	110
Thallium		0.162	–	2
Zinc		49.0	–	1500
General Analytical				
Cyanide, Total (ppm)		ND	–	1100
Phenol (ppm)		ND	–	10000

– = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

PREVIOUS AGRICULTURAL LAND USE

SUMMARY REPORT
Client: Melick Tully And Associates
Project: FLORHAM PARK
Lab Case No.: 10980-294

Lab ID:	294-001	294-002	294-003	294-004	294-005	NJ RESIDENTIAL CLEANUP CRITERIA
Client ID:	P-1	P-2	P-3	P-4	P-5	
Matrix:	Soil	Soil	Soil	Soil	Soil	
Sampled Date	1/15/98	1/15/98	1/15/98	1/15/98	1/15/98	
PARAMETER(Units)						
Pesticides (ppm)	ND	ND	ND	ND	ND	
Metals (ppm)						
Arsenic	3.37	13.9	11.1	6.70	5.60	20 (19)
Lead	36.8	110	69.8	31.1	28.2	400

Lab ID:	294-006	294-007	294-008	294-009	294-010	
Client ID:	P-6	P-7	P-8	P-9	P-10	
Matrix:	Soil	Soil	Soil	Soil	Soil	
Sampled Date	1/15/98	1/15/98	1/15/98	1/15/98	1/15/98	
PARAMETER(Units)						
Pesticides (ppm)	ND	ND	ND	ND	ND	
Metals (ppm)						
Arsenic	6.00	4.00	13.4	5.30	9.30	20
Lead	32.7	29.6	36.3	26.3	30.8	400

ND = Analyzed for but Not Detected at the MDL

OFF - SITE AREAS OF CONCERN

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Melick Tully And Associates

Project: FLORHAM PARK

Lab Case No.: 10980-448

Lab ID:	448-001			448-002			448-003			448-004			NJ RESIDENTIA CLEANUP CRITERIA
Client ID:	B-4			B-4			B-4			B-2			
Depth:	0-6"			6-12"			18-24"			0-6"			
Matrix:	Soil			Soil			Soil			Soil			
Sampled Date	1/27/98			1/27/98			1/27/98			1/27/98			
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	
Volatiles (ppm)													
TOTAL VO's:	-			ND		0.587	ND		0.496	-			
TOTAL TIC's:	-			ND			ND			-			
TOTAL VO's & TIC's:	-			ND			ND			-			1000
Semivolatiles - BNA (ppm)													
Phenanthrene	ND		0.112	-			-			0.588		0.131	-
Anthracene	ND		0.112	-			-			0.0939	J	0.131	10,000 (1,100)
Carbazole	ND		0.112	-			-			0.108	J	0.131	24 - 2400
Di-n-butylphthalate	ND		0.112	-			-			1.15		0.131	610 6100
Fluoranthene	ND		0.112	-			-			1.27		0.131	2,300
Pyrene	ND		0.112	-			-			1.63		0.131	1,700
Butylbenzylphthalate	ND		0.112	-			-			0.3		0.131	1,100 (200)
Benzo[a]anthracene	ND		0.112	-			-			0.736		0.131	0.9 - 6
Chrysene	ND		0.112	-			-			0.863		0.131	9.62
bis(2-Ethylhexyl)phthalate	ND		0.112	-			-			0.334		0.131	49 35
Benzo[b]fluoranthene	ND		0.112	-			-			1.27 ✓		0.131	0.9 .6
Benzo[k]fluoranthene	ND		0.112	-			-			0.5		0.131	0.9 6
Benzo[a]pyrene	ND		0.112	-			-			1.03 ✓		0.131	0.66 .2
In [1,2,3-cd]pyrene	ND		0.112	-			-			0.582		0.131	0.9 .6
Benzo[g,h,i]perylene	ND		0.112	-			-			0.671		0.131	- 380,000
TOTAL BNA'S:	ND			-			-			11.1259	J		
TOTAL TIC's:	0.859			-			-			6.91			
TOTAL BNA'S & TIC's:	0.859			-			-			18.0359	J		10000
PCB's (ppm)	ND		0.341	-			-			ND		0.384	0.49

- = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = The concentration was detected at a value below the MDL

All qualifiers on individual Semivolatiles are carried down through summation.

OFF-SITE AREAS OF CONCERN

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Melick Tully And Associates

Project: FLORHAM PARK

Lab Case No.: 10980-448

Lab ID:	448-001			448-002			448-003			448-004			NJ RESIDENTIAL CLEANUP CRITERIA
Client ID:	B-4			B-4			B-4			B-2			
Depth:	0-6"			6-12"			18-24"			0-6"			
Matrix:	Soil			Soil			Soil			Soil			
Sampled Date	1/27/98			1/27/98			1/27/98			1/27/98			
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	
Pesticides (ppm)													
alpha-BHC	ND		0.012	~			~			ND		0.0135	
beta-BHC	ND		0.012	~			~			ND		0.0135	
gamma-BHC	ND		0.012	~			~			ND		0.0135	
delta-BHC	ND		0.012	~			~			ND		0.0135	
Heptachlor	ND		0.012	~			~			ND		0.0135	
Aldr	ND		0.012	~			~			ND		0.0135	
Heptachlor Epoxide	ND		0.012	~			~			ND		0.0135	
Endosulfan I	ND		0.012	~			~			ND		0.0135	
4,4'-DDE	ND		0.012	~			~			ND		0.0135	
Dieldrin	ND		0.012	~			~			ND		0.0135	
Endrin	ND		0.012	~			~			ND		0.0135	
Endosulfan II	ND		0.0241	~			~			ND		0.0271	
4,4'-DDD	ND		0.012	~			~			ND		0.0135	
Endrin aldehyde	ND		0.0602	~			~			ND		0.0677	
Endosulfan sulfate	ND		0.0602	~			~			ND		0.0677	
4,4'-DDT	ND		0.0241	~			~			ND		0.0271	
Endrin Ketone	ND		0.012	~			~			ND		0.0135	
Methoxychlor	ND		0.012	~			~			ND		0.0135	
alpha-Chlordane	ND		0.012	~			~			ND		0.0135	
gamma-Chlordane	ND		0.012	~			~			ND		0.0135	
Toxaphene	ND		0.012	~			~			ND		0.0135	
*M : (ppm)													
Antimony	<7.2		7.2	~			~			<8.1		8.1	14 31
Arsenic	3.2		1.2	~			~			34.9	✓	1.4	20 19
Beryllium	<0.60		0.60	~			~			<0.68		0.68	1 3100
Cadmium	<0.60		0.60	~			~			<0.68		0.68	1 78
Chromium	13.6		1.2	~			~			24.3		1.4	500
Copper	11.9		3.0	~			~			28		3.4	600 3100
Lead	15.6		12	~			~			194		14	400 400
Mercury	<0.12		0.12	~			~			9.7		0.68	14 23
Nickel	11.1		4.8	~			~			12.8		5.4	250 1600
Selenium	<12		12	~			~			<14		14	63 390
Silver	<1.2		1.2	~			~			<1.4		1.4	110 90
Thallium	<1.2		1.2	~			~			<1.4		1.4	2 5
Zinc	95.4		2.4	~			~			284		2.7	1500 23000

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ND = Analyzed for but Not Detected at the MDL

? = Results not available.

*Subcontracted results from Accutest.

OFF-SITE AREAS OF CONCERN

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Melick Tully And Associates

Project: FLORHAM PARK

Lab Case No.: 10980-448

Lab ID:	448-001			448-002			448-003			448-004			NJ RESIDENTIAL Cleanup CRITERIA
Client ID:	B-4			B-4			B-4			B-2			
Depth:	0-6"			6-12"			18-24"			0-6"			
Matrix:	Soil			Soil			Soil			Soil			
Sampled Date	1/27/98			1/27/98			1/27/98			1/27/98			
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	
General Analytical													
Cyanide, Total (ppm)	ND		1.36	--			--			ND		1.49	1100
Phenol (ppm)	ND		0.49	--			--			ND		0.5	10000

Lab ID:	448-005			448-006			NJ RESIDENTIAL Cleanup Criteria	NJ "Impact TO GROUNDWATER CRITERIA	
Client ID:	B-2			B-2					
Depth:	6-12"			12-18"					
Matrix:	Soil			Soil					
Sampled Date	1/27/98			1/27/98					
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL			
Volatiles (ppm)									
Toluene	0.687	J	0.937	ND		0.821	1000 6300	500	4
Chlorobenzene	0.347	J	0.937	0.573	J	0.821	37 510	1	.4
Total Xylenes	6.04		0.937	ND		0.821	410 12,000	10	12
TOTAL VO's:	7.074	J		0.573	J				
TOTAL TIC's:	45.54			ND					
TOTAL VO's & TIC's:	52.614	J		0.573	J		1000	1000	

-- = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = The concentration was detected at a value below the MDL

All qualifiers on individual Volatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Melick Tully And Associates
Project: FLORHAM PARK
Lab Case No.: 10980-448

OFF-SITE AREAS OF CONCERN

Lab ID:	448-007			448-008			448-009			NJ Ground Water Quality Std.
Client ID:	B-1 GW			B-4 GW			B-2 GW			
Matrix:	Aqueous			Aqueous			Aqueous			
Sampled Date	1/27/98			1/27/98			1/27/98			
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	
Volatiles (ppb)										
TOTAL VO's:	ND		1	ND		1	ND		1	
TOTAL TIC's:	ND			ND			7.1			
TOTAL VO's & TIC's:	ND			ND			7.1			
Semivolatiles - BNA (ppb)										
2-Methylnaphthalene	2.6		2	–			–			100
TOTAL BNA'S:	2.6			–			–			
TOTAL TIC's:	ND			–			–			
TOTAL BNA'S & TIC's:	2.6			–			–			
PCB's (ppb)	ND		0.425	–			–			0.5
Pesticides (ppb)										
alpha-BHC	ND		0.015	–			–			
beta-BHC	ND		0.015	–			–			
gamma-BHC	ND		0.015	–			–			
delta-BHC	ND		0.015	–			–			
Heptachlor	ND		0.015	–			–			
Aldrin	ND		0.015	–			–			
Heptachlor Epoxide	ND		0.015	–			–			
Endosulfan I	ND		0.015	–			–			
4,4'-DDE	ND		0.015	–			–			
Dieldrin	ND		0.015	–			–			
Endrin	ND		0.015	–			–			
Endosulfan II	ND		0.03	–			–			
4,4'-DDD	ND		0.015	–			–			
Endrin aldehyde	ND		0.075	–			–			
Endosulfan sulfate	ND		0.075	–			–			
4,4'-DDT	ND		0.03	–			–			
Endrin Ketone	ND		0.015	–			–			
Methoxychlor	ND		0.015	–			–			
alpha-Chlordane	ND		0.015	–			–			
gamma-Chlordane	ND		0.015	–			–			
Toxaphene	ND		0.015	–			–			

– = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Melick Tully And Associates
Project: FLORHAM PARK
Lab Case No.: 10980-448

OFF-SITE AREAS OF CONCERN

Lab ID:	448-007			448-008			448-009			NJ GROUNDWATER QUALITY STD.
Client ID:	B-1 GW			B-4 GW			B-2 GW			
Matrix:	Aqueous			Aqueous			Aqueous			
Sampled Date	1/27/98			1/27/98			1/27/98			
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	
*Metals (ppb)										
Antimony	<5.0		5.0	~			~			20
Arsenic	45.1	✓	5.0	~			~			8
Beryllium	9.3		5.0	~			~			20
Cadmium	<4.0		4.0	~			~			4
Chromium	292	✓	10	~			~			100
C. .r	611		25	~			~			1000
Lead	172	✓	3.0	~			~			10
Mercury	<0.2		0.2	~			~			2
Nickel	304	✓	40	~			~			100
Selenium	5.5		5.0	~			~			50
Silver	<10		10	~			~			-
Thallium	<5.0		5.0	~			~			10
Zinc	790		20	~			~			5000
General Analytical										
Cyanide, Total (ppb)	ND		50.0	~			~			200
Phenol (ppb)	ND		50.0	~			~			4000

~ = Sample not analyzed for
N = Analyzed for but Not Detected at the MDL
? = Results not available.
*Subcontracted results from Accutest.

KEY:

TP-1 NUMBERS AND APPROXIMATE LOCATIONS OF TEST PITS PERFORMED AS PART OF THIS STUDY

P-1 NUMBERS AND APPROXIMATE LOCATIONS OF SURFACE SOIL SAMPLES COLLECTED FOR PESTICIDE TESTING

D-1 NUMBERS AND APPROXIMATE LOCATIONS OF HAND AUGERS PERFORMED ADJACENT TO AN EMPTY METAL DRUM

B-1 NUMBERS AND APPROXIMATE LOCATIONS OF TEST BORINGS PERFORMED TO ADDRESS OFF-SITE AREAS OF CONCERN

NOTES:

1. This drawing is part of Melick-Tully and Associates, P.C. Report No. 2141-0645 and should be read together with the report for complete evaluation.

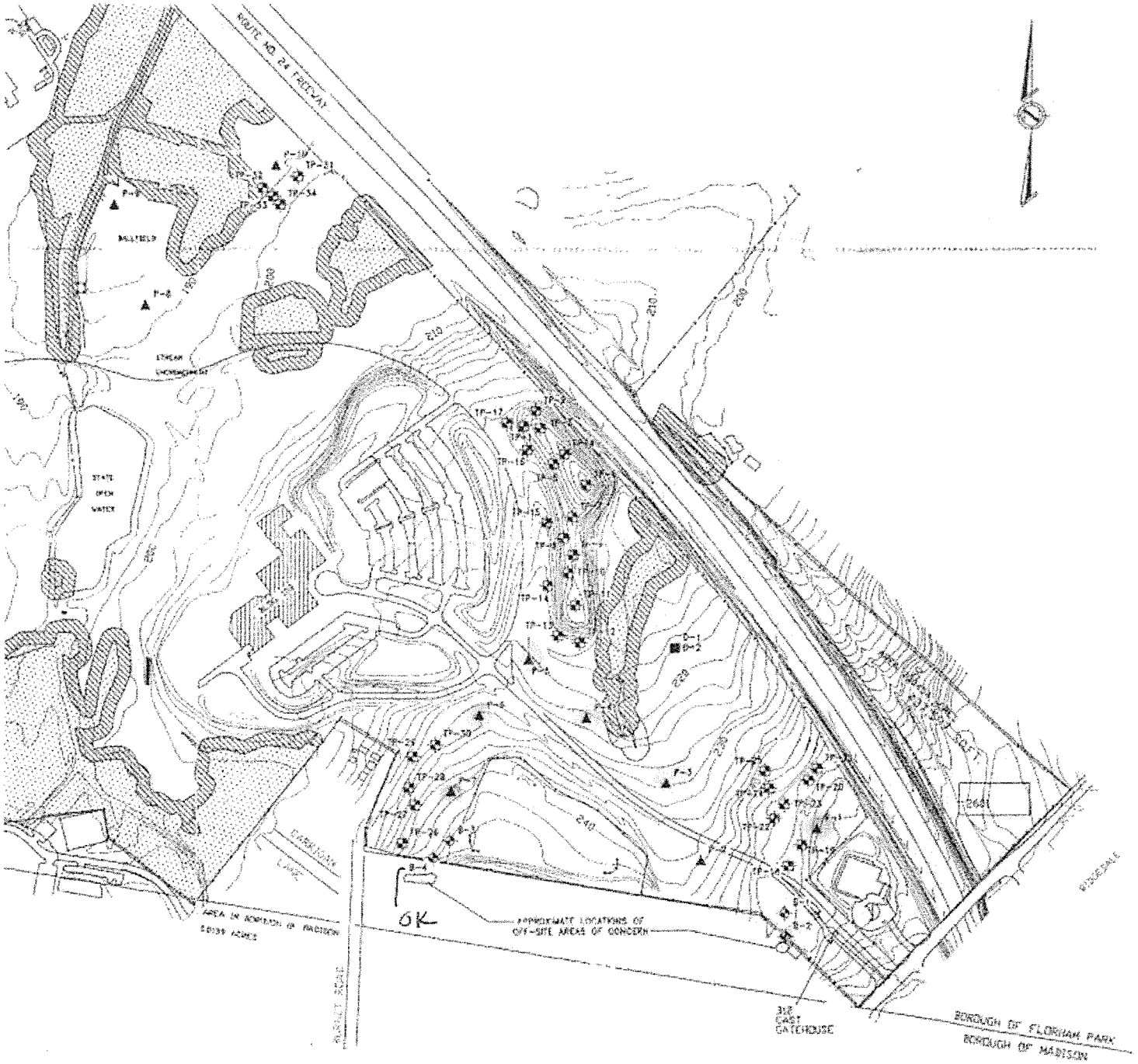
2. General layout and topography was obtained from a drawing prepared by Exxon Research and Engineering Company Facilities and Office Services, entitled "Florham Park Site Map," drawing number FED-000-0137, dated 9/12/90, revised 11/25/96.

PLOT PLAN

LIMITED ENVIRONMENTAL SITE INVESTIGATION
EXXON RESEARCH AND ENGINEERING COMPANY PROPERTY
(PART OF BLOCK 1401,LOT 1)
FLORHAM PARK, MORRIS COUNTY, NEW JERSEY
INTERNATIONAL TRADE CENTER

MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers
& Environmental Consultants
137 Sorrel Road
South Seaval Brook, New Jersey 08880
(732) 254-3400

JOB NO.	2141-0645	FILE NO.	14456	
DR. BY JCB	CHK. BY MR.	DATE 1/23/98	SCALE 1"=200'	PLATE 1


ROUTE NO. 24 FREEWAY
STATE OPEN WATER
APPROXIMATE LOCATIONS OF OFF-SITE AREAS OF CONCERN
AREA IN BOROUGH OF MADISON
352 EAST GATEHOUSE
BOROUGH OF FLORHAM PARK
BOROUGH OF MADISON
OK