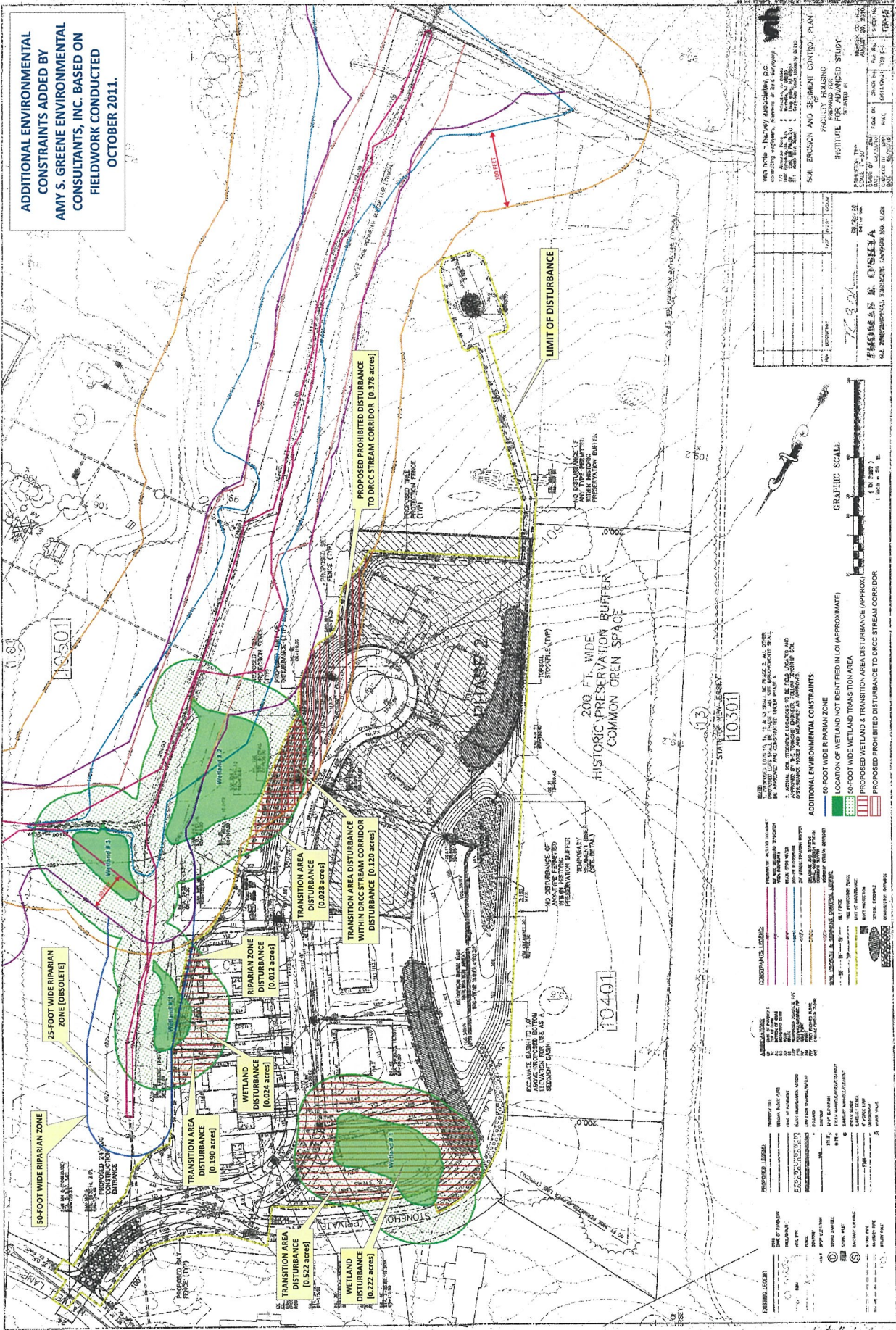


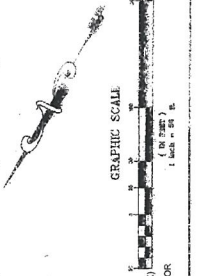
**APPENDIX**



ADDITIONAL ENVIRONMENTAL CONSTRAINTS ADDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS, INC. BASED ON FIELDWORK CONDUCTED OCTOBER 2011.



DATE: 10/13/11	SCALE: AS SHOWN	PROJECT: FACILITY EXPANSION	SHEET NO: 10401
BY: [Signature]	DATE: 10/13/11	PROJECT: FACILITY EXPANSION	SHEET NO: 10401
BY: [Signature]	DATE: 10/13/11	PROJECT: FACILITY EXPANSION	SHEET NO: 10401
BY: [Signature]	DATE: 10/13/11	PROJECT: FACILITY EXPANSION	SHEET NO: 10401
BY: [Signature]	DATE: 10/13/11	PROJECT: FACILITY EXPANSION	SHEET NO: 10401



**NOTES:**  
 1. ALL DISTURBANCES TO WETLANDS SHALL BE IN ACCORDANCE WITH THE SWANSON ACT AND THE FEDERAL REGISTER.  
 2. ALL DISTURBANCES TO WETLANDS SHALL BE IN ACCORDANCE WITH THE SWANSON ACT AND THE FEDERAL REGISTER.  
 3. ALL DISTURBANCES TO WETLANDS SHALL BE IN ACCORDANCE WITH THE SWANSON ACT AND THE FEDERAL REGISTER.  
 4. ALL DISTURBANCES TO WETLANDS SHALL BE IN ACCORDANCE WITH THE SWANSON ACT AND THE FEDERAL REGISTER.

SYMBOL	DESCRIPTION
[Green hatched]	50-FOOT WIDE RIPARIAN ZONE
[Red hatched]	50-FOOT WIDE WETLAND TRANSITION AREA (APPROXIMATE)
[Blue hatched]	PROPOSED WETLAND & TRANSITION AREA DISTURBANCE (APPROX. PROPOSED PROHIBITED DISTURBANCE TO DICCC STREAM CORRIDOR)
[Yellow hatched]	25-FOOT WIDE RIPARIAN ZONE [OBSOLETE]
[Purple hatched]	WETLAND DISTURBANCE
[Orange hatched]	TRANSITION AREA DISTURBANCE
[Pink hatched]	PROPOSED PROHIBITED DISTURBANCE TO DICCC STREAM CORRIDOR

SYMBOL	DESCRIPTION
[Black line]	PROPERTY LINE
[Red line]	PROPOSED FENCE LINE
[Blue line]	PROPOSED CONSTRUCTION DISTURBANCE
[Green line]	WETLAND BOUNDARY
[Orange line]	TRANSITION AREA BOUNDARY
[Purple line]	25-FOOT WIDE RIPARIAN ZONE BOUNDARY [OBSOLETE]
[Pink line]	PROPOSED PROHIBITED DISTURBANCE TO DICCC STREAM CORRIDOR BOUNDARY

DATE: 10/13/11  
 SCALE: AS SHOWN  
 PROJECT: FACILITY EXPANSION  
 SHEET NO: 10401

BRUCE I. AFRAN, ESQ.  
10 Braeburn Dr.  
Princeton, New Jersey 08540  
609-924-2075  
Attorney for Plaintiffs  
NJ ATTORNEY ID 010751986

UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY

---

PRINCETON BATTLEFIELD AREA  
PRESERVATION SOCIETY, A New  
Jersey Not for Profit Corporation;  
KIP CHERRY; JERALD HURWITZ;  
WILLIAM MARSCH; RICH PATTERSON;  
BILL MEYER; GLENN WILLIAMS;

Plaintiffs/Appellants/

v.

INSTITUTE FOR ADVANCED STUDY; and  
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL  
PROTECTION,

Defendants/Appellees.

IN THE MATTER OF LETTER OF INTERPRETATION  
NOS. 1110-99-0009.1 and 1110-04-0009.2,  
INSTITUTE FOR ADVANCED STUDY, BLOCK 10501,  
LOT 1; BLOCK 10401, LOT 1, PRINCETON,  
MERCER COUNTY

---

**PLAINTIFF'S APPENDIX**



JP  
3-16-05

State of New Jersey

Department of Environmental Protection

Richard J. Codey  
Acting Governor

Bradley M. Campbell  
Commissioner

Land Use Regulation Program  
P.O. Box 439, Trenton, NJ 08625-0439  
Fax # (609) 292-8115  
www.state.nj.us/dep/landuse

MAR 14 2005

Steven W. Gardner  
Van-Note Harvey Associates  
777 Alexander Road  
Princeton, NJ 08540

RE: Freshwater Wetlands Letter of Interpretation/Line Verification-Reissuance  
Program Interest No.: 1110-04-0009.1  
Activity No.: FWW-040001-FWLIRI  
Applicant: Institute for Advances Study, c/o James Barbour  
Block: 10501 Lot: 1.01 (formerly lot 1)  
Princeton Township, Mercer County

Dear Mr. Gardner:

The New Jersey Department of Environmental Protection issued a Letter of Interpretation for the above referenced site on January 20, 2000. You have requested that the Letter of Interpretation be reissued in accordance with the requirements at N.J.A.C. 7:7A-3.7.

In accordance with agreements between the State of New Jersey Department of Environmental Protection, the U.S. Army Corps of Engineers Philadelphia and New York Districts, and the U.S. Environmental Protection Agency, the NJDEP, Land Use Regulation Program is the lead agency for establishing the extent of State and Federally regulated wetlands and waters. The USEPA and/or USACOE retains the right to reevaluate and modify the jurisdictional determination at any time should the information prove to be incomplete or inaccurate.

Based upon the information submitted, and upon a site inspection conducted on January 19, 2005, the Land Use Regulation Program has determined that the wetlands and waters boundary line(s) as shown on the plan map entitled: "PLAN SHOWING FRESHWATER WETLANDS OF BLOCK 10501, LOT 1, PREPARED FOR INSTITUTE FOR ADVANCED STUDY, SITUATED IN PRINCETON TOWNSHIP, MERCER COUNTY, NEW JERSEY," dated September 7, 1999, last revised, November 17, 1999, and prepared by Van-Note Harvey Associates, is accurate as shown.

Therefore the term of the original Letter of Interpretation is hereby extended to January 20, 2010, which is five years from the expiration of the original Letter of Interpretation.

Any activities regulated under the Freshwater Wetlands Protection Act proposed within the wetlands or transition areas or the deposition of any fill material into any water area, will require a permit from this office unless exempted under the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B -1 et seq., and implementing rules, N.J.A.C. 7:7A. A copy of this plan, together with the information upon which this boundary determination is based, has been made part of the Program's public records.

The freshwater wetlands and waters boundary line(s), as determined in this letter, must be shown on any future site development plans. The line(s) should be labeled with the above LURP file number and the following note:

PA0001

4x

"Freshwater Wetlands/Waters Boundary Line as verified by NJDEP PINo. 1110-04-0009.1."

In addition, the Department has determined that the wetlands on and off the subject property are of Intermediate and Exceptional Resource Values. The off site wetlands are of Exceptional value and are noted on the referenced plan by the following wetlands location points: W-3 to WB-10 and the standard transition area required adjacent to these wetlands is 150 feet. The remaining wetlands on site are Intermediate value wetlands and the standard transition area required adjacent to these wetlands is 50 feet. The Department has also identified State Open Waters on the property; they are noted on the referenced plan as "Existing Pond", and by the following points: SOW-12 to SOW-20, WB-80 to SOW-32, and SOW-32A to WB-73. Please note that a buffer is not required adjacent to State Open Waters under the Freshwater Wetlands Protection Act, but a 25-foot buffer is required under the Flood Hazard Area Control Act.

These classifications may affect the requirements for an Individual Wetlands Permit (see N.J.A.C. 7:7A-7), the types of Statewide General Permits available for the wetlands portion of this property (see N.J.A.C. 7:7A-5) and the modification available through a transition area waiver (see N.J.A.C. 7:7A-6). Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 *et seq.*) and implementing rules for additional information.

It should be noted that this determination of wetland classification is based on the best information presently available to the Department. The classification is subject to change if this information is no longer accurate, or as additional information is made available to the Department, including, but not limited to, information supplied by the applicant.

This letter in no way legalizes any fill, which may have been placed, or other regulated activities, which may have occurred on-site. Also this determination does not affect your responsibility to obtain any local, State, or Federal permits which may be required.

In accordance with N.J.A.C. 7:7A-1.7, any person who is aggrieved by this decision may request a hearing within 30 days of the decision date by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, PO Box 402, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist.

Please contact Courtney Levering of our staff at (609) 777-0454, should you have any questions regarding this letter. Be sure to indicate the Program's interest number in all communication.

Sincerely,



Lou Cattuna, Section Chief  
Bureau of Inland Regulation

- c: Princeton Township Environmental Commission  
Princeton Township Municipal Clerk  
Princeton Township Municipal Construction Official

2-51-55670->0  
WG



# State of New Jersey

Department of Environmental Protection

Robert C. Shinn, Jr.  
Commissioner

Christine Todd Whitman  
Governor

Land Use Regulation Program

P.O. Box 439  
Trenton, NJ 08625  
Fax # (609) 777-3656

JAN 20 2000

John Ryder  
Van Note Harvey Associates  
777 Alexander Road  
Princeton, NJ 08540

Re: Letter of Interpretation, Line Verification  
File No.: 1110-99-0003.1  
Applicant: Institute for Advanced Study  
Block: 10501; Lot: 1  
Princeton Township, Mercer County

RECEIVED

JAN 25 2000

VAN NOTE-HARVEY  
ASSOCIATES, P.C.

Dear Mr. Ryder:

This letter is in response to your request for a Letter of Interpretation to verify the jurisdictional boundary of the freshwater wetlands and waters on the referenced property.

In accordance with agreements between the State of New Jersey Department of Environmental Protection, the U.S. Army Corps of Engineers Philadelphia and New York Districts, and the U.S. Environmental Protection Agency, the NJDEP, Land Use Regulation Program is the lead agency for establishing the extent of State and Federally regulated wetlands and waters. The USEPA and/or USACOE retains the right to reevaluate and modify the jurisdictional determination at any time should the information prove to be incomplete or inaccurate.

Based upon the information submitted, and upon site inspections conducted on November 1, 1999 and December 21, 1999, the Land Use Regulation Program has determined that the wetlands and waters boundary line(s) as shown on the plan map entitled "PLAN SHOWING FRESHWATER WETLANDS OF BLOCK 10501, LOT 1 PREPARED FOR INSTITUTE FOR ADVANCED STUDY SITUATED IN PRINCETON TWP. MERCER CO., N.J.", dated September 7, 1999, last revised November 17, 1999, and prepared by Harry J. Sypniewski, is accurate as shown.

Any activities regulated under the Freshwater Wetlands Protection Act proposed within the wetlands or transition areas or the deposition of any fill material into any water area, will require a permit from this office unless exempted under the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq., and implementing rules, N.J.A.C. 7:7A. A copy of this plan, together with the information upon which this boundary determination is based, has been made part of the Program's public records.

Pursuant to the Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A-1 et seq.), you are entitled to rely upon this jurisdictional determination for a period of five years from the date of this letter.

The freshwater wetlands and waters boundary line(s), as determined in this letter, must be shown on any future site development plans. The line(s) should be labeled with the above LURP file number and the following note:

"Freshwater Wetlands/Waters Boundary Line as verified by NJDEP."

In addition, the Department has determined that the wetlands on the subject property are of intermediate resource value and the standard transition area or buffer required adjacent to these wetlands is 50 feet. The Department also have identified State open waters on the property, they are noted on the referenced plan by the following points SOW-12 through SOW-20 and WB-80/WB-73 through SOW-32/SOW-32A. There is no standard transition area required adjacent to State open waters. This classification may affect the requirements for an Individual Wetlands Permit (see N.J.A.C. 7:7A-3), the types of Statewide General Permits available for the wetlands portion of this property (see N.J.A.C. 7:7A-9) and the modification available through a transition area waiver (see N.J.A.C. 7:7A-7). Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing rules for additional information.

It should be noted that this determination of wetlands classification is based on the best information presently available to the Department. The classification is subject to change if this information is no longer accurate, or as additional information is made available to the Department, including, but not limited to, information supplied by the applicant.

This letter in no way legalizes any fill which may have been placed, or other regulated activities which may have occurred on-site. Also this determination does not affect your responsibility to obtain any local, State, or Federal permits which may be required.

In accordance with N.J.A.C. 7:7A-12.7, any person who is aggrieved by this decision may request a hearing within 30 days of the decision date by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, P.O. Box 402, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist.

Page 3  
Letter of Interpretation

Please contact John F. Kale of our staff at (609) 777-0454 should you have any questions regarding this letter. Be sure to indicate the Program's file number in all communication.

Sincerely,



Lou Cattuna, Section Chief  
Bureau of Inland Regulation

ds

c: Princeton Township Clerk  
Princeton Township Construction Official

Disk #58, File:A:11109031.DOC

RECEIVED STEVENS & LEE

JUL 16 2015

PREPARED BY THE COURT

PRINCETON BATTLEFIELD AREA  
PRESERVATION SOCIETY, A New  
Jersey Not for Profit Corporation;  
ASHER LURIE; KIP CHERRY;  
JERALD HURWITZ; MARK CROSBY;  
SALLY CROSBY; WILLIAM  
MARSCH; IAIN HAIGHT-ASHTON;  
KIM GALLAGHER; JOE CARNEY;  
MRS. CARNEY; RICH PATTERSON;  
PAUL LUANE; BILL MEYER; GLENN  
WILLIAMS; CHRISTOPHER WREN;  
JOSEPH CARNEY,

Plaintiffs,

v.

INSTITUTE FOR ADVANCED STUDY  
and PRINCETON PLANNING BOARD,

Defendants.

SUPERIOR COURT OF NEW JERSEY  
LAW DIVISION  
MERCER COUNTY

DOCKET NO. L-539-15

CIVIL ACTION

ORDER GRANTING APPLICATION  
FOR TEMPORARY RESTRAINTS AND  
GRANTING APPLICATION TO  
ACCELERATE THE BRIEFING AND  
HEARING SCHEDULE

Attorney for Plaintiffs:  
Bruce I. Afran, Esq.  
10 Braeburn Drive  
Princeton, NJ 08540  
609-924-2075

Attorney for Defendant Princeton Planning Board:  
Karen L. Cayci, Esq.  
HERBERT, VAN NESS, CAYCI & GOODELL, PC  
3131 Princeton Pike, Bldg 4, Suite 114  
Lawrenceville, NJ 08648  
609-924-2495

Attorneys for Defendant Institute for Advanced Study:  
Bradley L. Mitchell, Esq.  
Christopher S. Tarr, Esq.  
STEVENS & LEE  
Princeton Pike Corporate Center  
100 Lenox Drive, Suite 200  
Lawrenceville, NJ 08648  
609-243-9111

THIS MATTER having come before the court by way of an application by plaintiffs for temporary restraints; and the court having reviewed the parties' briefs and the record in this case; and the court having heard oral argument on July 14, 2015; and, during oral argument, counsel

9x

for the Institute for Advanced Study having made an oral application for the court to accelerate its briefing and hearing schedule on the merits of the complaint; and for the reasons set forth on the record, and for good cause shown:

**IT IS** on this 16th day of July, 2015 **HEREBY ORDERED** that:

1. The plaintiffs' application for temporary restraints is GRANTED. The Institute for Advanced Study is restrained from engaging in construction activities at the project site pending the court's consideration of the merits of Plaintiff's challenge to the Planning Board approval. The Institute for Advanced Studies may continue to maintain, on the project site, a construction fence, a construction trailer, telephone and electrical lines to the construction trailer, and a security camera.
2. The Institute for Advanced Study's oral application to accelerate the briefing and hearing schedule on the merits of the complaint is GRANTED.
3. The plaintiffs' brief is due on August 3, 2015.
4. The defendants' opposition is due on August 17, 2015.
5. The plaintiffs' reply is due on August 24, 2015.
6. Oral argument on the complaint in lieu of prerogative writs is scheduled for September 3, 2015 at 2:00 P.M.

*Mary C. Jacobson, A.J.C.*  
MARY C. JACOBSON, A.J.S.C.

Original Request



Kip Cherry <kcherry10@gmail.com>

---

## REQUEST FOR A MEETING ON A WETLANDS DELINEATION PROBLEM AT THE PRINCETON BATTLEFIELD

2 messages

---

Kip Cherry <kcherry10@gmail.com>

Tue, Apr 22, 2014 at 11:43 AM

To: Ginger.Kopkash@dep.state.nj.us, Dave.Fanz@dep.state.nj.us  
Cc: "Bateman, Sen. D.O." <senbateman@njleg.org>, Annmarie.Hoagland@dep.state.nj.us  
Bcc: "bruceafran@aol.com" <bruceafran@aol.com>, "Hurwitz, Jerald P" <jhurwitz@santander.us>, "REDCOAT43D@aol.com" <REDCOAT43D@aol.com>

Hi Ginger,

We, the Princeton Battlefield Society, have a concern regarding wetlands on the Princeton Battlefield (where a seminal battle was fought during the American Revolution), and where a housing project is now proposed abutting Princeton Battlefield Park.

The DEP issued two LOIs for this property in 2005 (attached). At the time that these LOIs were issued, the Battlefield Society was not notified and did not become aware of the proposed project or of the request for LOIs on this property abutting the Park. The Princeton Battlefield Society is the Official Friends Group (ORFO) for Princeton Battlefield Park and its responsibilities include preserving and protecting the Battlefield inside AND OUTSIDE of the Park.

In issuing its LOIs, it appears that DEP, for whatever reason, was unable to take into account the presence of additional wetlands on the property, which had been previously identified, but may not have been reported to DEP. An earlier wetland delineation (attached), certified/verified by a consultant (BCM Engineers) on behalf of the Princeton Regional Planning Board, was apparently not supplied to DEP and apparently not considered in issuing these LOIs.

The Princeton Battlefield Society subsequently commissioned Amy Greene to study this property and she has delineated wetlands that were not identified in the LOIs.

Most recently, the Delaware & Raritan Canal Commission voted NOT to approve the project, which, as designed, required a waiver from the DRCC.

We have now been informed that the applicant has redesigned the project to avoid the DRCC buffer, although the redesign still impacts wetlands on the site.

We are feeling a great urgency to meet with you and Dave Fanz, as soon as possible, to discuss our concerns. We would like to get an idea of whether DEP shares these concerns and determine what steps might be taken next.

Thank you very much.

Sincerely,




Kip

PA0008

//x

(Kip Cherry, 1<sup>st</sup> VP, Princeton Battlefield Society, kcherry10@gmail.com, 609-731-9336-cell

**3 attachments**

-  **Permit\_Exten\_&\_LOI\_Reis\_11-21-05-Block 10401.pdf**  
380K
-  **Wetland-LOI-10501-Verification Reissuance-3-14-05.pdf**  
79K
-  **ASG\_Statement\_for\_1990\_Study\_FINAL[1].pdf**  
1777K

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**Kip Cherry** <kcherry10@gmail.com>  
To: "brucefran@aol.com" <brucefran@aol.com>




Wed, Apr 23, 2014 at 4:05 PM

Hi Bruce, here is my e-mail to Ginger. It looks like I bcc'd you in.

Kip

[Quoted text hidden]

**3 attachments**

-  **Permit\_Exten\_&\_LOI\_Reis\_11-21-05-Block 10401.pdf**  
380K
-  **Wetland-LOI-10501-Verification Reissuance-3-14-05.pdf**  
79K
-  **ASG\_Statement\_for\_1990\_Study\_FINAL[1].pdf**  
1777K

PA0009

12x

E-mail Recommending SHPO



Kip Cherry <kcherry10@gmail.com>

---

**PREPARATIONS FOR OUR MEETING ON THURSDAY, MAY 29 AT 2PM**

1 message

---

**Kip Cherry** <kcherry10@gmail.com>

Tue, May 27, 2014 at 12:32 PM

To: Ginger.Kopkash@dep.state.nj.us

Cc: "Hoagland, AnnMarie" <Annmarie.Hoagland@dep.state.nj.us>

Hi Ms. Kopkash,

We are looking forward to our meeting on Thursday at 2pm.

In preparing for our meeting, we wanted to recommend that someone from SHPO be there because we believe that our findings will trigger the cultural resources review of Section 106.

Thanks very much!

Kip  
(Kip Cherry, 1st VP, Princeton Battlefield Society)

PA0010

134

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEETING SIGN-IN SHEET

DATE OF MEETING May 29, 2014

SUBJECT OF MEETING Princeton Battlefield

ATTNDEES NAME                      AFFILIATION                      PHONE #                      E-MAIL

Assistant Commissioner Ginger Kopkash	NJDEP - LUM	609-633-2201	ginger.kopkash@dep.state.nj.us
Dave Fanz Asst. Director	NJDEP - OLUM	609-633-2289	dave.fanz@dep.state.nj.us
John Gray Asst. Director	NJDEP - PCR	609.292.6877	john.gray@dep.state.nj.us
DAN SAUNDERS NJ HPO	DEP - HPO	609 633 2397	dan.saunders@dep.nj.gov
Lou Cattuna	DEP LAND, USE	609 984 2071	lou.cattuna@ " , "
Russ Smith, PE	Hopewell Valley Engineering, PC	(609) 745-5200	rsmith@hvpc.com
Bill Meyer	PBS - Trassur	(215) 353-0316	wm1000@aol.com
Bruce Aftan	Attorney - Battlefield	609-904-2075	bruceaftan@aol.com
Amy Green	Secretary Amy Green Trust	908 788 9474	Amygreen@ Amygreen.com
Kip Cherry	Princeton Battlefield	609-731- 5336	Kcherry10@gmail.com



Kip Cherry <kcherry10@gmail.com>

---

**THANKS FOR MEETING WITH US/NEXT STEPS (RESENDING)**

1 message

---

**Kip Cherry** <kcherry10@gmail.com> Mon, Jun 9, 2014 at 10:04 AM  
To: Ginger.Kopkash@dep.state.nj.us, Dave.Fanz@dep.state.nj.us, "Gray, John" <John.Gray@dep.state.nj.us>, Lou.Cattuna@dep.state.nj.us, Dan Saunders <dan.saunders@dep.state.nj.us>  
Cc: "Hoagland, AnnMarie" <Annmarie.Hoagland@dep.state.nj.us>, "bruceafran@aol.com" <bruceafran@aol.com>  
Bcc: "Bateman, Sen. D.O." <senbateman@njleg.org>

Dear Ginger,

On behalf of the Princeton Battlefield Society, thank you very much for meeting with us a little over a week ago. Our attorney, Bruce Afran, will be following up with you but I wanted to give you my own thanks.

As we discussed we are requesting that DEP revoke/vacate its LOIs for Blocks 10401 and 10501 associated with a proposed housing project in Princeton. We feel a great sense of urgency in obtaining a determination of what DEP intends to do.

Our contention is that the current LOIs are inaccurate and permit the destruction of wetlands that the DEP has the legal responsibility to protect.

The question is NOT whether DEP acted in good faith. The evidence is very clear that DEP was misled by the applicant in not receiving a copy of the 1990 study commissioned by the Applicant, which showed wetlands on the site. Unfortunately, such wetlands did not appear on maps submitted by the Applicant to DEP in 2000. This study was verified (certified) by BCM Engineers, on behalf of then Princeton Township, and the map was included in the 1992 Development Plan Agreement signed by the Applicant and Princeton Township to settle litigation over a previously planned housing development project at a different location.

In addition, we pointed out that the applicant failed to report geotechnical evidence of unreported wetlands derived from an April 6, 2011 geotechnical investigation that was commissioned by the Applicant for use by the Applicant's civil engineering firm for its application to the Princeton Planning Board and for design of site infrastructure. When in 2014, the applicant's engineering firm requested confirmation of a second LOI extension beyond the previous 2013 extension date, the Applicant's representatives continued to withhold this new boring information. (We did note at the meeting with you that the wetlands work was done by the same firm that had been commissioned to perform the engineering work, a clear conflict of interest.)

This new hydric soil evidence from a boring (hand auger A-4), was included in the logs of this Supplementary Geotechnical Investigation and submitted to the Planning Board in an Engineering Report. This new incontrovertible evidence under DEP's own Standard Guidelines, was taken from a location within one of the "new" wetlands that Ms. Greene had mapped. We obtained the study just before our meeting with you under an OPRA request, but the applicant has had this information since it was commissioned by them in 2011. (I have attached Melick-Tully's Boring Location Map and the relevant log for your use.)

Now that DEP has better information, it has a responsibility to act. We take this very seriously. Each LOI specifically states: *"It should be noted that this determination of wetlands classification is based on the*

15x

*best information presently available to the Department. The classification is subject to change if this information is no longer accurate, or as additional information is made available to the Department..."*

In addition to protecting wetlands under DEP's care, there is also a great probability that the site contains artifacts that are also in DEP's care. These artifacts will be disturbed by site development, resulting in the loss of interpretative data and almost certainly the permanent loss of important artifacts from both the Battle of Princeton and from ancient American Indians who lived along the Stony Brook area for some 10,000 years. As you know under an earlier site plan configuration for the proposed development, DEP previously had concluded that wetlands would, in fact, be impacted, which invoked New Jersey's implementation of Section 106 of the National Preservation Act. On this basis DEP did previously require a cultural resources review, resulting in an archaeological investigation revealing a large number of battle and American Indian artifacts. In addition, two Memos of Determination from then SHPO Officer Dorothy Guzzo were issued in 2006 and 2007. These memos concluded that the property was the site of major battle activity, was eligible for the National Register, and would be adversely impacted by the development.


The Princeton Battlefield Society believes that we are at a major turning point and that time is of the essence. We would like a decision before June 19<sup>th</sup>, when the Princeton Planning Board is scheduled to hold a hearing on this project. If the LOIs are revoked, as we are requesting, the Planning Board application would no longer be complete, obviating the need for a hearing until corrected LOIs can be put into place and a determination can be made as to whether there is any possibility that a qualified site plan can be proposed under the corrected LOIs.

We do sense an inclination at DEP to allow its extension of these LOIs to run out. The problem is that the applicant intends to start construction before then using the inaccurate LOIs that are currently in place to obtain additional approvals. We need a definitive decision to vacate the LOIs as soon as possible, and well before the 19th, so that we can proceed with other options as Mr. Afran described in response to one of your questions.

Thanks again!

Very sincerely,

Kip Cherry, 1<sup>st</sup> VP, Princeton Battlefield Society, 609-731-9336-cell)

 **Melick-Tully-hydric boring log.pdf**  
154K

39756-030-01  
Tony Bordieri  
TOS, JCR, RCB



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Land Use Management  
P.O. Box 402  
East State Street  
Trenton, NJ 08625-0402

CHRIS CHRISTIE  
Governor

KIM GUADAGNO  
Lt. Governor

BOB MARTIN  
Commissioner

RECEIVED

JUL - 6 2010

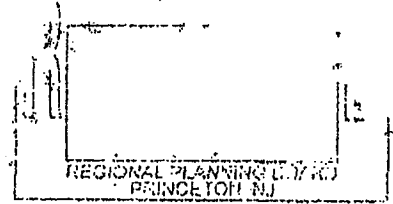
VAN.NOTE-HARVEY  
ASSOCIATES, P.C.

July 1, 2010



Steven Gardner  
Van Note-Harvey Associates  
777 Alexander Rd  
Princeton, NJ 08540

Re: **Permit Extension Act Verification Request**  
Program Interest No.: 1110-04-0009.2  
Activity No.: FWW- FWLIRI-050001  
Applicant: Institute for Advanced Study  
Block: 10401 Lot: 1  
Princeton Township, Mercer County



Dear Mr. Gardner:

I am writing in response to your request for a verification that the above referenced Letter of Interpretation has been extended under the Permit Extension Act of 2008. The Department has determined that the Letter of Interpretation has been extended until June 30, 2013. This date is the new expiration date for the Letter of Interpretation.

Sincerely,

Katrina Wessling



36387-300-31  
Sharon Goff, IAS  
TAC, TOS, BCB, SWG

State of New Jersey

Richard J. Codey  
Acting Governor

Department of Environmental Protection  
Land Use Regulation Program  
P.O. Box 439, Trenton, NJ 08625-0439  
Fax # (609) 777-3656  
www.state.nj.us/dep/landuse

Bradley M. Campbell  
Commissioner

Steven W. Gardner  
Van-Note Harvey Associates  
777 Alexander Road  
Princeton, NJ 08540

RECEIVED

DEC -2 2005

NOV 21 2005

VAN NOTE HARVEY  
ASSOCIATES, P.C.

6

RE: Freshwater Wetlands Letter of Interpretation/Line Verification-Reissuance  
Program Interest No.: 1110-04-0009.2  
Activity No.: FWW-FWLIRI-050001  
Applicant: Institute for Advanced Study  
Block: 10401 Lot: 1  
Princeton Township, Mercer County

Dear Mr. Gardner:

The New Jersey Department of Environmental Protection issued a Letter of Interpretation for the above referenced site on October 4, 2000. You have requested that the Letter of Interpretation be reissued in accordance with the requirements at N.J.A.C. 7:7A-3.6.

In accordance with agreements between the State of New Jersey Department of Environmental Protection, the U.S. Army Corps of Engineers Philadelphia and New York Districts, and the U.S. Environmental Protection Agency, the NJDEP, Land Use Regulation Program is the lead agency for establishing the extent of State and Federally regulated wetlands and waters. The USEPA and/or USACOE retains the right to reevaluate and modify the jurisdictional determination at any time should the information prove to be incomplete or inaccurate.

Based upon the information submitted, and upon a site inspection conducted on October 3, 2000, the Land Use Regulation Program has determined that the wetlands and waters boundary line(s) as shown on the plan map entitled: "PLAN SHOWING FRESHWATER WETLANDS OF BLOCK 10401, LOT 1, PREPARED FOR INSTITUTE FOR ADVANCED STUDY, SITUATED IN PRINCETON TOWNSHIP, MERCER COUNTY, NEW JERSEY," dated September 7, 2000, unrevised, and prepared by Harry J. Sypniewski of Van-Note Harvey Associates, is accurate as shown.

Therefore the term of the original Letter of Interpretation is hereby extended to October 4, 2010, which is five years from the expiration of the original Letter of Interpretation.

Any activities regulated under the Freshwater Wetlands Protection Act proposed within the wetlands or transition areas or the deposition of any fill material into any water area, will require a permit from this office unless exempted under the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B -1 et seq., and implementing rules, N.J.A.C. 7:7A. A copy of this plan, together with the information upon which this boundary determination is based, has been made part of the Program's public records.

The freshwater wetlands and waters boundary line(s), as determined in this letter, must be shown on any future site development plans. The line(s) should be labeled with the above LURP file number and the following note:

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PA0015

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"Freshwater Wetlands/Waters Boundary Line as verified by NJDEP PI No. 1110-04-0009.2."

The Department has determined that the delineated feature is a State open water and is noted on the referenced plan as "Limits of State open water". Please note that a buffer is not required adjacent to State Open Waters under the Freshwater Wetlands Protection Act, but a 25-foot buffer is required under the Flood Hazard Area Control Act. This classification may affect the requirements for an Individual Wetlands Permit (see N.J.A.C. 7:7A-7), the types of Statewide General Permits available for the wetlands portion of this property (see N.J.A.C. 7:7A-5) and the modification available through a transition area waiver (see N.J.A.C. 7:7A-6). Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 *et seq.*) and implementing rules for additional information.

It should be noted that this determination of wetlands classification is based on the best information presently available to the Department. The classification is subject to change if this information is no longer accurate, or as additional information is made available to the Department, including, but not limited to, information supplied by the applicant. Under N.J.S.A. 13:9B-7a(2), if the Department has classified a wetland as exceptional resource value, based on a finding that the wetland is documented habitat for threatened and endangered species that remains suitable for use for breeding, resting or feeding by such species, an applicant may request a change in this classification. Such requests for a classification change must demonstrate that the habitat is no longer suitable for the documented species because there has been a change in the suitability of this habitat. Requests for resource value classification changes and associated documentation should be submitted to the Land Use Regulation Program, P.O. Box 439, Trenton, New Jersey 08625.

This letter in no way legalizes any fill, which may have been placed, or other regulated activities, which may have occurred on-site. Also this determination does not affect your responsibility to obtain any local, State, or Federal permits which may be required.

In accordance with N.J.A.C. 7:7A-1.7, any person who is aggrieved by this decision may request a hearing within 30 days of the decision date by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, PO Box 402, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist.

Please contact Courtney Levering of our staff at (609) 777-0454, should you have any questions regarding this letter. Be sure to indicate the Program's interest number in all communication.

Sincerely,



Lou Cattuna, Section Chief  
Bureau of Inland Regulation

c: Princeton Township Environmental Commission  
Princeton Township Municipal Clerk  
Princeton Township Municipal Construction Official  
DEP, Parks and Forestry



## CERTIFICATE OF APPROVAL

DRCC# and Project Name: 14-3791B Institute for Advanced Study Faculty Housing

Notice is hereby given that the Delaware and Raritan Canal Commission issues this Certificate of Approval to the Institute for Advanced Study for the project known as 14-3791B Institute for Advanced Study Faculty Housing, located within the Municipality of Princeton, Mercer County, Block 10401, Lot 1, and Block 10501, Lot 1.01.

Signed:  Date: February 18, 2015

Expiration date of this approval: February 18, 2020

This Certificate of Approval shall be effective immediately, conditioned upon compliance with the following items, numbered one through 5.

1. There shall be no disturbance of the stream corridor buffer;
2. the applicant shall construct a temporary chain link/snow/silt fence prior to beginning of construction to keep all work out of the corridor;
3. the applicant shall give notice to the commission that the fence is in place and commission staff shall inspect the fence and approve its location;
4. the commission shall advise Princeton of the purpose and importance of the fence; and
5. a commission engineer shall review and give final approval of the plans to review the drains.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Chris Christie, Governor, Kim Guadagno, Lt. Governor Bob Martin, Commissioner

PRALLSVILLE MILLS 33 RISLER STREET P.O. BOX 539 STOCKTON, NJ 08559-0539  
(609) 397-2000 FAX: (609) 397-1081 www.dandrcanal.com

PA0017

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DRCC# and Project Name: 14-3791B Institute for Advanced Study Faculty Housing

RESOLUTION CONCERNING PROPOSED PROJECT IN THE  
DELAWARE AND RARITAN CANAL REVIEW ZONE

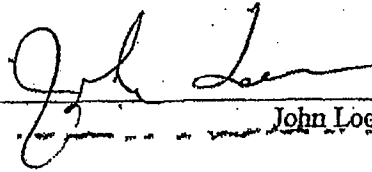
WHEREAS, the Delaware and Raritan Canal Commission (hereinafter "Commission") has received an application for a proposed project in the review zone on Block 10401, Lot 1, and Block 10501, Lot 1.01, located within the Municipality of Princeton, Mercer County (the "project");

WHEREAS, the Executive Director has recommended an approval of the proposed project;

WHEREAS, the Commission concurs in the recommendations of the Executive Director;

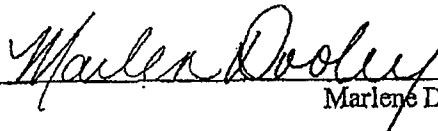
NOW, THEREFORE BE IT RESOLVED THAT:

1. The Commission approves, subject to any and all conditions attached on Schedule A, the proposed project as depicted on engineering plans and specifications prepared by Van Note-Harvey Associates, and listed in the Commission's Staff Report dated January 16, 2015, and approved by the Municipality of Princeton/Mercer County.
2. The Executive Director is directed to forward a copy of the resolution to the Municipality of Princeton/Mercer County and to the applicant.



John Loos, Vice Chairman

I hereby certify the foregoing to be a true copy of the resolution adopted by the Delaware and Raritan Canal Commission at their meeting of February 18, 2015.



Marlene Dooley, Secretary

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Chris Christie, Governor, Kim Guadagno, Lt. Governor Bob Martin, Commissioner

PRALLSVILLE MILLS 33 RISLER STREET P.O. BOX 539 STOCKTON, NJ 08559-0539  
(609) 397-2000 FAX: (609) 397-1081 www.dandrcanal.com

PA0018

DRCC# and Project Name: 14-3791B Institute for Advanced Study Faculty Housing

Schedule A

1. There shall be no disturbance of the stream corridor buffer;
2. the applicant shall construct a temporary chain link/snow/silt fence prior to beginning of construction to keep all work out of the corridor;
3. the applicant shall give notice to the commission that the fence is in place and commission staff shall inspect the fence and approve its location;
4. the commission shall advise Princeton of the purpose and importance of the fence; and
5. a commission engineer shall review and give final approval of the plans to review the drains.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Chris Christie, Governor, Kim Guadagno, Lt. Governor Bob Martin, Commissioner

PRALLSVILLE MILLS 33 RISLER STREET P.O. BOX 539 STOCKTON, NJ 08559-0539  
(609) 397-2000 FAX: (609) 397-1081 [www.dandrcanal.com](http://www.dandrcanal.com)

PA0019

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JUN 19 2015

*Alvin K...*

DEPUTY CLERK OF SUPERIOR COURT

SUPERIOR COURT OF NEW JERSEY  
LAW DIVISION  
MERCER COUNTY

Docket No.: L-539-15

Civil Action

STIPULATION AND ORDER

PRINCETON BATTLEFIELD AREA  
PRESERVATION SOCIETY, A New Jersey Not  
For Profit Corporation; ASHER LURIE; KIP  
CHERRY, JERALD HURWITZ; MARK  
CROSBY; SALLY CROSBY; WILLIAM  
MARSCH; IAIN HAIGHT-ASHTON; KIM  
GALLAGHER; JOE CARNEY; MRS. CARNEY;  
RICH PATTERSON; PAUL LUANE; BILL  
MEYER; GLEN WILLIAMS; CHRISTOPHER  
WREN; JOSEPH CARNEY,

Plaintiffs,

-against-

INSTITUTE FOR ADVANCED STUDY and  
REGIONAL PLANNING BOARD OF  
PRINCETON,

Defendants.

WHEREFORE, Plaintiffs and Defendant the Institute for Advanced Study ("IAS")  
hereby stipulate and enter into this agreement ("Agreement"), the terms of which follow:

1. The parties agree on the following schedule for briefing and argument on Plaintiffs' expected application for injunctive relief:
  - A. Plaintiffs' moving papers shall be served via email on IAS by 5:00 PM on July 3, 2015, and filed on the next business day with hard copy to defendants to follow;
  - B. IAS shall file and serve its opposition papers via email not later than July 10, 2015, with hard copy to follow that same day;
  - C. The Court shall hear oral argument in connection with the application on July 14, 2015, at 10:30 A.M.

D. Plaintiffs represent that they do not intend to seek injunctive relief against Defendant Regional Planning Board of Princeton, it being understood that this representation does not prejudice any right of the parties with respect to the validity, legality or enforceability of the Planning Board Resolution and/or approval of the IAS site plan application and/or its conditions that otherwise remain a subject of this action on the merits.

2. It is understood that, for purposes of this Agreement, the term "project site" is the 21- acre, plus or minus, site depicted on the site plan and the attached drawing, including the Historic Preservation Buffer Zone and other open space components described on the site plan application. The only activity to be permitted on the project site or the proposed area of disturbance prior to resolution of Plaintiffs' expected application for restraining order or injunctive relief as set forth in paragraph 1 above is that IAS may place a temporary chain link fence without permanent footings in accordance with the boundaries of the "Limit of Disturbance" set forth on the attached drawing. The construction fence is intended to protect persons from any injury on the site and to protect equipment already placed on the site. In addition, it is agreed that IAS may install a security camera and run electrical power and telephone lines to the construction trailer currently on the site. No other construction-related or development activity shall take place on the site during the period when this Agreement is in force or effect. It is understood that the attached drawing is solely for purposes of illustrating the location of the fenced area under this Agreement and does not comprise any admission by any party as to any issue or claim arising under this action including, without limitation, whether the proposed development meets the minimum acreage for a cluster development under existing municipal or state law, or any other issues, claims or rights.

3. This Agreement is not to be construed as an admission by Plaintiffs of any right of IAS to construct the faculty housing project.

4. IAS represents that, other than the activities described in paragraph 2, no additional equipment or construction vehicles, supplies and/or natural materials (dirt, rock, fill, and the like) are to be brought to the project site or to the proposed area of disturbance during the period in which this Agreement is operative and/or in effect. It is understood that equipment, trailers, etc. may be removed from the premises by IAS or its contractors. Nothing herein shall bar the movement or entry to the site of emergency or utility vehicles in case of fire, lightning strike or other natural disaster.

5. This Agreement shall terminate on the earlier of the following events: (i) the Law Division's disposition of Plaintiffs' expected application for injunctive relief as described in paragraph 1, or; (ii) Plaintiffs' failure to file an application for injunctive relief as described in paragraph 1.

6. It is understood that nothing herein shall preclude or bar Plaintiffs from seeking a further stay or injunctive relief from the Law Division or the appellate courts as to this action following the Law Division's decision on Plaintiffs' anticipated application for injunctive relief. IAS reserves all defenses and other legal or equitable rights in connection with any such application by Plaintiffs.

7. This Agreement is without prejudice to the legal rights, claims, defenses, counterclaims or other rights and interests of the plaintiffs, defendants or any third persons or parties. In particular, this Agreement is without prejudice to:

- A. Any right of IAS to claim, assert, seek relief or bring action as to any right or claim as the owner of or titleholder to such property to fence or bar access to the proposed area of disturbance or to the project site in its entirety; or
- B. Any right of Plaintiffs or any third persons to claim, assert, seek relief or bring action as to any right or claim to access to the proposed area of disturbance or to the project site in its entirety by easement, prescription, prescriptive right or otherwise.

It is understood that both Plaintiffs and IAS retain all rights, claims, defenses or other legal or equitable positions as to any of the foregoing in particular or as to any other issues in their existing disputes, pending actions or any other claims. The parties agree that this Agreement is without prejudice to their rights as to claims or issues in any other action or proceeding including without limitation the Plaintiffs' pending appeal to the Appellate Division of the approval of the IAS site plan by the Delaware & Raritan Canal Commission.

8. This Agreement and its particular provisions is a temporary standstill agreement representing a mutual accommodation of the parties to each other during the period when the Court is considering the expected application for injunctive relief described in paragraph 1, and is not to be construed as a waiver, release, estoppel, adjudication or disposition in any manner of any rights, claims, legal or equitable positions, grounds for relief or any issues or claims in any litigation. No rights, claims or legal or equitable positions are deemed adjudicated, resolved, disposed of or waived, released or settled by this Agreement and/or its particular provisions.

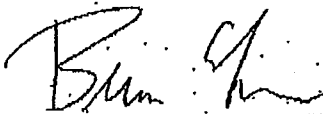
9. Plaintiffs and IAS agree that either or both of them may make and release the following statement as to the Agreement and the schedule of construction activities: "The Institute and the Battlefield Society have reached an agreement under which the Institute will

limit its work at the site to the construction of a security fence pending resolution by the Court in July of the Society's request for an injunction. The parties agree that there will be no further public statements about the agreement and the schedule of construction activities until that time."

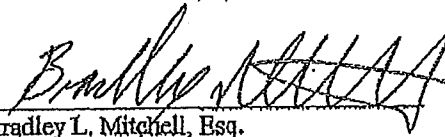
Dated: June 17, 2015

Bruce L. Afran  
Attorney for Plaintiffs

STEVENS & LEE  
Attorneys for Defendant  
The Institute for Advanced Study

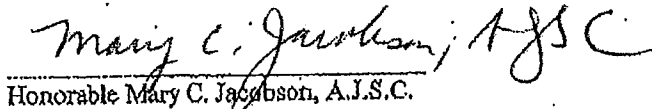


Bruce L. Afran, Esq.

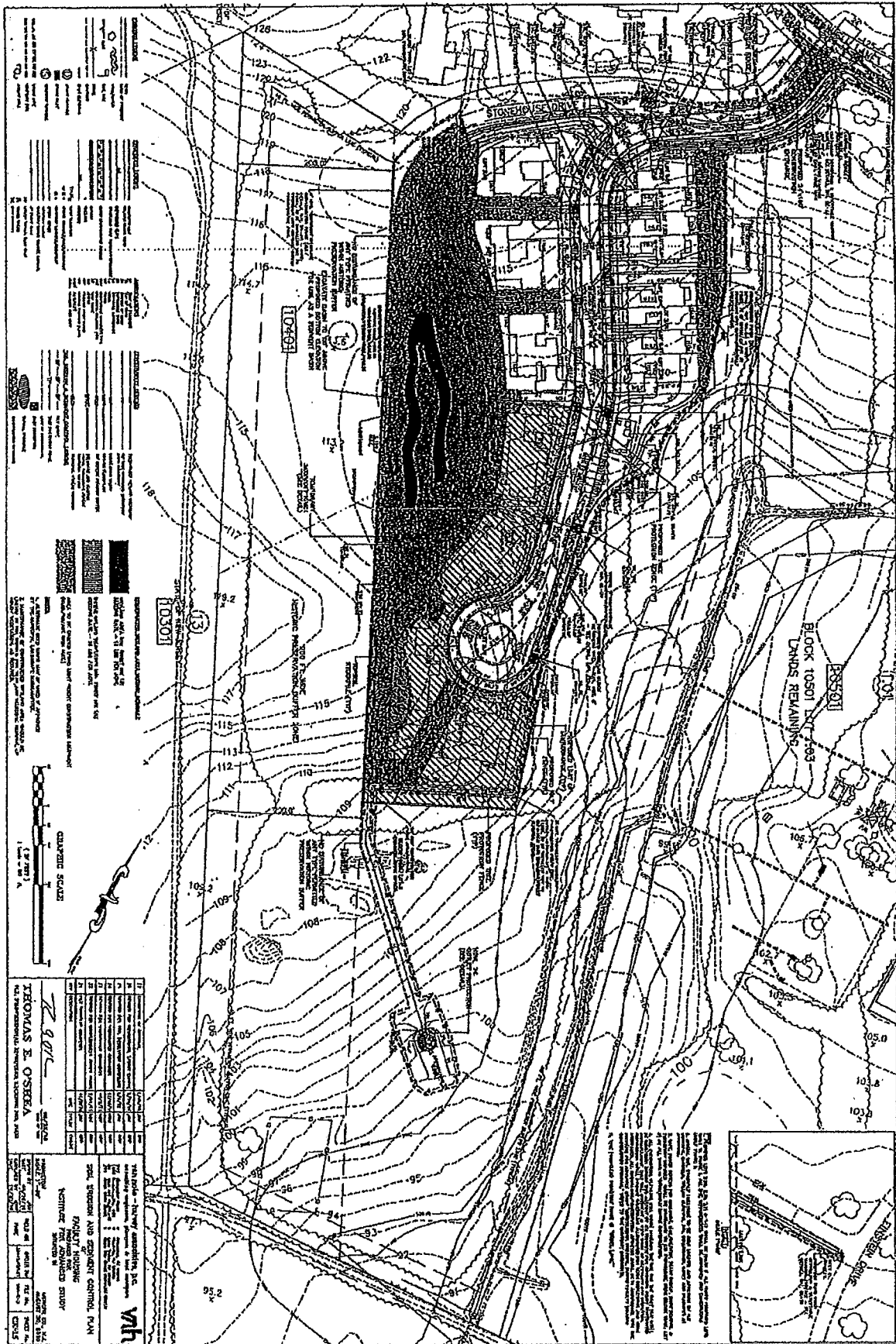


Bradley L. Mitchell, Esq.

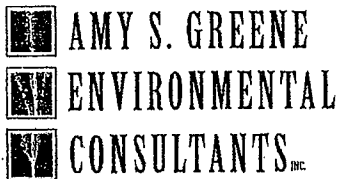
SO ORDERED:



Honorable Mary C. Jacobson, A.J.S.C.



28x



AMY S. GREENE

ENVIRONMENTAL

CONSULTANTS, INC.

**SIGNED STATEMENT REGARDING PRELIMINARY WETLAND INVESTIGATION  
FOR THE INSTITUTE FOR ADVANCED STUDIES IN 1990**

I, Amy S. Greene, President of Amy S. Greene Environmental Consultants, Inc., attest to the following statements as true and accurate regarding a Preliminary Wetlands Investigation completed for the Institute for Advanced Studies in 1990. I further attest that the following was discussed with Douglas J. Chabrak, a Project Manager at Amy S. Greene Environmental Consultants, Inc., on January 19, 2012.

1. Two (2) representatives of Amy S. Greene Environmental Consultants, Inc., Amy S. Greene and Barbara Rosensteel, performed a preliminary wetland assessment on property owned by the Institute for Advanced Studies located within the Township of Princeton, Mercer County, New Jersey on May 23 and 23, 1990;
2. The preliminary wetland investigation included a review of existing, available information and existing wetland mapping prepared by the U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) and the New Jersey Department of Environmental Protection prior to performing the field visits;
3. An approximate location of wetlands was established on the subject property through the completion of representative hand soil borings, an observation of dominant vegetation communities and noting of signs of hydrology;
4. The methodology employed to establish an approximate wetlands limit is enumerated in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (1989), which is the methodology accepted by the New Jersey Department of Environmental Protection (NJDEP);
5. The Regional Planning Board of Princeton engaged the services of BCM to review and verify the results of the preliminary wetland assessment. A representative of BCM, Scott Bush, met Amy S. Greene and Barbara Rosensteel on the subject property on December 27, 1990 to review and verify the approximate wetlands limit in the field; and,
6. BCM concurred with the preliminary wetlands mapping prepared by Amy S. Greene Environmental Consultants, Inc. and added three (3) small wetland areas to the plan. BCM's findings are memorialized in a report entitled *Preliminary Wetlands Investigation Verification, Institute for Advanced Studies Site*, dated January 1991, prepared by BCM. A copy of this report is attached. Illustrations which depict the approximate location of wetlands established in 1990 in the area of the proposed project are attached.

**CERTIFICATION**

Sworn before me this day of

January 24, 2012

Notary Public

**SUSAN M. KAMICH  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires April 13, 2015**

Amy S. Greene

K  
A6

PRELIMINARY WETLANDS INVESTIGATION VERIFICATION  
INSTITUTE FOR ADVANCED STUDIES SITE

PREPARED FOR  
THE PRINCETON REGIONAL PLANNING BOARD

BY

BCM ENGINEERS, INC.

JANUARY 1991



Engineers, Planners, Scientists and Laboratory Services  
One Plymouth Meeting • Plymouth Meeting, PA 19462 • Phone: (215) 825-3800

PA0027

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WETLANDS INVESTIGATION VERIFICATION REPORT  
INSTITUTE FOR ADVANCED STUDY SITE

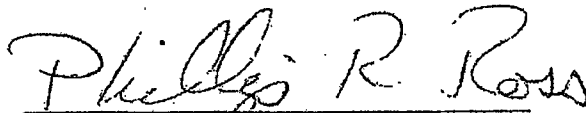
FOR

PRINCETON REGIONAL PLANNING BOARD  
PRINCETON, NEW JERSEY

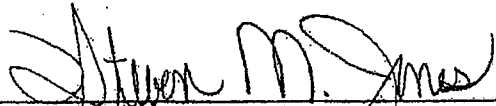
JANUARY 1991

BCM PROJECT NO. 00-0420-01

PREPARED BY



PHILIP R. ROSS  
ENVIRONMENTAL SCIENTIST



STEVEN M. JONES, PH.D.  
SECTION MANAGER





Executive Summary

BCM Engineers, Inc. (BCM) was retained by the Princeton Regional Planning Board to verify a preliminary wetlands investigation performed by Amy S. Greene, Inc. (Amy Greene) on the Institute for Advanced Studies (IAS) property. BCM reviewed sources of secondary information and conducted a three day site investigation to assess the accuracy of the Amy Greene study. Representatives of Amy Greene accompanied BCM during one of the field days. BCM identified and representatives of Amy Greene concurred with the addition of three small wetlands on the IAS site. These areas were added to the site plan and the results of the investigation on the remainder of the site indicate that the preliminary study is accurate.

## 1.0 Project Purpose

The Princeton Regional Planning Board is considering the purchase of property associated with the Institute for Advanced Study (IAS) in the Borough of Princeton. Green Acres funds will be used should this purchase occur. Green Acres regulations do not require a formal wetland delineation or a Letter of Interpretation (LOI) from the New Jersey Department of Environmental Protection (NJDEP) on the property to be acquired. However, informal identification of wetlands by a qualified consultant is required by Green Acres.

A preliminary investigation to identify the approximate location of wetlands on the IAS site had been performed for the IAS by wetlands scientists from the firm of Amy S. Greene, Inc. (Amy Greene) of Flemington New Jersey. The Princeton Regional Planning Board retained BCM Engineers, Inc. (BCM) to conduct an investigation to assess the accuracy of the Amy Greene study. This report presents the results of that investigation.

## 2.0 Secondary Data Review

BCM reviewed sources of secondary data prior to conducting a site investigation to determine the likelihood and approximate location of potential wetlands on the site. The Princeton Quadrangle of the United States Geologic Survey (USGS) in Appendix A indicates that water features on the site include the D & R Canal on the eastern border and Stony Brook immediately west of the D & R Canal. The USGS map also indicates that topography slopes gently from west to east and that the site is forested in its northern and eastern portions. The Princeton Quadrangle of the National Wetlands Inventory (NWI) map in Appendix B indicates that the site contains one small open water body, a large area of forested and emergent wetlands west of Quaker Road, and extensive areas of forested and emergent wetlands in the eastern portion of the site between Stony Brook and the D & R Canal. NJDEP Freshwater Wetlands Maps No. 78-2 and 78-4 identify the wetlands shown on the NWI maps as well as several other wetlands areas. The additional wetlands shown on the NJDEP maps include a forested wetland south of Fuld Hall, an emergent wetland in the southeast portion of the site, and additional areas of forested and emergent wetlands adjacent to Stony Brook. The Mercer County Soil Conservation Service (SCS) map in Appendix C indicates that the soil series occurring on the site are: the Birdsboro sandy loam, the Bowmansville silt loam, and the Rowland silt loam. The National Technical Committee for Hydric Soils identifies the Bowmansville series as a hydric soil (a soil that is saturated for significant periods of time) and the

Rowland series as containing hydric components of Bowmansville soils. The Birdsboro series is not identified as a hydric soil. Detailed descriptions of these soil series are provided in Appendix D.

The review of secondary data indicates that wetlands are likely to occur in the eastern portion of the site near Stony Brook and the D & R Canal and on the portion of the site to the west of Quaker Road. In addition a small pond is likely to occur on the site near Fuld Hall with a forested wetland located immediately south of the pond.

### 3.0 Field Investigation

BCM conducted a field investigation of the IAS site from December 26 through December 28, 1990. Representatives of Amy Greene were present on December 27, 1990. The field investigation was conducted using the methodology outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (Federal Interagency Committee for Wetlands Delineation, 1989) and included soil sampling, vegetation identification, and observation of indications of hydrology (the presence of water). Soils and vegetation on the site have not been significantly disturbed and therefore areas in which all three parameters were indicative of wetlands (i.e. soils that are hydric, vegetation that is likely to grow in saturated conditions, and indicators that show the presence of water) were identified as meeting the criteria of a jurisdictional wetland. The three types of wetlands identified on the IAS site were: forested wetlands, scrub/shrub wetlands, and emergent wetlands. Forested wetlands contain a mature canopy layer; scrub/shrub wetlands lack a mature canopy layer, but contain young tree saplings and/or a mature layer of shrubs; and emergent wetlands lack mature canopy and shrub layers, but rather contain only herbaceous plant species. The site plan in Appendix E presents the wetlands identified by the Amy Greene study as well as the wetlands added as a result of BCM's verification investigation.

#### Wetlands West of Quaker Road

The site plan indicates that the entire portion of the site west of Quaker Road consists of forested and emergent wetlands. These results are in agreement with the information contained in the NWI and NJDEP maps. This area contains vegetation indicative of wetlands including red maple (Acer rubrum), silver maple (Acer saccharinum), silky dogwood (Cornus amomum), common rush (Juncus effusus), blue vervain (Verbena hastata), cattail (Typha latifolia), panic grasses (Panicum sp.), and other grass species. The soil in this area generally matches the typical profile of the hydric Bowmansville soil series. Indicators of wetlands

hydrology present during the field investigation included saturated soils and areas of standing water.

Wetlands Along Stony Brook and D & R Canal

The site plan indicates that the entire portion of the site from Stony Brook east to the D & R Canal is an area of emergent and forested wetlands. These results are in agreement with the information contained in the NJDEP maps. Vegetation in this area is indicative of wetlands and includes rushes, sedges (Carex sp.), cattail, and grasses in emergent wetland areas and red maple, silver maple, river birch (Betula nigra), spicebush (Lindera benzoin), and grasses in forested wetland areas. The soils in these areas generally match the typical profiles of the hydric Bowmansville and Rowland soil series. Indicators of wetlands hydrology observed during the field investigation include saturated soils and areas of standing and flowing water.

Pond Near Fuld Hall

The site plan indicates that a small pond with an emergent wetland fringe is present several hundred yards south of Fuld Hall. These results are in agreement with the information provided in the NWI and NJDEP maps. The pond meets the definition of an "open water" of the State of New Jersey. The borders of the pond are vegetated with plant species that are indicative of wetlands including rushes, sedges and cattails. The soils are saturated "muck" soils and standing water was observed in this area during the field investigation.

Wetlands Along Two Small Channels

The site plan indicates that two small streams cross the northeast portion of the site. Emergent and forested wetlands are associated with these streams. One area is located to the northwest and the other to the northeast of Fuld Hall. In addition BCM's verification investigation identified three additional areas of wetlands connected to these small channels (these areas are denoted in green on the site plan in Appendix E). The wetland located south of Fuld Hall is in the general area of the wetland identified on the NJDEP Wetlands maps, but the wetland identified to the north of Fuld Hall is not shown on any of the secondary sources.

The stream that is situated northwest of Fuld Hall drains an emergent and forested wetland, runs to the southeast, and empties into Stony Brook. The vegetation along this stream is indicative of wetlands and includes sweet gum (Liquidambar styraciflua), American beech (Fagus grandifolia), red maple, silky dogwood, spicebush, common

rush, cattail, and grasses. The soil in this area generally matches the typical profile of the hydric Bowmansville series and indicators of wetland hydrology observed during the field investigation included areas of saturated soil as well as areas of standing and flowing water. A small area of additional wetlands contiguous with the stream was identified during the field investigation. The area is vegetated with silky dogwood and common rush, contains soil matching the typical Bowmansville profile, and contains areas of saturated soils.

The second stream drains a small emergent wetland that is situated northeast of Fuld Hall. The stream runs southeast and empties into Stony Brook. The vegetation in this area is indicative of wetlands and includes red maple, sweet gum, silky dogwood, spicebush, rushes, and grasses. The soils in the area match the typical profile of the hydric Bowmansville series and indicators of wetlands hydrology observed in the field include saturated soils and areas of standing and running water. A small area of additional emergent wetland and a drainage ditch were identified during the field investigation. The additional emergent wetland is vegetated with rushes, sedges, and grasses, contains soils matching the typical profile of the Bowmansville series, and contains areas of standing water. The drainage ditch is located east of the small stream and parallels the route of the stream. The ditch is vegetated with grasses and rushes and contained running water at the time of the field investigation.

#### Upland Fields

The site plan indicates that the central portion of the site is predominantly open, upland fields. These areas are vegetated with a variety of upland grasses. The soils in these areas generally match the typical profiles of the non-hydric Rowland and Birdsboro series. No indicators of wetlands hydrology were observed in these areas during the field investigation.

#### 4.0 Conclusions

The results of this investigation indicate that, with the exception of three small, additional areas of wetlands, the preliminary wetlands study performed on the IAS site by wetlands scientists from Amy Greene, Inc. is accurate. Wetlands identified on the site include: emergent wetlands on the entire portion of the site west of Quaker Road; areas of emergent and forested wetlands on the entire portion of the site along Stony Brook and the D & R Canal; a small pond with an emergent wetland fringe on its banks; areas of emergent, scrub/shrub, and forested wetlands associated with a small stream west of Fuld Hall; and areas of emergent and

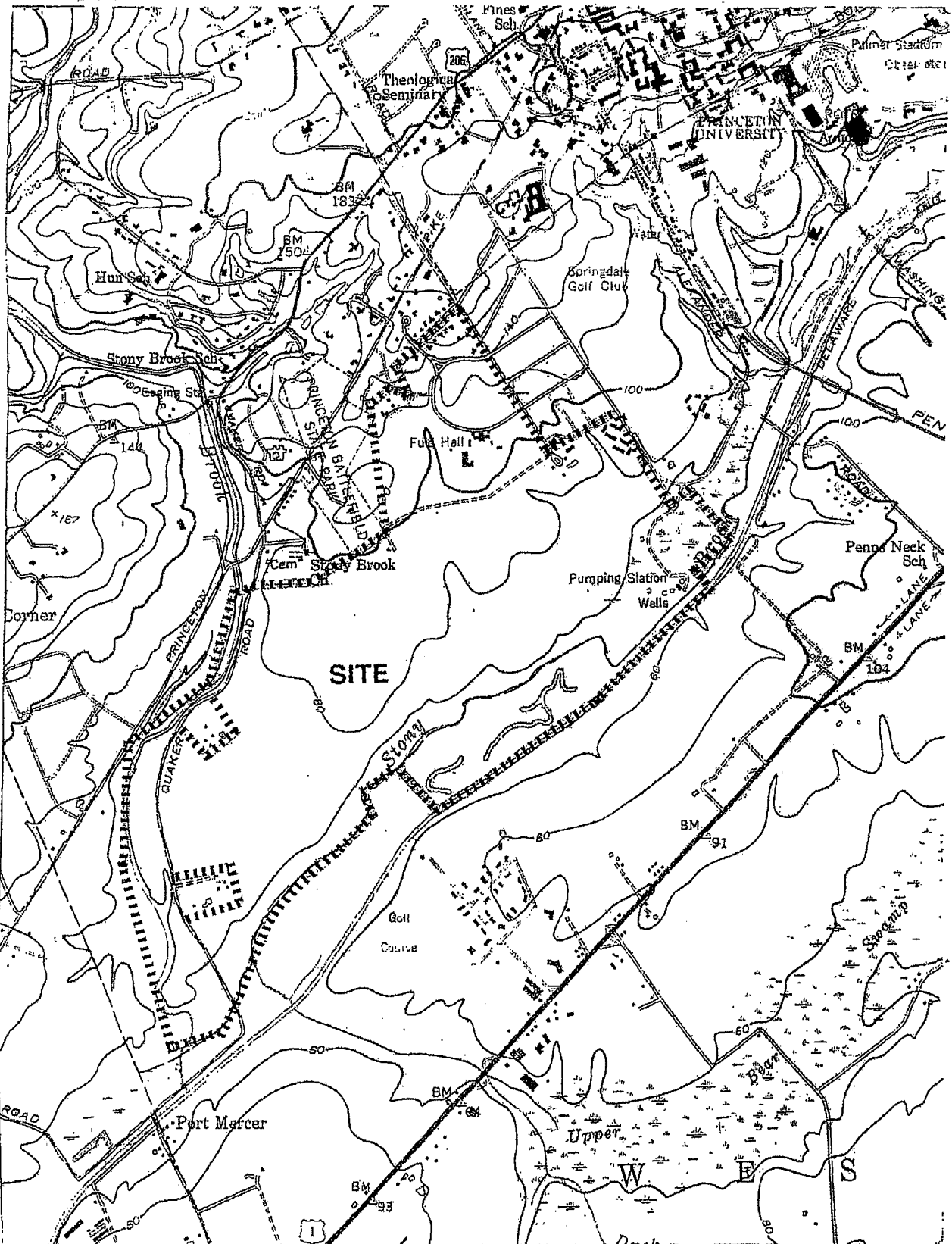
BCM

forested wetlands associated with a small stream east of Fuld Hall. This verification investigation identified (and representatives of Amy Greene concurred with) three small additional areas of wetlands on the site beyond those areas identified by the Amy Greene preliminary study. One scrub-shrub/emergent wetland was identified along the small stream west of Fuld Hall and an emergent wetland and a drainage ditch were identified along the small stream east of Fuld Hall.

PA0034

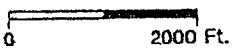
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IAS SITE



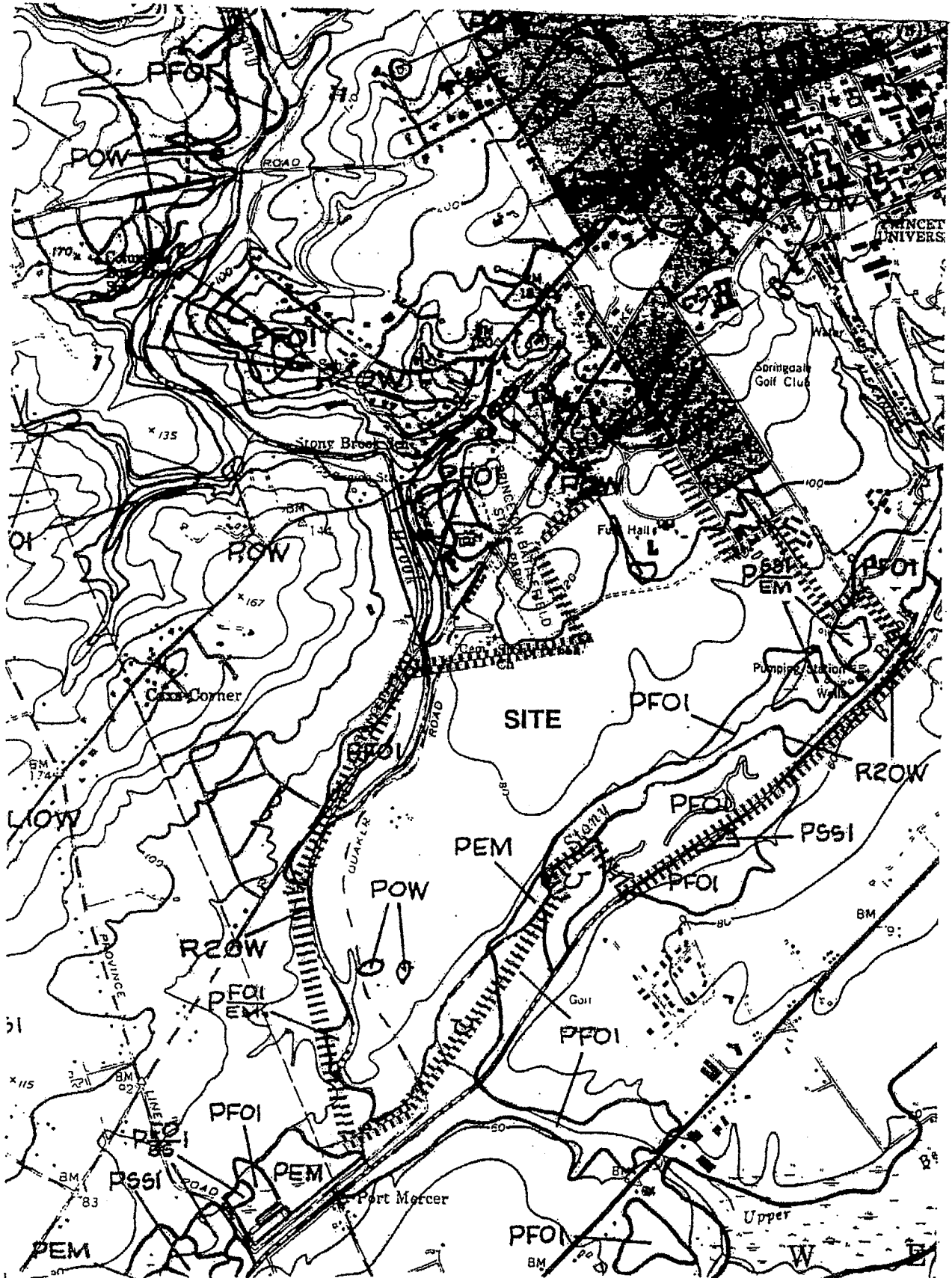
USGS Quadrangle: Princeton, NJ

BCM Project No. 00-0420-01

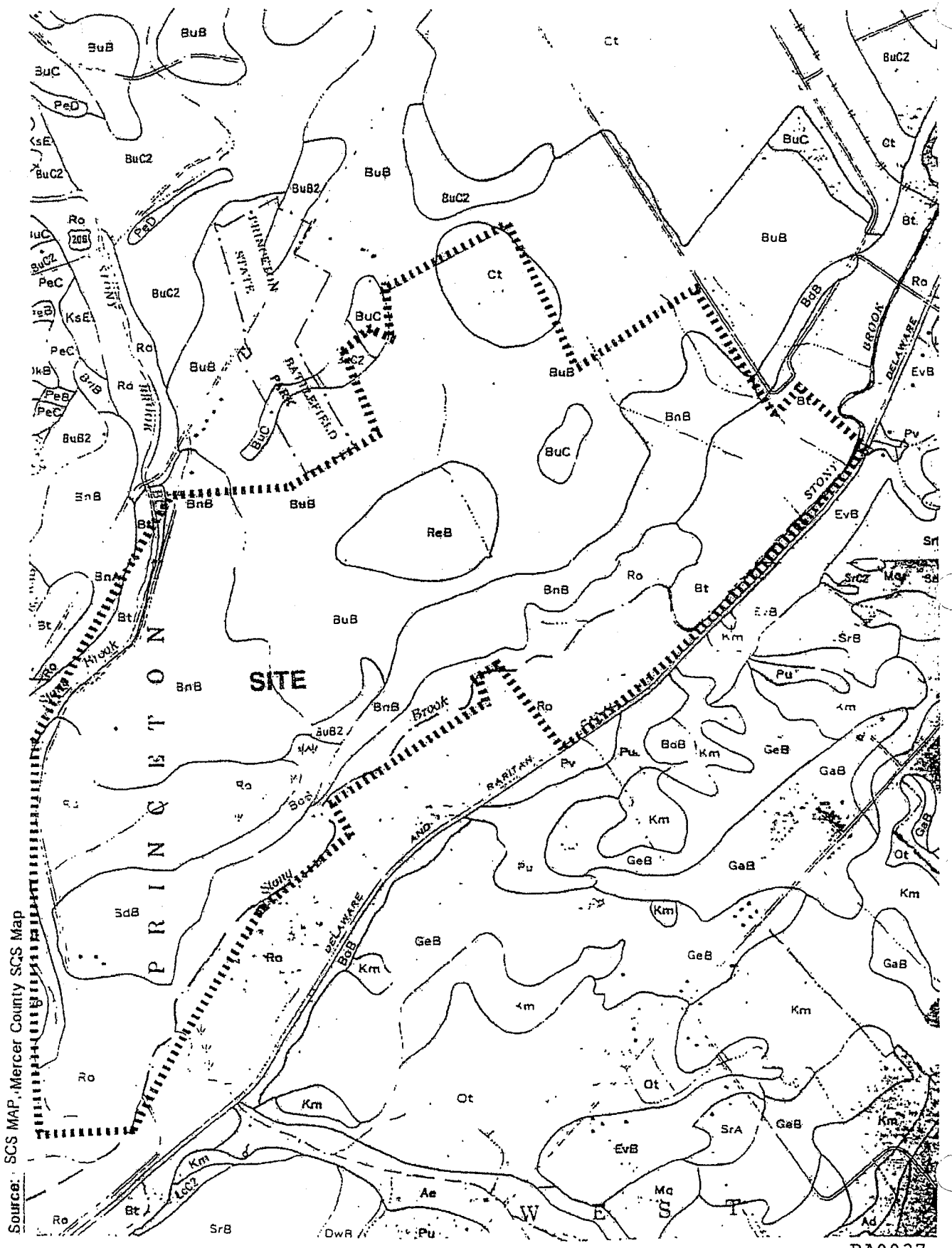


Appendix A  
**Location Map**  
 PA0035

38x



NWI Map: Princeton, NJ



Source: SCS MAP, Mercer County SCS Map

40x

PA0037

APPENDIX D

SOIL PROFILES

Birdsboro Sandy Loam (Bn)

A deep, well-drained stream terrace soil.

PROFILE

Ap (0 to 10 inches)....10 YR 4/2.....sandy loam  
 A2 (10 to 15 inches)...10 YR 5/4.....sandy loam  
 B2 (15 to 22 inches)...7.5 YR 5/4.....sandy loam  
 B3 (22 to 32 inches)...7.5 YR 5/4.....sandy loam

Bowmansville Silt Loam (Bt)

A deep, poorly drained flood plain soil.

PROFILE

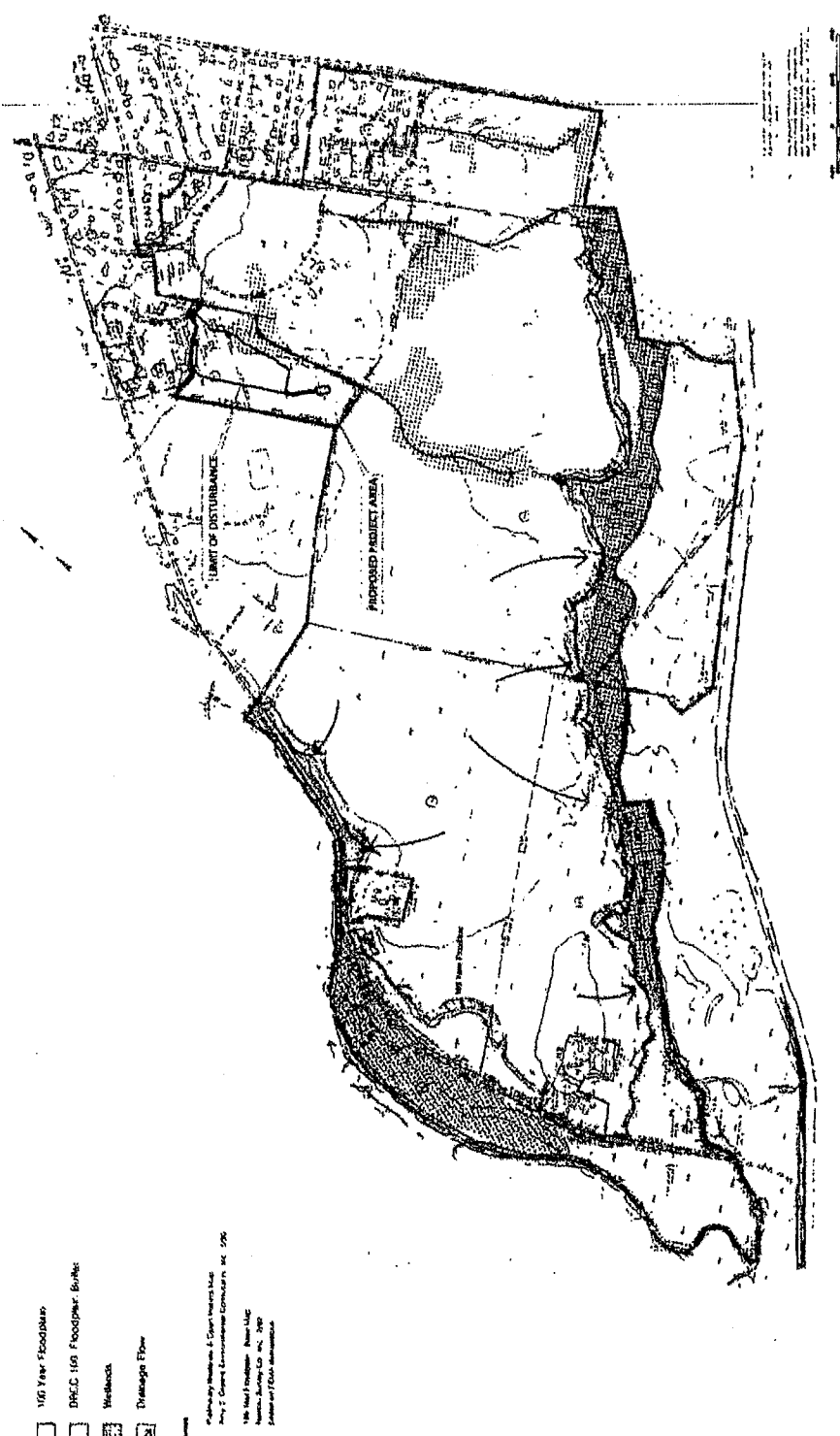
Ap (0 to 6 inches) 7.5 YR 4/2.....silt loam  
 C1 (6 to 11 inches) 7.5 YR 4/2.....silt loam  
 C2 (11 to 18 inches) 7.5 YR 4/2.....silt loam  
     mottles: N 5/0  
             5 YR 4/6  
 C3 (18 to 36 inches) 5 YR 4/2.....silt loam  
     mottles: N 5/0  
             5 YR 4/6

Rowland Silt Loam (Ro)

A deep, moderately well-drained flood plain soil.

PROFILE

Ap (0 to 8 inches) 5 YR 3/3.....silt loam  
 C1 (8 to 18 inches) 5 YR 4/3.....silt loam  
 C2 (18 to 48 inches) 5 YR 4/3.....silt loam  
     mottles: 5 YR 5/3



- 100 Year Floodplain
  - DRFC 100 Floodplain Buffer
  - ▨ Wetlands
  - ▨ Drainage Eflow
- Hydrology Studies & Design Services  
 Proj. 2, County Environmental Controls, Inc. 1/96  
 1. Map of Project Area  
 2. Map of Project Area  
 3. Map of Project Area

Institute for Advanced Study  
 Princeton, New Jersey

**HYDROLOGY**  
**GENERAL DEVELOPMENT PLAN**

Sheet No. 4

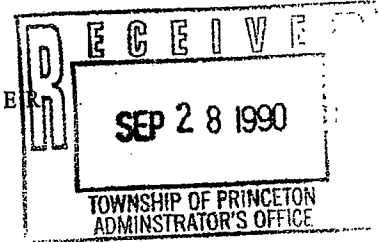
SOURCE: GENERAL DEVELOPMENT PLAN FOR THE INSTITUTE FOR ADVANCED STUDY, DATED APRIL 1993, REVISED FEBRUARY 17, 1994.

**1990 Preliminary Wetlands Map Showing Subject Site and Project Area**

42x

JAMIESON ◊ MOORE ◊ PESKIN & SPICER

A PROFESSIONAL CORPORATION ◊ COUNSELLORS AT LAW



September 28, 1990

NOLA R. BENCZE  
JAMES J. BRITT, JR.  
DENNIS R. CASALE  
THOMAS C. JAMIESON, JR.  
ANN F. KIERNAN  
KEVIN L. LILLY  
THOMAS G. McMAHON  
ARTHUR MEISEL  
HERBERT FRANKLIN MOORE  
KEVIN J. MOORE  
TIMOTHY J. O'NEILL  
DEBORAH T. PORITZ  
JAY SAMUELS  
DOUGLAS G. SANBORN  
NEAL L. SCHONHAUT  
MICHAEL F. SPICER  
THOMAS P. WEIDNER

HAND DELIVERED

Ms. Kate Litvack, Mayor  
Ms. Margen Penick, Chairperson  
Princeton Regional Planning Board  
Valley Road Building  
369 Witherspoon Street  
Princeton, NJ 08540

Re: Institute for Advanced Study:  
Master Plan Litigation

Dear Mayor Litvack and Chairperson Penick:

In accordance with our discussion held on Monday, September 17, 1990 regarding the master plan litigation, enclosed please find a copy of the environmental wetlands map prepared by Amy S. Greene Consultants, Inc.

We also have enclosed an estimate of the potential range of development of the Institute's lands permitted under the present zoning.

During the September 17th meeting, there was also some discussion regarding a subdivision sketch of the site prepared by Gerry Lenaz. We erred, however, since no sketch of the potential development under the existing zoning was ever prepared.

We look forward to meeting with you on October 3, 1990 and we are hopeful that we will be able to move forward toward a resolution of the litigation.

Very truly yours,

Thomas C. Jamieson, Jr.  
For the Firm

300 ALEXANDER PARK  
CN 5276  
PRINCETON, NJ 08543-5276  
609-452-0808

TCJ/jha  
Encl.

cc: Dr. Marvin L. Goldberger  
Wallace, Roberts & Todd

FAX: 609-452-1147  
609-452-0943

TRENTON OFFICE  
609-396-5511

PA0041

43x

*no need to provide for case law*

JAMIESON ◊ MOORE ◊ PESKIN & SPICER

A PROFESSIONAL CORPORATION ◊ COUNSELLORS AT LAW

March 4, 1992

HAND DELIVER

James Biggs, Chairman  
State Plan Cross-Acceptance Committee  
Mercer County Planning Board  
County Administration Building  
640 S. Broad Street  
Trenton, NJ 08611

Edward Feinberg, Chairman  
Mercer County Planning Board  
County Administration Building  
640 S. Broad Street  
Trenton, NJ 08611

Dear Messrs. Biggs and Feinberg:

We represent the Institute for Advanced Study, (the "Institute") with regard to its ownership of approximately 600 acres of land located along Quaker Road, Mercer Street, Olden Lane and the Stony Brook (the "Property") and the State Development and Redevelopment Plan (the "Plan").

We previously wrote to the Mercer County Cross-Acceptance Committee in June 1989 to object to the then proposed tier 7 designation for a portion of the Institute Property. The Institute disputed the extent of the wetlands but the municipality believed that substantial parts of the Institute lands were wetlands. As a result, the County determined to keep the initial proposed tier 7 designation.

In the meantime, in May 1990 the Institute retained a wetlands consulting firm, Amy S. Greene Environmental Consultants, Inc., ("Greene") to determine the actual extent, if any, of the on-site wetlands throughout the wooded and unimproved portions of the Property. The consultant used the appropriate methodology approved by the New Jersey DEPE. The consultant determined that aside from a narrow strip within the woods which follows tributaries into the Stony Brook, there are no wetlands within these portions of the Property except for the strip of land

NOLA R. BENCZE  
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NEAL L. SCHONHAUT  
MARK A. SOLOMON  
MICHAEL F. SPICER  
THOMAS P. WEIDNER  
◊  
LESLIE A. ADELMAN  
ALAN L. AUGULIS  
TERESA A. CALLAHAN  
GUY F. CLERICI  
STEPHEN J. CUSMA  
DAVID R. FORREY  
NANCY F. GOLDSTEIN  
S. FAIN HACKNEY  
ARTHUR F. HERRMANN  
PATRICIA U. HEAST  
LEE JAMIESON  
THOMAS M. LETIZIA  
ROSS A. LEWIN  
JAN DENISE LOUGHRAN  
MICHAEL J. MANN  
EDWARD MCCARDELL  
JOHN D. MCQUARRIE, JR.  
DAVID PAIGE  
HOWARD SCHACHTER  
ALICE K. SMALL  
PHILIP J. SULLIVAN  
JULIE RILEY TATTONI  
LEWIN J. WEYL  
AUDREY D. WISOTSKY  
◊  
CRAWFORD JAMIESON  
(1927-1967)  
BURTON PESKIN  
(1949-1989)

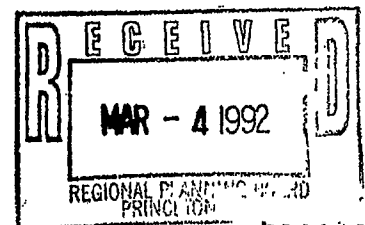
\*LICENSED ONLY IN PA

300 ALEXANDER PARK  
CN 5276  
PRINCETON, NJ 08543-5276  
609-452-0808

FAX: 609-452-1147  
609-452-0943  
609-951-0096

TRENTON OFFICE  
609-396-5511

XC:RPBP 3/5/92.



PA0042

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James Biggs  
Ed Feinberg  
March 4, 1992  
Page 2

between the Delaware and Raritan Canal and the Stony Brook. Thus, except for the Canal's stream corridor, the unimproved lands which are presently farmed are essentially uplands, and unconstrained by wetlands. For your convenience, we have attached a copy of the wetlands map prepared by Greene.

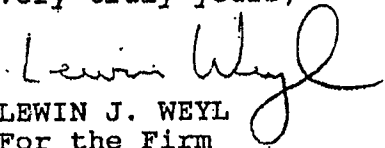
With regards to the wetlands analysis, you should be apprised that Betz Converse & Murdoch, the environmental engineers for the Regional Planning Board of Princeton (the "Board"), walked the site with the Institute's consultants on December 27, 1990. The Board's consultants confirmed the analysis of the Institute's consultants as to the site's wetlands throughout the wooded and farmed areas. (See attached affidavit.) Moreover, since 1990 the Board has always used and never questioned the Greene wetlands analysis in the Board's discussions with the Institute as to the appropriate scale and location of development for the Property. In fact, in the Board's most recent development proposal for the Property, the Board's consultants used the Greene analysis.

Based upon the foregoing, we respectfully request that the County modify the planning area proposed for the Institute Property to accord with the new factual information set forth herein.

We look forward to hearing from you and we ask that if the County holds any discussions with the municipality which affect the Property, the County include the Institute in those discussions.

Thank you for your attention to and cooperation in this matter.

Very truly yours,

  
LEWIN J. WEYL  
For the Firm

LJW/bms

cc: Mr. Allen Rowe  
Thomas C. Jamieson, Jr., Esq.  
Mr. Gerald Lenaz

JAMIESON & MOORE  
PESKIN & SPICER

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James Biggs  
Ed Feinberg  
March 4, 1992  
Page 3

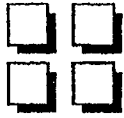
✓ Regional Planning Board of Princeton  
Gerald Muller, Esq.  
Mr. Leo Laaksonen  
Ms. Donna Lewis

JAMIESON O MOORE  
PESKIN & SPICER

A PROFESSIONAL CORPORATION

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**Institute for Advanced Study**  
**Princeton, New Jersey**

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04

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**GENERAL DEVELOPMENT PLAN**

April 1993

*Revision Date: February 17, 1994, incorporating revisions approved  
by Regional Planning Board, September 30, 1993*

Approved by Regional Planning Board of Princeton  
September 30, 1993

PA0045

47x

**GENERAL DEVELOPMENT PLAN**

for

**Institute for Advanced Study**  
Princeton, New Jersey

Prepared by:

**Lenaz, Mueller & Associates**  
Land Planning/Development Consultants

**Harlyn Associates**  
Traffic Consultants

**Jamieson-Moore-Peskin & Spicer, P.A.**  
Legal Counsel

April 1993

*Revision Date: February 17, 1994, incorporating revisions approved by Regional  
Planning Board, September 30, 1993*

Approved by Regional Planning Board of Princeton  
September 30, 1993

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5. Circulation Plan .....	11
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### Illustrations:

GDP-1	Land Use/Circulation Plan
GDP-2	Open Space Preservation Plan
GDP-3	Utility/Stormwater Management Plan
GDP-4	Environmental Inventory: Hydrology
GDP-5	Environmental Inventory: Natural Resources
GDP-6	Environmental Inventory: Soils

- Appendix A: Settlement Agreement: Institute for Advanced Study - Louis Bamberger and Mrs. Felix Fuld Foundation vs. Regional Planning Board for the Borough of Princeton and the Township of Princeton
- Appendix B: Residential-Historic Farmland-Woodland (R-HF-W) Zoning Standards and Educational E-2 Zoning Standards
- Appendix C: List of exhibits submitted as part of General Development Plan Application
- Appendix D: Historic Resource Designations which include Attachment A: National Historic Landmarks, and Attachment B: National and New Jersey Register of Sites and Districts
- Appendix E: GDP Approval Resolution adopted February 17, 1994 by the Regional Planning Board of Princeton

## 1. INTRODUCTION

This General Development Plan (GDP) governing the future open space preservation, limited residential development and continued educational and related facilities use of the Institute For Advanced Study ("Institute") land holdings has been prepared as required by the terms of a Settlement Agreement filed with the Superior Court of New Jersey on February 22, 1993 between the Institute For Advanced Study, the Regional Planning Board of Princeton and the Township of Princeton. Copies of the Settlement Agreement which includes as an exhibit the Development/Open Space Plan and court order are attached as Appendix A.

The basic material contained in this report was developed during the negotiations relating to the Settlement Agreement, which provides that this material is sufficient for the Planning Board to act upon this GDP application. If more details of an engineering nature are required, this level of information would be provided in conjunction with an application for preliminary subdivision and site plan approval.

The General Development Plan provides for 482± acres or 82% of the land area exclusive of the Institute campus to be permanently preserved as open space with 105 acres restricted to a future development of 276 residential units or such lesser density as the Institute may determine.

In addition, the GDP includes the 8.6± acre Eno farmstead, owned by the Institute which will be retained in its present use, and includes as a condition that the remaining Institute lands of 147± acres containing the Institute campus and abutting vacant areas are to be used for educational and related purposes as is currently permitted under the E-2 Educational District.

No details are submitted with respect to the future development of the Remaining Institute Lands, it being the intent of this GDP application that any future development of the campus will be in accordance with the current E-2 zoning controls in effect at the time of the Settlement Agreement (a copy of these controls is annexed as part of

Appendix B), as well as the provisions of the GDP requirements of the Municipal Land Use Law; provided however, that the Applicant agrees that any reasonable subsequent modification of the Required Building Setback and Permitted Building Height provisions in the E-2 zone, and any subsequent ordinance or regulation which would be applicable pursuant to N.J.S.A. 40:55D-45.1(a), are applicable to future development of the Remaining Institute Lands.

## 2. THE SITE: ENVIRONMENTAL INVENTORY

The site is comprised of a combination of agricultural fields, open space areas with environmental features, wooded areas and educational facilities with related support uses in a campus atmosphere. In total the Institute lands contain 743± acres. It is generally bounded by the Stony Brook and Delaware & Raritan Canal on the east, by Quaker and Mercer Roads on the west, by a branch of Stony Brook on the south and by Olden Lane and Springdale Road on the north.

An environmental inventory of the site has been undertaken. As described below this inventory includes a general description of the vegetation, soils, topography, geology, hydrology and extent of existing man-made structures located on the site. As is described in a subsequent section of this report, the General Development Plan proposal has responded to the various environmental and historical resource attributes of the site with a variety of preservation and clustered land planning techniques. These have included perpetual preservation of open space and environmental features, together with continued agricultural preservation of a major portion of existing farmland. In addition, establishment of significant setback and buffers from a limited residential development area to the historic battleground park and Quaker Road enables the preservation of the scenic qualities of viewsheds along Quaker Road. Continued maintenance of the existing farmstead known as the Eno parcel complements the historic resources associated with this area of the Institute lands.

A review of the environmental attributes of the site is highlighted below.

**A. Geology and Surficial Hydrology**

The site is situated in central New Jersey which has a humid continental climate and a yearly rainfall average of 44 inches. The geology of the site includes a red shale bedrock in the area of proposed Development Area A. This red shale is not generally considered to be an important aquifer recharge area even though it has some recharge potential. It can be induced from the soils map that the Magothy-Raritan geologic formation lies just south of the Stony Brook. This formation is important as a recharge area for the region but will not be affected by the proposed project.

As indicated on Exhibit GDP-4 "Hydrology", the site drains primarily to the south and east toward the Stony Brook. A portion of the farm area drains towards the west.

The 100 year flood line generally follows the 65 foot contour level along the eastern edge of the property. Along the southern and western edges of the site, the 100 year flood line ranges approximately from elevation 65 to elevation 73.5 in a band generally parallel to Quaker Road. The flood line has been plotted based on township topological data. Also shown on the exhibit is the 100 foot wide floodplain buffer area required by the Delaware and Raritan Canal Commission.

Freshwater wetlands have been preliminarily identified and these wetland investigations have been verified by the township's environmental consultant.

**B. Natural Resources**

Exhibit GDP-5 "Natural Resources" depicts the site's topography, vegetation, and field areas as well as man-made features.

**1. Topography**

The existing topography is gently sloping from its northern to southern boundaries where an approximate 90 foot elevational change occurs. The Institute's campus buildings are located near the site's highest elevation 150±. The low point on the site is located along the Stony Brook approximately at elevation 60. Most of the site contains slopes in the 2-6% range, with flatter slopes in the 0-3% range evidenced in areas adjoining the Stony Brook.

**2. Vegetation**

The site primarily contains farmland and open land, woodlands, floodplains and wetlands. The site's wooded areas include over forty-five (45) tree species. Vegetation typically found in the Institute Woods includes red maple, shagbark hickory, white ash, elm, black cherry, birch, pin oak, sassafras, blackgum, spice bush, red oak, flowering dogwood, sycamore, black walnut, red cedar, and sweetgum. Mature woods which resemble a native American forest can be found undisturbed on upland areas of the site. Areas where woods have been disturbed and are of lesser importance are located close to Institute buildings within stream corridors and adjacent the main sewer trunk lines that traverses the site. The woods are good for paths and trails.

**3. Field Areas**

There are both upland agricultural fields and lowland fields on the site. The upland agricultural fields are located east of Quaker Road and are currently farmed through lease agreements with the Institute. The lowland field west of Quaker Road lies fallow.

#### 4. Wildlife

Observed wildlife species and species anticipated to frequent the various environment habitats on the site have been identified through prior investigations and are described as follows:

- a. Farmland and open land wildlife consists of birds and mammals that normally live on cropland, pastures, meadows, lawns and other areas of open land where grasses, herbs, and shrubby plants are growing. Examples are quail, pheasants, meadowlarks, field sparrows, dove, cottontail rabbits, red foxes and woodchucks.
- b. Woodland wildlife consists of the birds and mammals that normally live in wooded areas where hardwood trees and shrubs and coniferous trees and shrubs are growing. Examples are ruffed grouse, towhees, thrushes, vireos, scarlet tanagers, gray squirrels, red squirrels, gray foxes, white-tailed deer, and raccoons.  
According to Tom Sutherland, noted bird expert, the Institute Woods and Quaker Woods adjoining the Quaker Meeting and adjacent floodplain area are an essential part of the Northeast Flyway and provide permanent bird habitat. At present, these undeveloped areas offer ideal seasonal conditions and types of growth for food and shelter that supports both migratory and nesting birds. The habitat is strategically located where the Coastal Plain meets the Piedmont and just north of the Pinelands. As such, the area provides a mixed cover of deciduous and coniferous trees and woodland edges.
- c. Floodplain and wetland wildlife consists of the birds and mammals that normally live in wet areas, such as ponds, marshes, and swamps. Examples are ducks, geese, herons, minks, muskrats, and beavers.

Generally, the woods lack conifers which is a detriment to wildlife. There appears to be no major concentration of wildlife in the upland areas. Most wildlife can be found along the natural corridors created by the two branches of the Stony Brook and along the drainageways leading from the Institute's campus.

## 5. Soils

Seven soil types are identified on-site according to the Mercer County Soil Survey. These include the following and are shown on Exhibit GDP-6 "Soils":

*Reaville silt loam (ReB) 2-6% slope*

*Rowland silt loam (Ro) 0-2% slope*

*Bowmansville silt loam (Bt) 0-2% slope*

*Birdsboro silt loam (BdB) 2-6% slope*

*Birdsboro sandy subsoil (BnB) 2-6% slope*

*Bucks silt loam (BuB and BuC) 2-12% slope*

*Cut and fill land (Ct) 0-6% slope*

The Reaville silt loam type has a moderately high water table. A seasonal high water table, 1-2 feet from the surface, occurs between February and April. The depth to bedrock is 1½ to 3½ feet from the surface. The Reaville series is a moderately deep, moderately well drained to somewhat poorly drained, and moderately sloping soil on uplands.

The Rowland silt loam type has a seasonal high water table of 1 to 2 feet from the surface and depth to bedrock of 5 feet from the surface. This soil type has severe construction limitations because of wetness. It is subject to frequent flooding in late winter and early spring. The majority of this soil type is located along the Stony Brook at the eastern and

southern edges of the site. There is also a protrusion of such soil type into the farmland between the Eno and Updike farmsteads.

The Bowmansville silt loam type has a constantly high water table and overflow hazard. Its depth to bedrock is 3-5 feet and greater. This soil phase is nearly level and poorly drained. It is subject to stream overflow several times annually and therefore has severe limitations for all types of construction. This soil type is generally located along the Stony Brook at the site's eastern boundary.

Birdsboro silt loam and associated sandy subsoil has a seasonal high water table of 5 feet from the surface and depth to bedrock is 3-6 feet. This soil series consists of deep well-drained to moderately well-drained soils. These soil types are generally located within the agricultural fields off Quaker Road and in portions of the Institute Woods.

Bucks silt loam soil types have a seasonal high water table of 6 feet from the surface and depth to bedrock is between 3½-5 feet. This soil type is characterized by deep, well-drained soils with slow or moderately slow permeability. These soils have slight limitations for most types of uses and moderate erosion hazard. This soil type is generally located within the Institute Woods and a majority of the open field area located within the central portion of the site.

Portions of the Institute campus contain soil from cut and fill land.

**C. Historic Designations and Man-Made Structures or Features**

Most of the Institute lands subject to the Settlement Agreement together with neighboring lands of the Quaker Meeting, Updike Farmstead, Battlefield Park and Quaker Road, have been designated as historic resources by national, state, and local agencies. These designations include:

- National Historic Landmarks - Princeton Battlefield/including Stony Brook Bridge, and the site of Worth's Mill (See Appendix D - Attachment A)
- National and New Jersey Register of Sites and Districts - Princeton Battlefield and Stony Brook Village Historic District, Delaware and Raritan Canal (See Appendix D - Attachment B)
- Princeton Township ordinated local historic preservation districts - Princeton Battlefield and Stony Brook Village and buffer; and the Delaware and Raritan Canal district

These designations, plus related land planning and development controls detailed in the General Development Plan partially mitigate the adverse impact of development within the limited area reserved for future residential use. If development proceeded, impacts that would occur, would be limited to those normally associated with residential or educational facility construction. These impacts would be of short duration and subject to the applicable environmental controls established for such construction by the Township or by those agencies having jurisdiction over phases of a development. For example, soil erosion and sediment control measures will guard against excessive runoff or siltation into adjoining open space areas and the Stony Brook.

Two farmsteads with associated residence and accessory buildings/sheds have frontage along Quaker Road. However, only the southernmost farmstead on Quaker Road, known as the Eno parcel, is owned by the Institute. The other farmstead, known as the Updike parcel, is not part of this General Development Plan because it is not owned by the Institute but is subject to zoning regulations now or hereafter applicable. Open farm fields surround both farmsteads.

The Institute's main academic campus and related support buildings which include faculty and fellow residences, offices, and other structures are located in

the northern sections of the site. These facilities and uses are adjacent to established residential development patterns that exist along Mercer Street, Maxwell/Olden Lanes, and Springdale Road.

### 3. PLANNING OBJECTIVES

The following objectives have guided the planning for the Institute's lands:

- Maintain the Institute for Advanced Study as a renowned academic institution through the preservation of its natural assets including the development value of its lands.
- Respect the historic landscape along Quaker Road through the retention of the Eno farmstead and the permanent preservation of agricultural and open field areas within defined limits.
- Maximize the preservation of natural resources and open space on the site through the use of a clustered planning technique limiting potential residential development to a designated area within the interior of the Institute lands outside of environmentally critical areas.
- Preserve the academic integrity and viability of the Institute Campus and its related support facilities through a continuation of its present educational E-2 zone site area.
- Protect the natural amenities and environmentally sensitive land along the Delaware & Raritan Canal and the Stony Brook through the establishment of required buffer areas.
- To minimize intrusion onto Quaker Road, limit access to Quaker Road to a single entry point south of the common property line with the Friends Meeting as shown on GDP Map #1, but not within the Quaker Woods. Provide a second

access point and right-of-way for indirect connection to Mercer Street by way of Maxwell Lane.

#### 4. GENERAL DEVELOPMENT PLAN: LAND USE PLAN

The land use plan for the Institute lands includes a combination of preservation/open space areas, a limited development area for future residential dwellings and remaining lands designated for academic and related support facilities for an educational campus. Exhibit GDP-1 "Land use/Circulation Plan" depicts the proposed land uses envisioned for the site. A general description of these land uses follows.

##### A. Development Area A

Residential dwellings are proposed to be contained within a 105 acre area located within the interior portions of the property. Based on the Settlement Agreement, 276 single-family residential units with an average lot size of 1/4 acre and a permissible floor area of each residence of at least 2,700 square feet are allowed within the designated development area. At the option of the Institute a mix of residential dwelling types, including townhomes, attached housing, multi-family apartments, and other dwelling types as well as larger lot single family homes are also permitted with the Development Area A. The Institute, at its option, may reduce the number of units below 276. The type and number of units and the specific subdivision and phasing plan will be determined at the time of preliminary subdivision approval.

Bulk, locational and other standards governing the development of this area for the period of the GDP approval are outlined in the R-HF-W Residential zoning district. A copy of these zone standards is attached as Appendix B to this report and made a part hereof.

The overall gross residential density based on the total land area contained within the preservation areas and the development area (587± acres), excluding the Institute campus area, equates to 0.47 dwellings per acre.

**B. Preservation Areas B, C, D, E**

Four areas are indicated for permanent preservation as open space. These open space areas are further described in the Open Space Plan section of this report. Generally they include the Institute/Quaker Woods, the farmland between the development area and Quaker Road, the Stony Brook floodplain with its associated 100 foot D&R Canal buffer strip and the open field area west of Quaker Road. These areas total 482± acres and amount to 82% of the total lands comprising the proposed development and preservation areas.

**C. Institute Campus**

The Remaining Institute Lands include the campus area. This area is defined as the lands contained within the existing E-2 Educational zoning district and accounts for 147± acres. It is the intent of the Institute to use these lands for the educational and related support uses that are permitted by the E-2 zone criteria as they are in effect as of the date of this GDP application; provided however, that the Applicant agrees that any reasonable subsequent modification of the Required Building Setback and Permitted Building Height provisions in the E-2 zone and any subsequent ordinance or regulation which would be applicable pursuant to N.J.S.A. 40:55D-45.1(a) are applicable to future development of the Remaining Institute Lands. Such E-2 zoning criteria are attached to this report as part of Appendix B and made a part hereto.

**D. Other Uses**

Also indicated on the land use plan are areas designated for two future soccer fields and associated 35 space gravel parking area to be maintained and

operated by the Township. The locational criteria governing these playing fields is further described in the Circulation Plan section of this report.

Two existing farmstead lots are shown on the land use plan. With respect to the farmstead owned by the Institute (Eno parcel located near the southern edge of the site), this lot will be retained in its present use subject to the zoning controls governing such farm lots. No further development on or subdivision of the Eno farmstead will occur other than to restore and, to the extent destroyed by natural causes, replace the main farm house and to restore and replace accessory structures. The other existing farmstead located on Quaker Road (Updike parcel) is not owned by the Institute; however, it is subject to development controls currently in the Township's zoning code.

## 5. CIRCULATION PLAN

Access to Development Area A is to be provided at a single location on Quaker Road with a second access providing connection through the existing campus of the Institute to Mercer Road using Maxwell Lane to be determined at the time of preliminary approval.

No decision as to the design of the access roads has been made; however, the final design of the roads will be established by the Planning Board at the time of preliminary approval.

The second access road generally follows existing trails through the Institute Woods to minimize the extent of clearing necessary to construct this roadway.

The precise location and design of these access roads, and whether the second access will be limited to emergency use will be determined at the time of application for preliminary subdivision and site plan approval.

Accompanying this report is a traffic assessment for the proposed development area prepared by Harlyn Associates. The report examines the probable traffic impacts and need for off-tract improvements associated with the future residential development area.

While not specifically detailed at this level of submission, it is envisioned that pedestrian access through the existing trail system that presently exists throughout the Institute Woods would be provided at selected locations to the proposed Development Area A. The details regarding the type of pedestrian path systems will evolve when a development application is submitted for this area.

Pedestrian access within the development area will contain sidewalk systems along local streets with connections to the existing trail network located within the Institute Woods. Depending on the nature of the ultimate development pattern and housing type(s) to be constructed a pedestrian walk system either in combination with or separate from the local street system may be developed. Bikeways and paths should be generally located to enhance chances of completing a regional pedestrian system within Princeton and to adjacent municipal, county and state lands.

Since a lease restriction on the Eno farmstead precludes the Institute from locating any improvements within the vicinity of the homestead prior to September of the year 2000, the proposed public soccer/playing fields have been shown at an interim location south of the main access road.

Given that Development Area A cannot proceed to construction prior to January 1, 2002, the proposed playing fields have been shown at this interim location, with the understanding that the fields would be relocated to the final location south of the Eno farmstead should Development Area A proceed to be implemented. The relocation of the playing fields would be undertaken at the expense of the Institute.

The precise location of the soccer fields, and whether interim fields should be constructed, will be determined by the Township and the Institute pursuant to paragraphs 4(i) and 5(d) of the Settlement Agreement.

**6. OPEN SPACE PLAN**

A significant portion of the Institute's land is proposed for permanent preservation as open space. In addition a limited area for soccer playing fields and its associated parking has been indicated as described in the Land Use section of this report.

With respect to the open space preservation proposals, Exhibit GDP-2 "Open Space/Preservation Plan" depicts the four main preservation areas. The general use and maintenance of these areas is described as follows:

**A. Preserved Area B**

This area encompasses the Institute Woods which also contains the wooded area east of the Quaker Meeting property sometimes referred to as the "Quaker Woods". Other than accommodating the second access road and necessary utility corridors to service Development Area A, there will be no other development or lotting into the preserved wooded area. The area will continue to be maintained by the Institute and remain open to the public subject to reasonable regulations imposed by the Institute to control such public access. The Settlement Agreement grants the option of the Institute to retain title of Area B or to convey same to a governmental or not-for-profit agency or association, subject to the cited controls.

**B. Preserved Area C**

This area includes a significant portion of the farmland between Quaker Road and Development Area A. It will be maintained in its semi-rural appearance with its use limited to selected agricultural activities as defined by the Settlement

64x

Agreement. If left fallow, the area will be managed so as to prevent second growth woody species invasion.

As part of this preservation area a-landscape buffer, including 10 feet in the rear of any future residential lots within the development area and along its western edge, will be provided. Based on a future preliminary approval application, the west line of the development area may vary, subject to Planning Board approval, provided that the acreage of the development area remains constant at 105 acres.

**C. Preserved Area D**

Containing the floodplain associated with the Stony Brook and the Delaware & Raritan Canal Commission's 100 foot buffer requirement adjacent the floodplain, this preservation area will be maintained in its natural state. Any portion of Preservation Area D that is not wooded may be used for the limited agricultural activities that are allowed in the preserved farmland area.

**D. Preserved Area E**

The lands located west of Quaker Road are located in Preserved Area E. These lands are within the floodplain of the Stony Brook and will remain in their natural state.

Appropriate instruments regarding the restrictions on the use of the above open space areas will be filed with the Township upon commencement of the first residential section of Development Area A.

**E. Other Preservation Items**

- 1) **Eno Farmstead.** As previously described, the Eno farmstead lot will be maintained in its present condition with no further subdivision of the lot. Additional development on the lot is limited to replacement or

64x

restoration of existing accessory structures. In the event of destruction of the existing farmhouse by natural causes, the farmhouse may be replaced. The applicable regulations of Chapter 10B of the Princeton Township Code in effect on the date of the GDP approval shall apply to these activities.

- 2) **Historic Preservation.** The historic, cultural, and environmental features and importance of this property are noted in Section 2C (Page 7) of this GDP and the designation document attached as Appendix D. The intent of the four preservation areas (Areas B, C, D, E), beyond the provision of open space, is to respect the historic resource features of the Institute lands. The combination of preservation areas, retention of the Eno farmstead in its current setting, the location of the limited clustered Development Area A within the interior of the property together with a landscape buffer to be planted at the western edge of the development area partially mitigates the adverse visual effects of the proposed development and satisfies the requirements of Section 10B-272.4(d)(1) and (2) of the Township Ordinance.

The intent of the GDP with its limited Development Area A and its defined preservation area is to preserve to the extent possible the historic context, the rural/agrarian 18th Century landscape, scenic vistas, and the valued gateway to the community.

- 3) **Imposition of Open Space Restrictions.** In the event of the acquisition by purchase or condemnation of all or portions of Development Area A, then certain provisions for the imposition of use restrictions on the open space preservation areas would occur according to the terms of the Settlement Agreement.
- 4) **School Site.** A school site is designated in the Princeton Community Master Plan dated July 18, 1989 and amended November 30, 1989 to be

within the 105-acre development area (Area A). The number of units permitted would be reduced proportionally to the acreage acquired. The general location of the site (assuming 30-40 acres) will be adjacent to the north and west sides of the development area. The final shape and size are dependent on the type of school, its size, and design. The rights of the Township to reserve this area for acquisition are governed by N.J.S.A. 40:55D-44, and no additional rights are created hereby.

**7. UTILITY/PUBLIC SERVICE PLAN**

This plan generally outlines how utilities and storm drainage facilities will be provided to the proposed Development Area A. The public services to be provided to the site are depicted in concept on Exhibit GDP-3 "Utility/Storm Water Management Plan". When a subdivision application for the development area is submitted, supplemental engineering detail will be provided in support of the actual development program to be constructed.

**A. Electric Power Service**

Electric service to the site will be provided by the Public Electric & Gas Company. Existing power is located on Quaker Road. The service will be extended to the development area below grade along the access entry road that leads from Quaker Road to Development Area A. The lines will be owned and operated by the Public Service Electric & Gas Company. At the time of site plan application, attention should be given to the location of the electrical power substation, transformers and other equipment emitting electromagnetic fields to minimize exposure of future residents and users (e.g., school students). Based on the Township Engineer's recommendation, all such devices should be located at a minimum of 50 feet from structures or use areas, and in accordance with other accepted standards at the time of site plan application.

**B. Natural Gas Service**

Natural gas for the development area will be provided by Public Service Gas & Electric Company from existing facilities located at the Institute campus. A main distribution line will be extended along the second access road to the development site. Operation and maintenance of the line will be the responsibility of PSE&G Company.

**C. Telephone**

Telephone service will be provided by New Jersey Bell Telephone Company from the existing facilities located at Quaker Road. Underground cable will be placed along the access entry road that leads from Quaker Road to Development Area A. Operation and maintenance of the line will be the responsibility of the New Jersey Bell Telephone Company. Cable service, if available at the time of a development application, will be installed underground and placed along this access entry road.

**D. Storm Water Collection**

Storm water control from the proposed Development Area A will be serviced by two primary detention basins and a swale system leading discharge to the Stony Brook. Depending on the development pattern that may ultimately be designed, a variation on the proposed storm water control system may be proposed as part of a preliminary subdivision and site plan application. Internal development area storm water collection facilities and primary piping within the development area will be owned either by a homeowners association or dedicated to the Township as part of the on-site collection system depending on the final form of residential development that is submitted to the Township.

**E. Solid Waste**

At this time solid waste will be handled by private contractor collection service. If at the time of a development application there is a public solid waste collection program in effect then the proposed development area will become part of that program.

**F. Water Service**

Potable water and water for fire protection will be provided by the Elizabethtown Water Company. A primary 8" distribution line will extend from an existing 16" water main in Mercer Street. The proposed 8" line will be extended along Quaker Road and through the access road from Quaker Road leading to Development Area A. It will then loop within the development area. Internal development area local streets will be serviced by 6" water lines. Operation and maintenance of the water lines will be the responsibility of the Elizabethtown Water Company through a service agreement with the development entity for the project.

**G. Sanitary Sewer**

Sanitary sewer collection service will be provided by Princeton Sewer Operating Committee, with treatment by the Stony Brook Regional Sewage Authority. A sewer connection to the development area will be made to an existing 36" sewer main that crosses through the Institute Woods in close proximity to the northern edge of the development area. Internal sewer lines will be part of the public infrastructure system to be dedicated to the Township when the development is constructed. The Township is obligated under the Settlement Agreement to modify the Township's Wastewater Management Plan to reflect this proposed development.

69x

**8. MUNICIPAL SERVICES**

Since development on the site is restricted for the next ten years and the precise nature of the residential dwelling type mix at this point is flexible, a definitive analysis of the anticipated demand on municipal services and associated fiscal impacts with the future development is not possible. At the time of submission of a preliminary subdivision and site plan development application for the designated development area, an impact assessment on municipal services will be provided. At that time a realistic appraisal of the then proposed housing program on municipal services can be undertaken. Any other items that were waived as part of this GDP application will be submitted, if requested by the Board, at the time of application for preliminary approval. This would include a specific phasing plan for the development.

For general long-range municipal and school planning purposes an estimate of the potential number of people and school children has been made assuming a 276 single family development on 1/4 acre lots.

Population and school-age population projections were based on an assumed development program containing an 80% - 20% mix of three and four bedroom single family units. Based on average population and school-age pupil multipliers obtained from various publications of the Center for Urban Policy Research, it is estimated that about 940 persons could result from the proposed development. About 230 school-age children are projected from the assumed development program.

**9. PHASING PROGRAM**

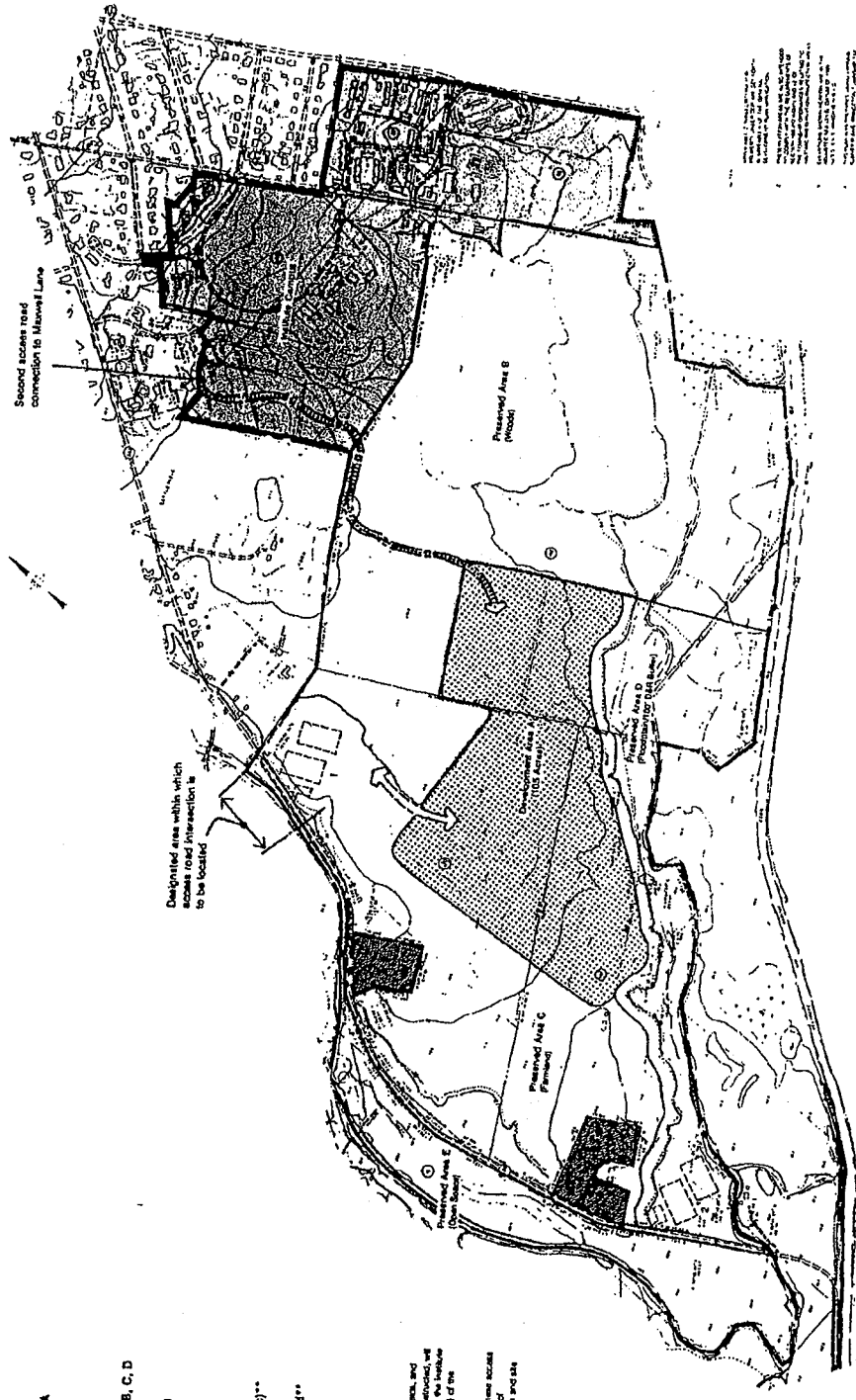
Based on the Settlement Agreement, residential development of Area A can not be commenced until January 1, 2002. The General Development Plan that is presented within this report seeks to establish a vesting period of 20 years from the date of final approval of the first section in the development by the Regional Planning Board of Princeton as provided by the Settlement Agreement and the Township's GDP Ordinance.

70x

Upon submission of a preliminary subdivision and site plan development application for all or a section of Development Area A, a supplemental phasing program detailing the GDP requirements for such timing schedules to assure the orderly construction of the residential area will be presented.

**Drawings:**

- GDP-1** Land Use/Circulation Plan
- GDP-2** Open Space Preservation Plan
- GDP-3** Utility/Stormwater Management Plan
- GDP-4** Environmental Inventory: Hydrology
- GDP-5** Environmental Inventory: Natural Resources
- GDP-6** Environmental Inventory: Soils



- Development Area A
- Institute Campus
- Preservation Areas B, C, D
- Existing Farmsteads
- Soccer Fields\*
  - 1 = North Location
  - 2 = East Location
- Access Road (Public)\*\*
  - 60' ROW
  - Second Access Road\*\*

\* The precise location of the soccer fields, and whether their fields should be constructed, set back, or otherwise, should be determined by the Township and the Institute in accordance with the terms of the Subsequent Agreement.

\*\* The precise location and design of these access roads will be determined at the time of preliminary submission and site plan approval.

Scale: 1" = 400'  
 Date: 03/17/88  
 Prepared by: J. M. ...  
 Checked by: ...  
 Approved by: ...

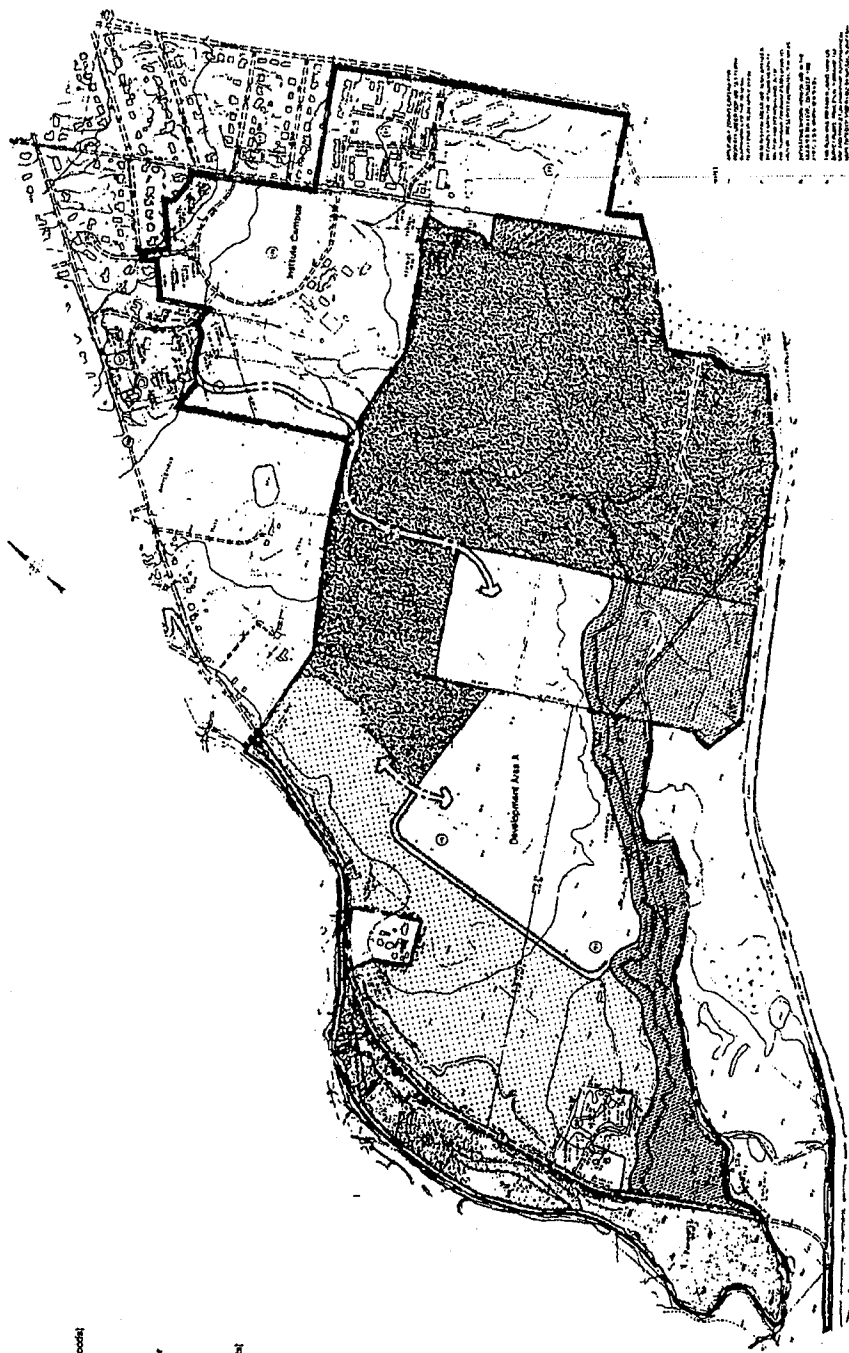
Institute for Advanced Study  
 Princeton, New Jersey

Land, Utilities & Services  
 Major Projects  
 Traffic Circulation  
 Landscape Architecture  
 Legal Counsel

LAND USE/CIRCULATION PLAN  
 GENERAL DEVELOPMENT PLAN

Project	03/17/88
Date	1" = 400'
Scale	MARCH 1988
Sheet	GDP - # 1

73x



- Preserved Area B  
(Prairie Woods/Chalk Woods)
- Preserved Area C  
(Pantlough)
- Preserved Area D  
(Pond/Inlet Dam Buffer)
- Preserved Area E  
(Open Space)
- Landscape Buffer  
(100 ft near residential lots)

ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE INSTITUTE FOR ADVANCED STUDY.

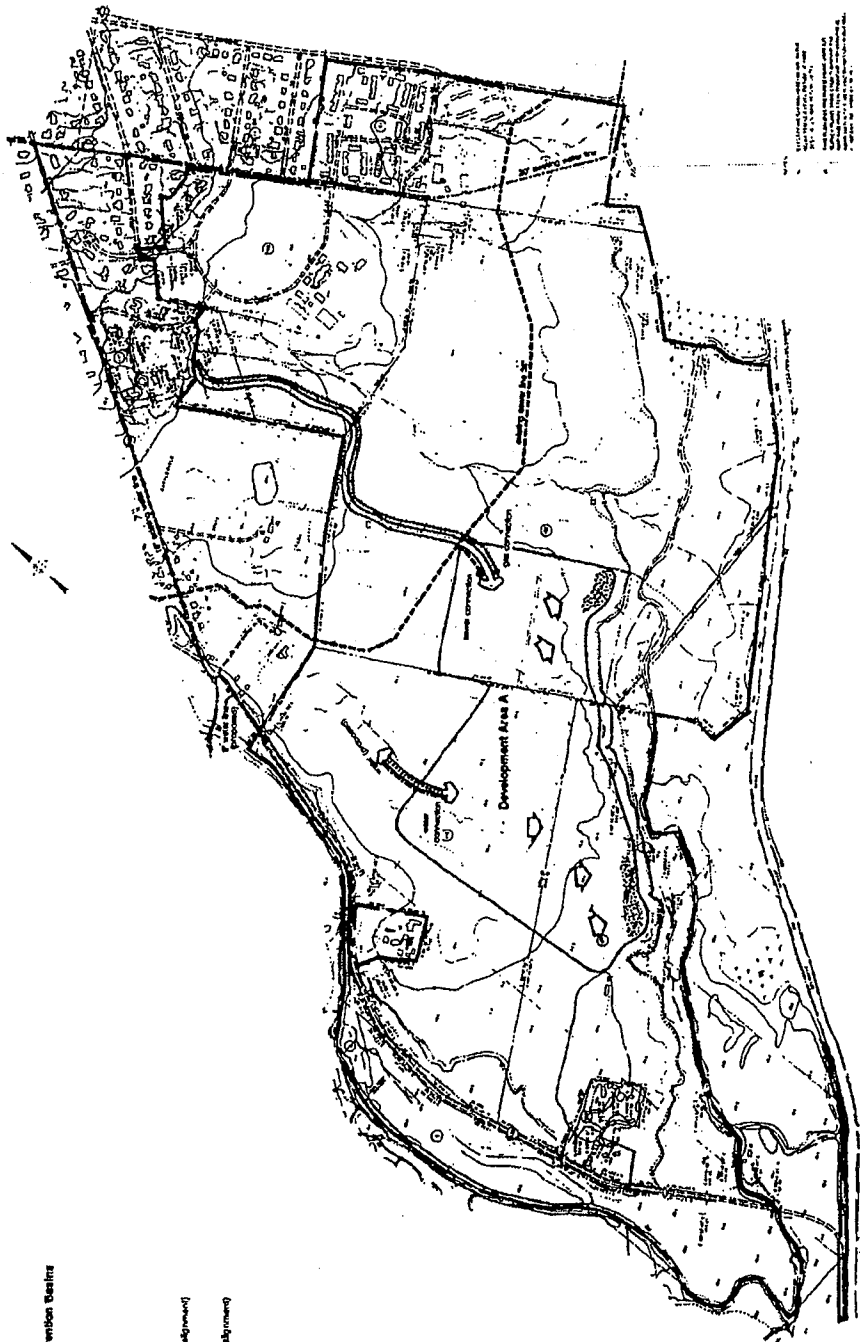
Project No.	207794
Scale	1" = 400'
Date	APRIL 1983
Sheet	GDP ' 2







## OPEN SPACE/PRESERVATION PLAN GENERAL DEVELOPMENT PLAN

Lewis, Mumler & Associates  
 Multiple Associates  
 Traffic Engineers  
 Landscape Architects  
 Planning & Urban Design

**Institute for Advanced Study**  
 Princeton, New Jersey

74x



-  General Location of Detention Basins
-  Surface Flow
-  Sanitary Sewer (Existing Line)
-  Water (To show future access road alignment)
-  Electric, Telephone (To show future access road alignment)
-  Natural Gas

Project No.	4007
Date	MARCH 1973
Scale	1" = 400'
Sheet No.	3

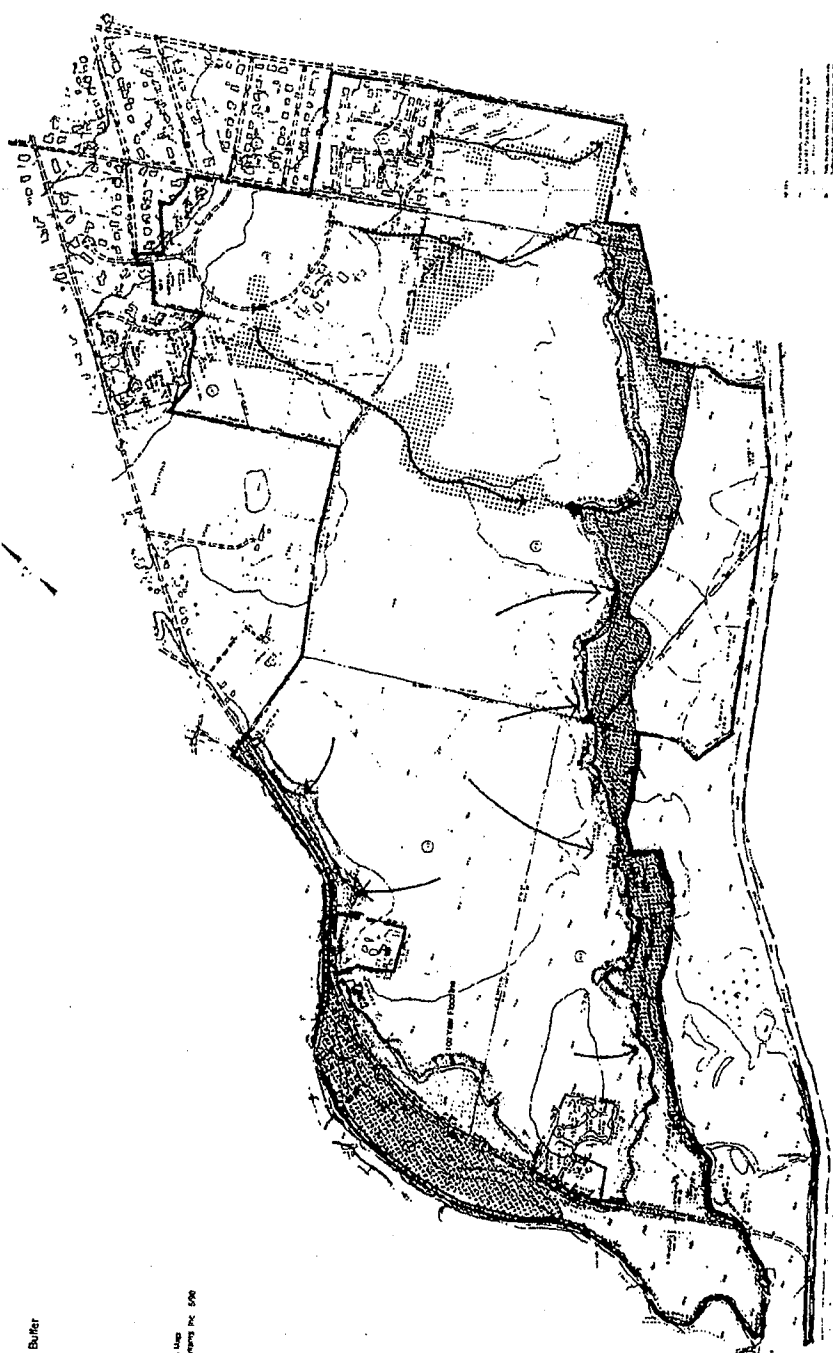
**UTILITY/STORM WATER  
MANAGEMENT PLAN  
GENERAL DEVELOPMENT PLAN**

John M. Kelly & Associates  
 1000 Park Avenue  
 Princeton, New Jersey  
 609-951-1234

**Institute for Advanced Study**  
 Princeton, New Jersey

75x

- 100 Year Floodplain
  - DRCC 100' Floodplain Buffer
  - Wetlands
  - Drainage Flow
- Source:
1. Redbank Meadows & Open Water's Map  
Army & General Environmental Consulting Inc. 5/90
  2. 100 Year Floodplain Base Map  
Nassau-Suffolk Co., Inc. 2/87  
Based on FEMA information



Scale: 1" = 400'

DATE: MARCH 1993

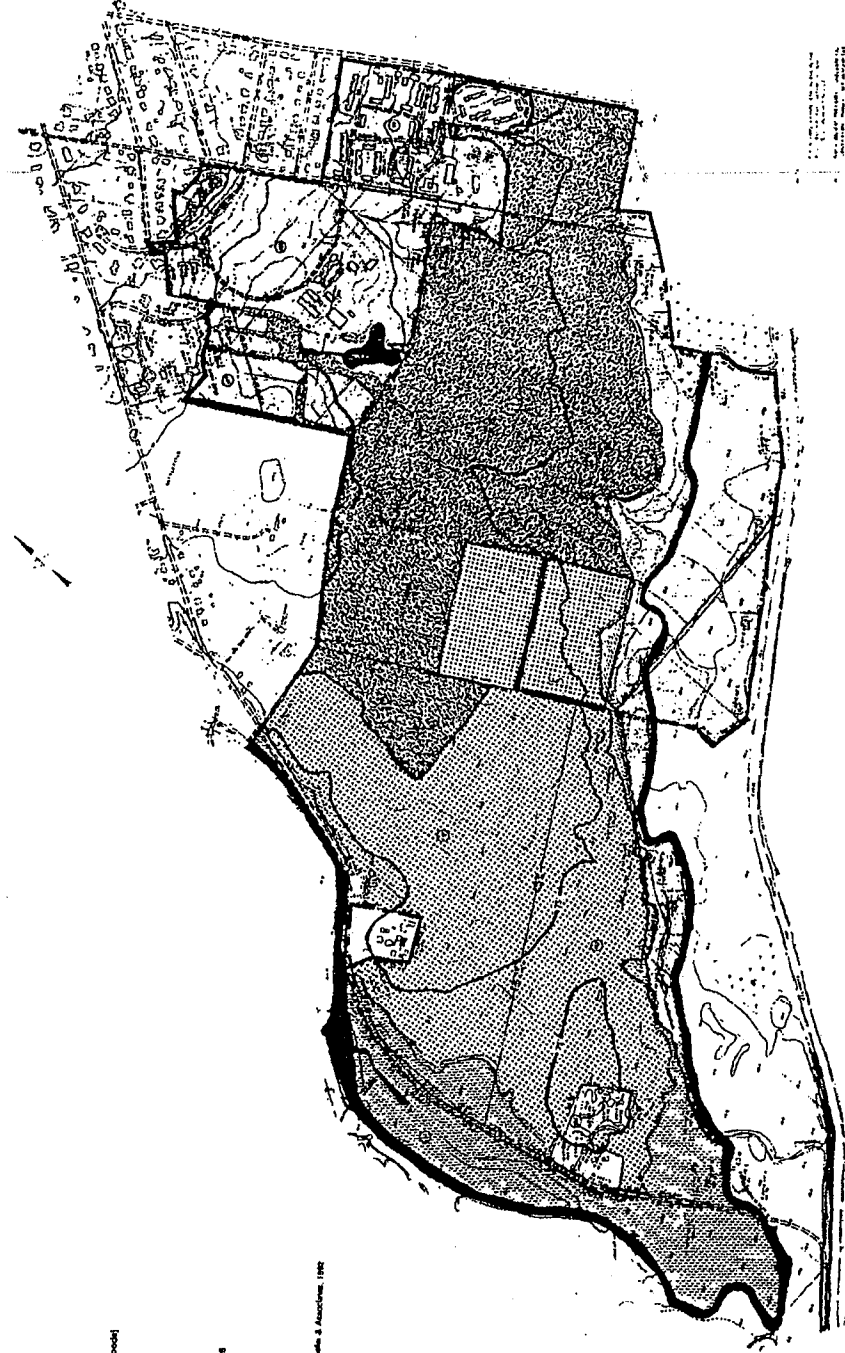
PROJECT: GDP # 4

**Institute for Advanced Study**  
Princeton, New Jersey

Lead: Richard E. Koenig  
Senior Planner  
Traffic Engineer  
James Moore Perini Firm  
Lead Designer

**HYDROLOGY**  
**GENERAL DEVELOPMENT PLAN**

76x



- Agricultural Fields
  - Lowland Fields
  - Upland Forest  
(Pine, Oak, Spruce, Fir)
  - Lowland Forest
  - Contour Interval
  - Streams, Water Bodies
  - Institute Campus
- Source: Data from Princeton University, Princeton, New Jersey, 1982.

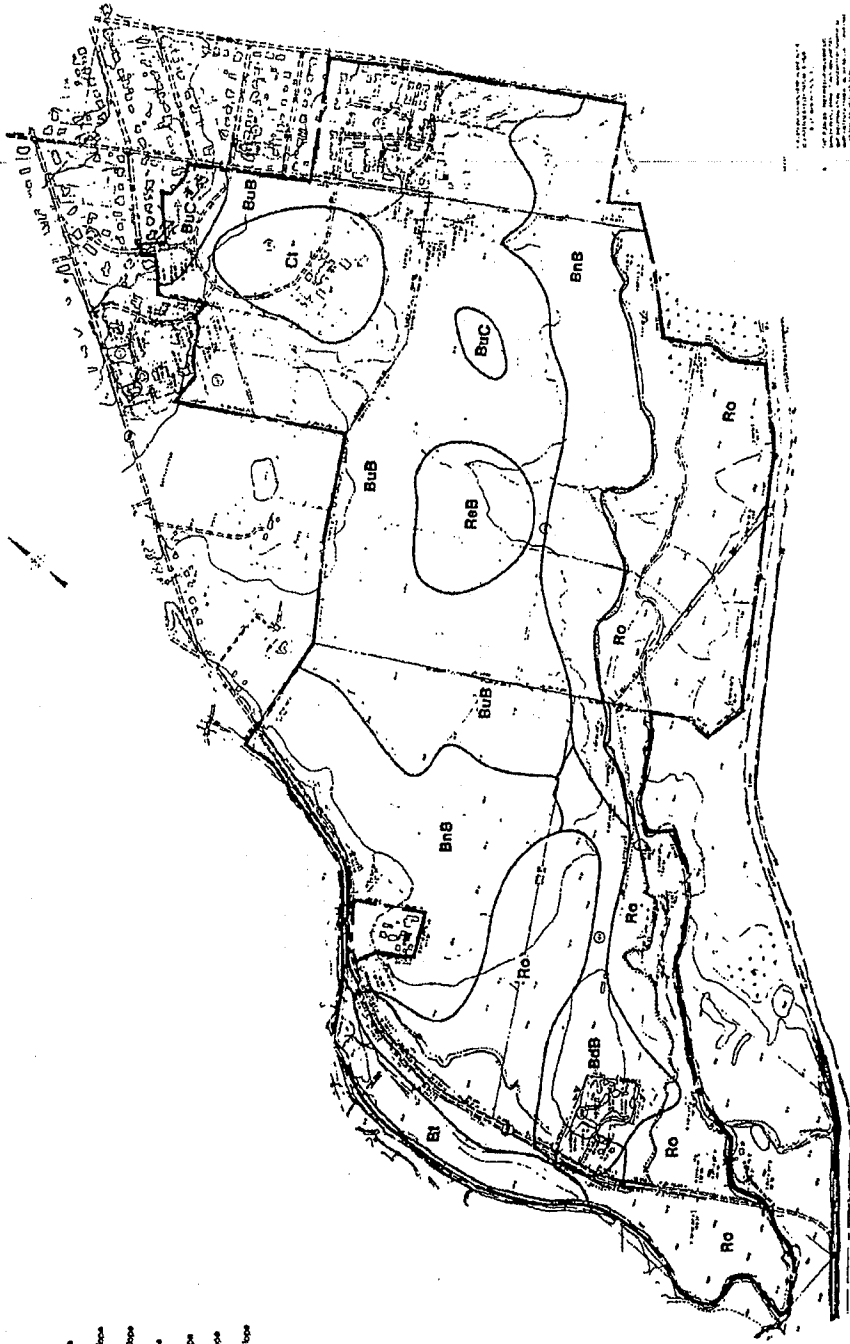
Institute for Advanced Study  
Princeton, New Jersey

Land Use & Planning  
Survey Program  
Night Sessions  
Traffic Engineering  
Princeton University  
Princeton, New Jersey

**NATURAL RESOURCES  
GENERAL DEVELOPMENT PLAN**

1 - 400	GDP # 5
MARCH 1993	

77x



- Soil Types/Slopes**
- BuB BuBcs Slt Loam 2-8% slope
  - BuC BuCs Sandy Loam 2-8% slope
  - BnB BnBcs Slt Loam 2-8% slope
  - Bn BnBcs Sandy 2-8% slope
  - ReB ReBcs Slt Loam 0-2% slope
  - Ro RoBcs Slt Loam 0-2% slope
  - BnB BnBcs Silt Loam 0-2% slope
  - Bn BnBcs Silt Loam 0-2% slope
  - C1 CUPFL Land

Source:  
 Soil Survey of Mercer County, New Jersey  
 United States Department of Agriculture  
 Soil Conservation Service 1972

Institute for Advanced Study  
 Princeton, New Jersey

James H. Miller & Associates  
 Hydrologists  
 Traffic Engineers  
 Environmental Public Works  
 City Planner

**SOILS**  
**GENERAL DEVELOPMENT PLAN**

Scale: 1" = 400'  
 DATE: MARCH 1992  
 SHEET: GDP # 6

78x

**APPENDIX A:**

Settlement Agreement: Institute for Advanced Study  
Louis Bamberger and Mrs. Felix Fuld Foundation vs. Regional Planning Board  
for the Borough of Princeton and the Township of Princeton

FILED

FEB 22 1993

CHAMBERS OF  
JUDGE PAUL G. LEVY

JAMIESON, MOORE, PESKIN & SPICER  
A Professional Corporation  
300 Alexander Road  
Princeton, New Jersey 08543-5276  
(609) 452-0808  
Attorneys for Plaintiff

Plaintiff,	:	SUPERIOR COURT OF
	:	NEW JERSEY
INSTITUTE FOR ADVANCED STUDY -	:	LAW DIVISION
LOUIS BAMBERGER and MRS. FELIX	:	MERCER COUNTY
FULD FOUNDATION, A Not-for-	:	
Profit Corporation of the State	:	
of New Jersey	:	
	:	
v.	:	Docket No. L-90-0204 P.W.
	:	
Defendant,	:	
	:	CIVIL ACTION
REGIONAL PLANNING BOARD FOR THE	:	
BOROUGH OF PRINCETON AND THE	:	
TOWNSHIP OF PRINCETON	:	
	:	ORDER PLACING ACTION ON
	:	THE INACTIVE LIST AND
	:	GRANTING OTHER RELIEF


This matter having been opened to the Court before the Honorable Paul G. Levy, P.J.Ch., on February , 1993, upon the joint application of Miller, Porter & Muller, Esquires, attorneys for defendant (Gerald J. Muller, Esq. appearing) and Jamieson, Moore, Peskin & Spicer, P.C., attorneys for plaintiff (Douglas G. Sanborn, Esq. appearing), seeking to have this action placed on the inactive list in accordance with the Settlement Agreement annexed hereto; and

It appearing that the defendant Planning Board and the plaintiff have settled this action subject to the fulfillment and/or waiver of certain contingencies which are detailed in

Article 6 of the Settlement Agreement and are expected to take six months or more to satisfy; and good cause appearing,

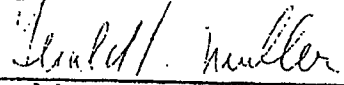
IT IS on this 22<sup>nd</sup> day of February 1993, ORDERED that

1. This action be and hereby is placed on the inactive list;
2. The parties to this action shall promptly report to this Court when all of the conditions have been satisfied and/or waived, in which event this Court shall order the action be dismissed without prejudice in accordance with Paragraph 8(b) of the Settlement Agreement;
3. The parties may petition this Court for the resolution of any controversies which may arise with respect to the Settlement Agreement, such petition to be by letter captioned in this action;
4. In the event that any of the conditions set forth in the Settlement Agreement are not timely satisfied or met and the Institute terminates the Agreement pursuant to paragraph 7a, plaintiff shall have the right to reinstate this action upon motion, which motion may be made by letter captioned in this action.

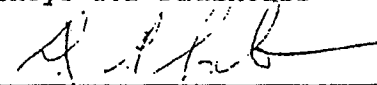
  
\_\_\_\_\_

We hereby consent to the form and entry of this Order.

MILLER, PORTER & MULLER, ESQS.  
Attorneys for Defendant

By:   
Gerald J. Muller

JAMIESON, MOORE, PESKIN & SPICER, P.C.  
Attorneys for Plaintiff

By:   
Douglas G. Sanborn

Article 6 of the Settlement Agreement and are expected to take six months or more to satisfy; and good cause appearing,

IT IS on this 22nd day of February 1993, ORDERED that

1. This action be and hereby is placed on the inactive list;
2. The parties to this action shall promptly report to this Court when all of the conditions have been satisfied and/or waived, in which event this Court shall order the action be dismissed without prejudice in accordance with Paragraph 8(b) of the Settlement Agreement;
3. The parties may petition this Court for the resolution of any controversies which may arise with respect to the Settlement Agreement, such petition to be by letter captioned in this action;
4. In the event that any of the conditions set forth in the Settlement Agreement are not timely satisfied or met and the Institute terminates the Agreement pursuant to paragraph 7a, plaintiff shall have the right to reinstate this action upon motion, which motion may be made by letter captioned in this action.

Paulsen

We hereby consent to the form and entry of this Order.

MILLER, PORTER & MULLER, ESQS.  
Attorneys for Defendant

By: Gerald J. Muller  
Gerald J. Muller

JAMIESON, MOORE, PESKIN & SPICER, P.C.  
Attorneys for Plaintiff

By: Douglas G. Sanborn  
Douglas G. Sanborn

December 8, 1992

JAMIESON, MOORE, PESKIN & SPICER  
A Professional Corporation  
300 Alexander Road  
Princeton, New Jersey 08543-5276  
(609) 452-0808  
Attorneys for Plaintiff

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Plaintiff,	:	SUPERIOR COURT OF
	:	NEW JERSEY
INSTITUTE FOR ADVANCED STUDY -	:	LAW DIVISION
LOUIS BAMBERGER and MRS. FELIX	:	MERCER COUNTY
FULD FOUNDATION, A Not-for-	:	
Profit Corporation of the State	:	
of New Jersey	:	
	:	
v.	:	Docket No. PW-L90-0204
	:	
Defendant,	:	
	:	CIVIL ACTION
REGIONAL PLANNING BOARD FOR THE	:	
BOROUGH OF PRINCETON AND THE	:	
TOWNSHIP OF PRINCETON	:	SETTLEMENT
	:	AGREEMENT
	:	
	:	
	:	
	:	
	:	

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WHEREAS, a Complaint has been filed in this matter;  
and

WHEREAS, the Regional Planning Board of Princeton  
(hereinafter referred to as the "Planning Board") and the  
Institute for Advanced Study - Louis Bamberger and Mrs.  
Felix Fuld Foundation (hereinafter "the Institute") have

83x

agreed to settle this matter on the terms set forth in this Settlement Agreement; and

WHEREAS, the Township Committee of the Township of Princeton (hereinafter "the Township"), not a party to this action, but a necessary party to resolution of the litigation, has consented to and agreed to be bound by the terms hereof to the extent that action of the Township is required hereby; and

WHEREAS, the Planning Board and the Township have approved the execution hereof by their respective representatives in accordance with resolutions of the Planning Board and the Township Committee duly adopted after public hearing;

NOW, therefore, it is agreed by and among the parties hereto as follows:

1. THE PLANNING BOARD

The Planning Board agrees:

- a) To consider recommending to the Township by December 1, 1992, an amendment to the zoning ordinance which will provide for the review and approval by the Planning Board of general development plans (GDP) as provided for by the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq. (hereinafter the MLUL). The terms of the GDP provisions

84x

shall be such that the Development Plan of the Lands of the Institute, consisting of 599.4 acres, as shown on Exhibit A hereto hereinafter Lands), may be approved as a GDP pursuant thereto;

b) to consider recommending to the Township by December 1, 1992, amendments to the zoning ordinances of the Township which will permit the development of the Lands of the Institute in accordance with the Development Plan set forth in Paragraph 4(a) through (n) hereof;

c) to consider adopting an amendment to the Princeton Community Master Plan by December 1, 1992, such that the proposed use of the Lands of the Institute as hereinafter set forth in the Development Plan is consistent with and not in conflict with the Master Plan as so amended;

d) to promptly and expeditiously schedule a public hearing on the application for the General Development Plan approval to be filed by the Institute as hereinafter provided, and to act upon that application within 90 days of the date of the filing of the same by the Institute, assuming that the application is not deemed incomplete. The Board and the Institute agree to work cooperatively to determine what additional documentation or informational submissions are necessary with respect to that application

and which requirements under the GDP Ordinance are appropriate to be waived under the circumstances of this settlement, it being the intent of the Planning Board and the Institute, as stated above, that the work product already developed in connection with the Development Plan of the Institute, together with a conceptual access road plan, will be substantially sufficient for the Board to act on the proposed GDP application of the Institute. A decision on any request for waivers from the GDP submissional requirements will be made as early in the application process as practicable, but no later than the time for determining completeness of the application. The decision of the Planning Board will be made after public review and hearing on the GDP application, as required by the MLUL. The Institute agrees to grant two 30 day extensions of the 90 day period as may be necessary if requested to do so by the Board in order for the Board to complete its determination with respect to the application.

## 2. THE TOWNSHIP COMMITTEE

The Township agrees:

- a) to act upon the recommendations to the Township with respect to the proposed amendments to the Princeton

zoning ordinances, as detailed above, prior to December 31, 1992;

b) to adopt an amendment to the Princeton Township Wastewater Management Plan so as to include in its sewer service area all of the development areas required for the Development Plan prior to December 31, 1992, and to apply to the New Jersey Department of Environmental Protection and Energy (hereinafter "NJDEPE") and Mercer County to amend the Water Quality Management Plan of Mercer County to include therein the amendments to the Princeton Township Wastewater Management Plan, such application to be made to Mercer County and to NJDEPE prior to December 31, 1992;

c) to apply for an amendment to the New Jersey State Development Plan, so that the Development Plan of the Institute is consistent with the State Development Plan, prior to December 31, 1992;

d) to pursue with due diligence the approval of the applications with respect to the Water Quality Management Plan of Mercer County and New Jersey State Development Plan, as set forth above, and to keep the Institute and the Planning Board advised of the status of those applications;

e) to cooperate with the Institute in connection with the location of certain playing fields to be leased to the

Township by the Institute following approval of the Development Plan, as hereinafter set forth.

3. THE INSTITUTE

The Institute agrees:

- a) to file an application for GDP approval of the Development Plan in accordance with the ordinances to be adopted by the Township as above set forth, as soon as is reasonable following the adoption thereof, and to process that application with due diligence;
- b) that the application will provide for the development of the Lands of the Institute in accordance with the Development Plan described below;
- c) to limit its use of its Lands in accordance with the Interim Restrictions set forth below;
- d) to withhold the commencement of any improvements on its Lands for the purpose of implementing the Development Plan until January 1, 2002 and to refrain from the sale or execution of an agreement of sale of all or any portion of its Lands, except to a governmental agency with powers of eminent domain, or to a non-profit entity or individual for open space preservation purposes, until January 1, 1995; provided however, that the restrictions of this subparagraph

3(d) will be void as to any portion of the Lands which is the subject of eminent domain proceedings commenced by any governmental authority; and provided further, that the restrictions of this paragraph 3 and any other restrictions hereinafter provided will automatically cease to exist if this agreement is terminated.

#### 4. THE DEVELOPMENT PLAN

The Development Plan for the Lands of the Institute which plan is to be the subject of the General Development Plan application provided for above, with a vesting period of 20 years from the date of final approval of the first section, as provided for by N.J.S.A. 40:55D-45.1(b), is as follows:

a) **Development Area:** Clustered development within 105 acre area (Area A) shown on attached plan. The 105 acres does not include the right-of-way for the 2 access roads. The development rights for the entire 589.4 acre tract (the Lands of the Institute) are to be transferred to the 105 acre development area. The conveyance of land outside the development area by the Institute or acquisition thereof by condemnation, provided the use thereof is deed restricted in accordance with the Development Plan, will not affect the

number of units permitted nor the size and shape of the development area.

b) Preserved Area: No development within or lotting into the Institute Woods and Quaker Woods (Area B), the farmland between the development area and Quaker Road (Area C), the 100 foot D & R buffer strip and the Stony Brook floodplain (Area D), and the area west of Quaker Road (Area E). The west line of the development area may vary with approval of Planning Board, but such variance is not to increase the acreage of the development area.

c) Use of Open Space - Institute and Quaker Woods (Area B): The Woods are to be open to the public as at present, maintained by , and subject to reasonable regulation by the Institute while it retains title and thereafter by its successor in title. This area will be dedicated to open space by appropriate instruments, open to the public and maintained by the owner, upon commencement of site construction of the first residential section, with the option of the Institute to retain title or convey to a governmental or not-for-profit agency or association. The grantee will be subject to approval of the Township which shall not be unreasonably withheld. No approval will be necessary for the Institute to retain title. Tree cutting

will be permitted only for forest management purposes and maintenance of existing or new trails.

c) Use of Open Space - Farmed Historic Area (Area C): This area will be permanently preserved as open space with a semi-rural appearance. Only crop farming, livestock, orchard use, sod farming and nursery-type activity and uses and structures accessory and incidental thereto are permitted, and, if fallow, this area will be managed so as to prevent woody species, second growth invasion. No active recreation use (other than the play fields) will be permitted. These restrictions will be imposed by appropriate instruments upon commencement of site construction of the first residential section.

e) Use of Open Space - Land west of Quaker Road (Area E) and Floodplain and D & R Buffer (Area D): These areas will remain in natural growth, except that the uses set forth in the preceding paragraph will be permitted in, and the other provisions of the preceding paragraph will apply to, any portion of Area D which is not wooded. Appropriate instruments incorporating these restrictions will be filed upon commencement of site construction of the first residential section.

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f) Buffer: the west line of the development area will have a landscaped buffer, including 10 feet in the rear of the residential lots within the development area.

g) Access: Two access points. The first is shown on the plan to intersect with Quaker Road between the Quaker Meeting House and the floodplain indentation. The second, as shown on the plan, will connect with Maxwell Lane.

h) Unit yield: 276 single-family market homes with average lot size of 1/4 acre and a permissible floor area of residence of at least 2,700 square feet. Apartments, townhomes, attached housing, zero lot line single family homes, etc., as well as larger lot single family homes are permissible at the Institute's option to be exercised at the time of preliminary approval. The parties acknowledge that the general development plan provisions of the MLUL do not require determination of the type or location of housing within Area A at the time of GDP approval. Bulk, locational and other standards will be included in the zoning amendment referred to in Paragraph 1(b), as will be a provision of general applicability limiting the extent of structures for farm operations.

i) Playing fields: The Institute will lease to the Township for \$1.00 per year, sufficient acreage on the Lands

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of the Institute in a location within Areas C or D to be agreed to between the Township and the Institute, for two soccer-size playing fields and parking therefor. At the time of site construction of the first residential section, the interim lease provided for below is to be continued, or the lands are to be dedicated to the Township, as determined by the Township. All necessary approvals and the construction of the fields is to be the Township's responsibility. Development of the fields will be subject to any required approval by the Office of New Jersey Heritage, as the fields will be located in the historic zone. If all necessary approvals are not secured, this paragraph 4(i) lapses. The location of the fields will be determined by the Township and Institute in conjunction with the application for GDP approval. If at the time of a development application for preliminary approval following GDP approval the Institute requests that an access road be relocated to a point acceptable to the Planning Board, and the new access interferes with the fields, the fields shall be relocated and the Institute shall pay the cost of building the new fields. If at the time of a development application for preliminary approval the Planning Board and the Township requests that the access be relocated, to a

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point acceptable to the Institute, and the new access interferes with the fields, the fields may be relocated by and at the expense of the Township.

j) Relation of Playing Fields to Quaker Meeting and Princeton Friends School. If the fields are located adjacent to the Meeting House, they are not to be used at a time that will unreasonably interfere with the activities of the Quaker Meeting. The School can use the fields for its recreation needs. Such use and restrictions are to be determined by the Township only after consultation with the Friends, shall be subject to approval by the Institute, and shall be set forth in the lease or the deed of dedication to the extent permitted by law.

k) Institute Campus: The remaining Institute Lands, as shown on Exhibit A, are to be limited to existing E-2 use, and not further limited.

l) School site: If the Princeton Regional Board of Education acquires a school site within the development area, the number of units will be reduced in proportion to acreage acquired.

m) Eno farmstead: No further development on or subdivision of the Eno farmstead as shown on Exhibit A. The Institute will have the right to restore and, to the extent

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destroyed by natural causes, replace the existing main farm house, and to restore and replace accessory structures. Applicable provisions of Chapter 10B of the Princeton Township Code in effect as to the date of the GDP approval shall apply.

n) Partial acquisition: The 276 units to be developed in the development area (Area A) shall be reduced by the ratio of the acres within the development area acquired by a third party and restricted at the time of acquisition to other than residential development to the total acreage of the development area. That is, the number of units will be reduced by an amount equal to 2.63 times the acreage so acquired, rounded to the nearest whole number.

##### 5. INTERIM RESTRICTIONS

Following execution of this Settlement Agreement, and subject to the provisions of the contingency and termination provisions set forth below, the Institute agrees to restrict the use of the Institute lands (589.4 acres) until such time as the Development Plan is implemented or this agreement is terminated, as follows:

a) The Institute Woods and Quaker Woods (Area B) are to be opened to the public as at present, are to be maintained by the Institute or its successor in title, subject to such reasonable regulation as may be imposed by the Institute while it retains title and thereafter by its successor in title. Tree cutting will be allowed only for forest management purposes and maintenance of existing trails.

b) The Farmed Historic Area (Area C) and the portion of Area D which is not wooded will be restricted to open space with a semi-rural appearance. Only crop farming, livestock, orchards, sod farming and nursery-type activity and uses and structures accessory and incidental thereto are permitted and, if fallow, this area will be managed so as to prevent woody species, second growth invasion. No active recreation use (other than the play fields set forth above) will be permitted.

c) The lands in Area E and the portion of Area D which is presently wooded will remain in natural growth.

d) Upon the contingencies of Paragraph 6 being met or waived, the Institute will offer to enter into a lease with the Township for an area sufficient for two soccer size playing fields and parking therefor, as provided for in

Paragraph 4(1). The plans for development of the playing fields are to be approved by the Institute and will not include lighting, spectator stands or other similar improvements. The lease will be for \$1.00 per year with full insurance protection for and indemnification of the Institute, and will provide that all necessary government approvals for and construction of the fields will be the responsibility of the Township, and that development of the playing fields will be subject to any required approval of the Office of New Jersey Heritage. If any required approvals are not attained, this paragraph 5(d) will lapse. The location of those fields will be determined by the Institute in conjunction with the Development Plan of the Institute and in consultation with the Township. The lease will provide that the Princeton Friends School will have use of the fields for school activities, and that the use of the play fields will not unreasonably interfere with the activities of the Quaker Meeting and the Princeton Friends School. The details of the restrictions on use are to be determined by the Township only after consultation with the Friends and shall be subject to approval by the Institute.

e) The restrictions with respect to the use of the Eno farmstead, as set forth above, shall be in effect.

8) Upon the contingencies of Paragraph 6 being met or waived:

(1) In the event of the acquisition by purchase or condemnation of all of Area A by a governmental agency, or the acquisition by purchase of all of Area A for open space preservation purposes by a non-profit entity or entities or individual or group of individuals, the restrictions on Areas B, C, D and E set forth in subparagraphs 4(c), (d) and (e) above, and the playing field provisions in subparagraph 4(i), will be imposed by appropriate instrument at the time of the acquisition.

(2) In the event of the acquisition or a series of acquisitions of a portion or portions of Area A by a governmental agency or agencies, or by a non-profit entity or entities or individual or individuals for open space preservation purposes, the use restrictions set forth in subparagraph 4(c), (d) and (e) above will be imposed by appropriate instrument at the time of acquisition, with 4.61333 acres selected by the Institute from Areas B, C and D being so restricted for each 1 acre of Area A so acquired. The provisions in Subparagraph 4(i) as to continuation of the lease or dedication to the Township shall apply if the

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acres selected by the Institute include the playing fields and parking therefor.

(3) In the event that any portions of Areas B, C, D and E are acquired by third parties (other than by a governmental agency with powers of eminent domain) the conveyance shall be made subject to subsequent compliance with the provisions of subparagraphs (1) and (2) above upon the subsequent acquisition of all or a portion of Area A.

(4) The restrictions provided for in subparagraphs (1) and (2) above, once imposed, shall continue in effect pursuant to their terms, anything in Paragraph 3 and 7 hereof to the contrary notwithstanding.

#### 6. CONTINGENCIES

The obligations of the Institute under this agreement are contingent upon the happening of all of the following events:

- a) the adoptions of amendments to the Master Plan as set forth in paragraph 1(c) above;
- b) the adoption of the zoning ordinances as set forth in paragraph 2(a) above;
- c) the approval of the amendments to the Mercer County Water Quality Management Plan and the approval of the Princeton Township Wastewater Management Plan with respect

to the sewer service area as set forth in paragraph 2(b) above; and NJDEPE approval thereof by December 31, 1993;

d) the amendment to the New Jersey State Development Plan, as set forth in paragraph 2(c) above, by July 1, 1993;

e) approval of the GDP application in a form satisfactory to the Institute no later than 150 days after application therefor.

#### 7. TERMINATION

This agreement will terminate upon:

a) failure to meet any of the contingencies as set forth in Paragraph 6 above, unless waived or extended by the Institute;

b) expiration of the vesting period of the GDP approval, but no later than 28 years from the date of GDP approval, unless the parties hereto mutually agree to a longer term.

In the event this agreement is terminated, the rights of the parties under this agreement, as well as the rights of the Institute with respect to the GDP approval, if one is obtained, shall cease or lapse; the Planning Board and the Township having the right as provided by law to enact amendments to any Master Plan or zoning regulation applicable to the lands of The Institute, and The Institute

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having the right to contest any such regulations, without being limited in any such challenge to any term or condition of this agreement or any approvals obtained pursuant to or contemplated by this agreement. The parties may agree to leave in effect the zoning amendments referred to in Paragraph 2(a) and the Interim Restrictions even if this agreement terminates.

#### 9. LITIGATION

The Planning Board and the Institute agree, upon the approval and execution of this agreement by all parties hereto, to jointly apply to the Superior Court of New Jersey for an Order of the Court: (a) placing this matter on the inactive list, with the right to reinstate the same upon motion of The Institute if this agreement is terminated pursuant to paragraph 7a; (b) dismissing the action without prejudice upon the contingencies of paragraph 7(a) being met or waived by the Institute; and (c) providing that any controversies arising out of the agreement shall be subject to determination by the Court in the pending action. Upon this action being dismissed pursuant to paragraph 7(b), the Institute agrees during the term of this agreement not to challenge the zoning and Master Plan provisions adopted pursuant to paragraphs 1(b) and 2(a).

The provisions hereof shall be binding upon the parties' successors and assigns, including their successors-in-interest as to all or a portion of the Lands of the Institute.

WITNESSED:

*Pearl J. Pillion*  
Pearl J. Pillion, Administrative  
Coordinator

Regional Planning Board of Princeton

By *Joseph O'Neill*  
Joseph O'Neill, Chairman

ATTEST:

*Patricia C. Shuss*  
Patricia C. Shuss, Clerk

Township of Princeton

By *Richard C. Woodbridge*  
Richard C. Woodbridge, Mayor

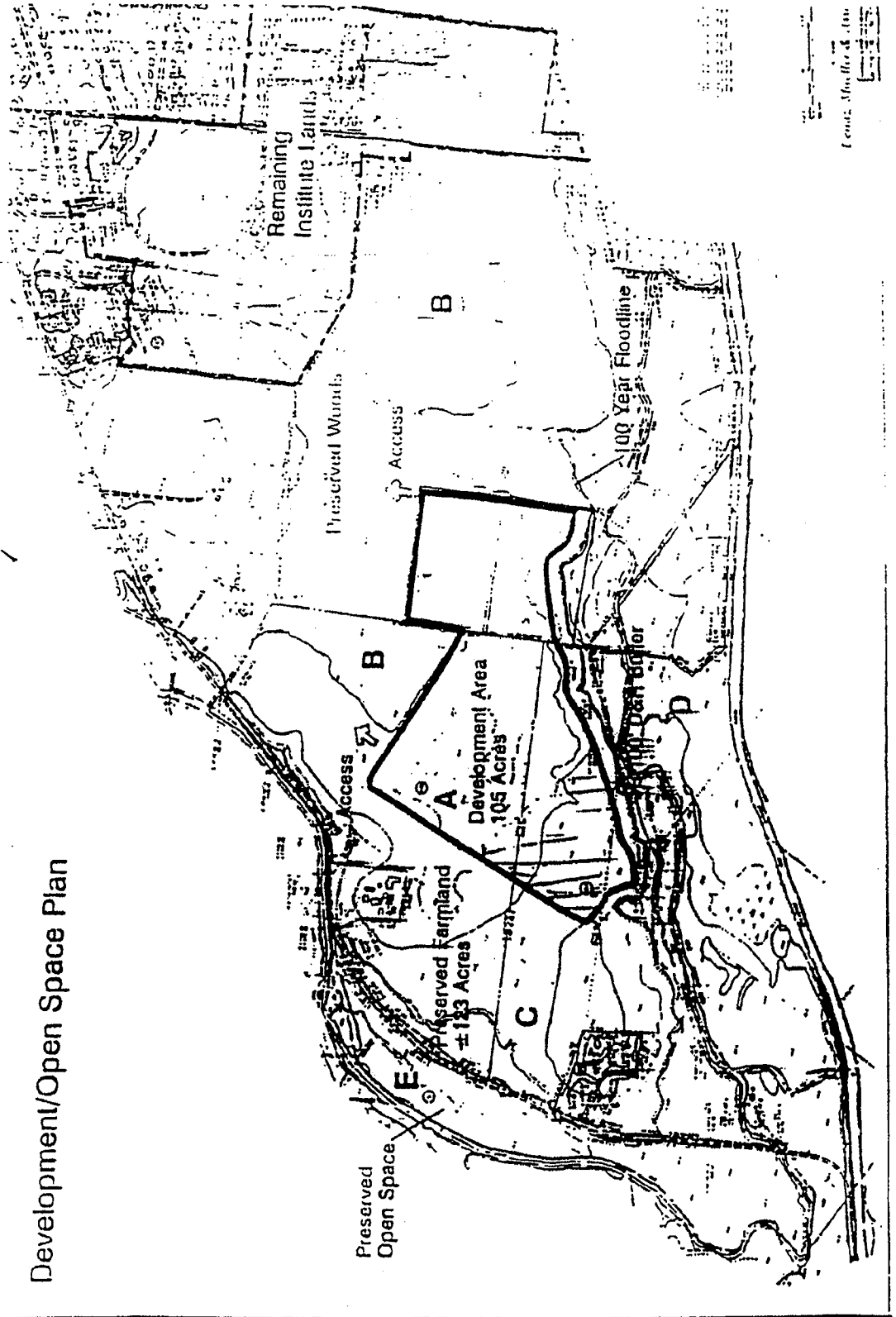
WITNESSED OR ATTESTED:

*Allen I. Rowe*  
Allen I. Rowe, Associate Director

Institute for Advanced Study -  
Louis Hamberger and Mrs. Felix  
Fuld Foundation

By *Phillip A. Griffiths*  
Phillip A. Griffiths, Director

Development/Open Space Plan



Legend  
Scale  
North Arrow

103x

**APPENDIX B:**

1. Residential-Historic Farmland-Woodland (R-HF-W) Zoning Standards
2. Educational E-2 Zoning Standards

9. Article XI, Division 2 of Chapter 10B of said Code, which sets forth regulations for the zoning districts, is amended by adding a NEW Subdivision XV as follows:

Subdivision XV. Residential-Historic Farmland-Woodland District.

Sec. 10B-272.10. Purposes.

Township Committee has determined that a new zoning district, to be designated R-HF-W, should be established in the Township in order to:

(a) Retain as much of the lands within such zoning district in their present condition as is practicable in order to preserve:

(1) the wooded portion thereof, commonly known as the Institute and Quaker Woods, because of their critical importance in the ecosystem and for recreational use;

(2) as much of the farm fields as is practicable in light of their historic significance especially and the need to foster agricultural activities;

(3) the Stony Brook floodplain for environmental purposes; and

(4) the D & R Canal Park buffer in order to respect and protect the quality of the park.

(b) Effect such preservation goals by shifting development potential from the areas preserved by mandating that development be clustered in the portion of the tract most suitable therefor and with a density consistent with a capacity of the circulation system.

Sec. 10B-272.11. Establishment.

There is hereby established a Residential-Historic Farmland Woodland (R-HF-W) Zoning District including subzones A

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through F, made up of such land as is shown on the zoning map on file in the office of the township clerk.

Sec. 10B-272.12. Permitted uses in subzone A.

Those uses permitted in residential clusters, as set forth in section 10B-191.

Sec. 10B-272.13. Permitted density and lot and other standards in subzone A.

(a) Permitted density. Two hundred seventy six dwelling units meeting the lot and other standards set forth in this subdivision (or such lesser number as the developer may choose) may be developed in subzone A. In the case of a conveyance of a portion of subzone A to a third party prior to the grant of preliminary approval, the number of units which may be developed in each portion of subzone A not under common ownership shall be arrived at by multiplying 276 by the ratio of acres within each such portion to 105. That is, the number of units will be 2.63 times each parcel's acreage, rounded to the nearest whole number.

(b) Improvements serving subzone A. All lots and other improvements serving development within subzone A shall be located within subzone A, except that two access roads and necessary utility corridors serving subzone A may be located in subzones B or C.

(c) Variation of western boundary line. The planning board may vary the western boundary line of subzone A, but such variation shall not increase or decrease the acreage of such subzone.

(d) Buffer along western boundary line. The western boundary line of subzone A shall have a landscaped buffer which shall be located in whole or in part in the rear of the residential lots within subzone A to a depth of ten feet.

(e) Additional provisions. Sections 10B-189.1, -190, -190.1, -190.2, -191.1(b), -191.3, -193(a), (b)(2)-(5), (d), and (e), -194.2 (if subzone B, C, D, or E is conveyed to the developer of subzone A), and -195 shall apply. In addition, section 10B-192.1 shall apply, and no calculation need be made as to whether the open space in this R-HF-W zoning district (i.e., Subzones B through E except for the road right-of-way but including the playing fields) meets the percentage open space requirement of that section.

Sec. 10B-272.14. Permitted uses and restrictions on development in subzones B through F.

(a) Subzone B. Subzone B shall be maintained in its natural condition. Tree cutting shall be permitted only for forest management purposes and for maintenance of existing and creation of new trails.

(b) Subzone C. Subzone C shall be preserved as open space with a semi-rural appearance. Only crop farming, livestock, orchard use, sod farming and nursery-type activity and uses and structures accessory and incidental thereto shall be permitted, and, if fallow, this subzone shall be managed so as to prevent woody species, second growth invasion. No active recreation use other than playing fields on land leased to or owned by the Township shall be permitted.

(c) Subzones D and E. Subzones D and E shall remain in natural growth, except that in the portion of Area D presently not wooded the uses set forth in subsection (b) hereof shall be

permitted, and, if fallow, this portion will be managed so as to prevent woody species, second growth invasion.

(d) Subzone F. No further development shall be permitted in Subzone F, nor shall land therein be further subdivided. Within subzone F-1, the owner shall have the right to restore and, to the extent destroyed by natural causes, replace the main farm house and to restore and replace accessory structures. All pertinent provisions of Chapter 10B pertaining to historic preservation or otherwise shall continue to apply.

Section 10B-272.15. Imposition of restrictions in perpetuity upon subzones B through E.

As a condition of any approval granted for residential development within subzone A, the planning board shall require that upon the commencement of any site construction for residential development within subzone A the developer record a legal instrument acceptable to the board attorney which restricts in perpetuity subzones B through E in the manner set forth in section 10B-272.14(a)-(c).

10. Section 10B-320, which sets forth the table of conditional uses, is amended by adding a NEW vertical column entitled "R-HF-W (Subzone A)," by placing asterisks in vertical column (d), and by placing dashes in the remaining horizontal columns.

11. This ordinance shall take effect upon its passage, publication, and filing with the Mercer County Planning Board, according to law.

I, Patricia C. Shuss, Clerk of the Township of Princeton, County of Mercer, State of New Jersey, do hereby certify that the foregoing is a true copy of an ordinance adopted by Township Committee at its meeting on December 21, 1992.

Patricia C. Shuss  
Patricia C. Shuss  
Township Clerk

**Sec. 10B-263.1. Permitted uses in the E-2 district.**

The following uses are permitted in the E-2 district:

(a) The educational activities of any institution of higher learning that is organized and operated not for pecuniary profit and any activities customarily incidental thereto; provided, that there is no nuisance factor other than as occasioned by the incidental light and the noise of the congregation of people, of passenger traffic and of the delivery of goods.

(b) Residences exclusively for the faculty, students and staff of any such institution, including their families, in multi-family houses and apartments and residences exclusively for students and assigned supervisory staff, including the families of assigned supervisory staff in dormitories.

(c) Single family houses exclusively for the faculty and staff including their families of any such institution.

(d) Accessory uses on the same lot with, and customarily incidental to, any of the foregoing permitted uses. (Ord. No. 856, § 2; Ord. No. 82-17, § 5.)

**Sec. 10B-264. Lot and building coverage.**

(a) No lot in districts E-1 and E-2 shall have a lot coverage exceeding fifty percent, nor shall the total area of the plan projections of all buildings on a lot exceed twenty percent of the

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gross area of the lot. For this purpose a plan projection is a projection to ground level of the largest horizontal cross section of a building.

(b) For the sole purpose of computing lot coverage within districts E-1 and E-2, the total land covered by such districts is divided into three subareas as defined below, each of which shall be considered as a single lot solely for such purpose:

(1) Subarea A: Bounded by the E-2 district boundary on the north and south and west, and by Springdale Road on the east.

(2) Subarea B: Bounded by the E-2 district boundary on the north and south, by Springdale Road on the west, and by the service district boundary on the east;

(3) Subarea C: Bounded by the E-1 district boundary on the north and south and east and by the service district boundary on the west.

The beds of Carnegie Lake and Stony Brook shall not be included in the computation of the areas of the aforesaid lots. (Ord. No. 856, § 2.)

**Sec. 10B-265. Minimum floor area in multifamily student housing.**

Every dwelling unit in a multifamily structure in district E-1, E-2, or E-4 that houses students and their immediate families, if any, shall have the applicable minimum total net floor area as shown in column (1) of the following table; except that such total net floor area may be reduced by the area of related space, but in no event shall such reduced total net floor area be less than the amount shown in column (2) of such table. For the purpose of this section, related space means the total area within the multifamily structure in which the dwelling unit is located, but outside such dwelling unit, that is actually provided and suitably finished for the common use of the occupants of such multifamily structure for storage (except garages and carports), utilities and laundry, divided by the number of dwelling units in such multifamily house.

§ 10B-265	LAND USE	§ 10B-265
<i>Type of Dwelling</i>	<i>Minimum Total Net Floor Area (square feet)</i>	<i>Reduced Total Net Floor Area For Related Space (square feet)</i>
Efficiency apartment	400	400*
1 Bedroom	590	530
2 Bedrooms	725	650

\*No reduction allowed for related space. (Ord. No. 856, § 2;  
Ord. No. 90-12, § 5.)

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**Sec. 10B-266. Minimum bedroom space in multifamily married student housing.**

In multifamily houses in districts E-1 and E-2, that house only transient married students of institutions of higher learning and their immediate families, the minimum size for a first bedroom in each dwelling unit shall be one hundred twenty square feet and for each additional bedroom therein the minimum size shall be eighty square feet. (Ord. No. 856, § 2.)

**Sec. 10B-267. Buildings over one hundred feet in height.**

(a) *Conditional use approval.* Buildings over one hundred feet in height in E-1 and E-2 districts, for the educational activities of any institution of higher learning that is organized and operated not for pecuniary profit or for any activities customarily incidental thereto or for the shelter of the faculty, students and staff of any such institution in multifamily houses, apartments and dormitories, may be located not less than three hundred feet from the nearest E-1 or E-2 district boundary line, but only by conditional use approval in accordance with the provisions of division 4 of this article and only if all regulations of the district, other than height, applicable to such buildings, are complied with. To the extent that such E-1 or E-2 lines coincide with the boundary between the borough and township or with the boundary of a service district, such line shall not be considered a district boundary line for this purpose. In acting upon applications for such conditional use approval, the planning board, in addition to applying the guiding principles set forth in paragraphs (b) and (c) of section 10B-321, shall take into account the need for such additional height and the scale of proposed buildings in relationship to the scale of other buildings and spaces in the zoning district and in areas adjacent to the zoning district containing an institutional complex of which the proposed buildings are a part. The planning board shall grant such conditional use approval only in cases where the scale of proposed buildings is in harmony with that of the zoning district and such adjacent areas and where such building is in keeping with the general character thereof. (Ord. No. 856, § 2.)

*Subdivision II. Schedule of Regulations.*

**Sec. 10B-246. Regulations included; schedule.**

The schedule of regulations shows in tabular form the applicable regulations in each zoning district governing lot sizes and dimensions, building and parking area setbacks, building heights, floor area ratio and building setback-height ratio:

**Notes:**

- (a) But not more than two stories.
- (b) Applies to all parking spaces required by this article, and also to parking spaces in excess of the number so required except as otherwise provided in note (c).
- (c) Applies only to parking spaces in excess of the number required by this article, but only if such excess spaces utilize this reduced setback and are screened from the adjacent lot line or lines as provided in section 10B-288.
- (d) For the purpose of computing F.A.R., gross floor area is the aggregate floor area of all buildings, including basements, other enclosed spaces and roof areas used for selling; but it does not include outside covered pedestrian walkways.

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(d') For purposes of computing F.A.R. and the required off-street parking under section 10B-282, gross floor area as defined in section 10B-241, shall not include outside covered pedestrian walkways.

(e) Does not apply in the case of lot lines between lots of the same owner.

(f) But not more than one foot of building height for each three feet of building setback from nearest district boundary. To the extent that such district boundary coincides with the boundary between the borough and township or with the boundary of a service district, it shall not be considered a district boundary for this purpose. Buildings exceeding one hundred feet in height may be allowed as conditional uses in accordance with section 10B-267.

(g) One hundred fifty feet at district boundary. To the extent that such district boundary coincides with the boundary between the borough and township, it shall not be considered a district boundary for this purpose.

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SCHEDULE OF REGULATIONS — Continued  
TOWNSHIP OF PRINCETON

District	SC	E-1	E-2	E-3	E-4
For Permitted Uses	AI	Educational & multi-family residential	Single-family residential	Educational & multi-family residential	Institutional residential
Required Lot Area (Min. Acre)	25	1/2	1	50	(na)
(Min. Sq. Ft.)	1,089,000	21,780	43,560	2,178,000	(na)
Required Lot Width (Min. Ft.)	1,600	100	150	(na)	(na)
Required Lot Depth (Min. Ft.)	(na)	100	150	(na)	(na)
Required Lot Frontage (Min. Ft.)	800	50	75	(na)	(na)
Required Bldg. Setback					
Front	175	60	25	60	75(o)
Side	280	60(e)	15	60(e)	75(o)
Combined Side	(na)	(na)	(na)	(na)	(na)
Rear	200	60(e)	15	60(e)	75(o)
Permitted Bldg. Height (Max. Ft.)	38	100(f)	(na)	100(f)	45(p)
Bldg. Setback Height Ratio	(na)	(na)	1.5:1	(na)	(na)
Permitted Bldg. F.A.R. (Max. %)	20(d)	(na)	20	(na)	16(q)
Required Parking Setback					
Front	50	60(g)	25(b)	60(g)	75(e)(o)
Side	50	20(h)	25(c)	20(h)	20(h)
Rear	50	60(g)(e)	15(b)	60(g)(e)	60(g)(e)
		20(b)(e)	8(c)	20(b)(e)	20(b)(e)
		60(g)(e)	15(b)	60(g)(e)	60(g)(e)
		20(h)(e)	8(c)	20(h)(e)	20(h)(e)

78.136.3/78.136.4

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117x

(h) This indicates a reduced minimum setback which is permitted, other than along a district boundary, for all parking that is screened as provided in section 10B-288. To the extent that a district boundary coincides with the boundary between the borough and township, it shall not be considered a district boundary for this purpose.

(i) Reserved.

(j) Residential clusters meeting the requirements of section 10B-191 et seq., as modified by article XII required.

(k) Not applicable to developments by the Princeton Township Housing Fund pursuant to article XII.

(l) Not applicable to attached housing.

(m) Subject to the requirements of Section 10B-268(e), the maximum F.A.R. shall be nine percent if at least twenty-five percent of all existing and proposed buildings on the site are used for laboratory research as defined in section 10B-241; ten percent if at least thirty-three and one third percent of all existing and proposed buildings on the site are so used; and eleven percent if at least forty percent of all existing and proposed buildings on the site are so used.

(n) Subject to the requirements of section 10B-268(e), the maximum F.A.R. shall be eleven percent if at least twenty-five percent of all existing and proposed buildings on the site are used for laboratory research as defined in section 10B-241; twelve percent if at least thirty-three and one-third of all existing and proposed buildings on the site are so used; and thirteen percent if at least forty percent of all existing and proposed buildings on the site are so used.

(o) Setbacks shall be from the zoning district boundary line and shall be modified as follows:

(1) Reduced to sixty feet for faculty and staff housing and related parking; and

(2) Increased for buildings exceeding thirty feet in height to a number which bears the same ratio to seventy-five feet as the proposed building height bears to thirty feet.

(p) Notwithstanding the stated maximum height of forty-five feet, no building in the E-4 district shall exceed three stories.

(q) F.A.R. for purposes of this zoning district shall mean the ratio of the gross floor area of all buildings in the zoning district to the gross area of the zoning district, expressed as a percentage.

(Ord. No. 856, § 2; Ord. No. 967, §§ 1, 2; Ord. No. 971, § 2; Ord. No. 983, § 3; Ord. No. 1014, § 3; Ord. No. 1031, § 3; Ord. No. 82-17, § 3; Ord. No. 83-9, § 3; Ord. No. 83-32, § 3; Ord. No. 84-31, § 3; Ord. No. 86-14, § 3; Ord. No. 86-15, § 2; Ord. No. 88-31, § 1; Ord. No. 88-48, § 2; Ord. No. 89-13, § 2; Ord. No. 90-12, § 3.)

**Sec. 10B-247. Minimum lot dimensions.**

No lot shall have an area, depth or frontage less than that shown on the schedule of regulations as being required in the zoning district in which the lot is located, and no lot shall be less in width as measured through an existing or proposed building or any part thereof than the minimum lot width shown on such schedule. (Ord. No. 856, § 2.)

**Sec. 10B-248. Building and parking area setbacks.**

No building or parking area shall have any front, side or combined side, rear or district boundary setback distance less than that shown on the schedule or regulations as being required in the zoning district in which the building or parking area is located. (Ord. No. 856, § 2.)

**Sec. 10B-249. Building height.**

No building shall have a height greater than that shown on the schedule of regulations as being permitted in the zoning district in which the building is located; except, that buildings used primarily as places of worship shall not be subject to any height limitation. (Ord. No. 856, § 2.)

§ 10B-250

LAND USE

§ 10B-253

**Sec. 10B-250. Floor area ratio.**

No lot shall have a floor area ratio greater than that shown in the schedule of regulations as being permitted in the zoning district in which the lot is located. (Ord. No. 856, § 2.)

**Sec. 10B-251. Building setback-height ratio.**

All parts of every building shall lie below planes sloping inward and upward from the lot lines with the horizontal to vertical ratio shown on the schedule of regulations as applying to the zoning district in which the building is located; except, that buildings used solely as places of worship shall not be subject to this regulation nor shall this regulation apply to radio or television antennae. (Ord. No. 856, § 2.)

**Sec. 10B-252. Modification for special developments.**

(a) In the case of residential clusters, the provisions of the schedule of regulations may be modified in accordance with the provisions of section 10B-256 and Article IX, division 9.

(b) In the case of special office-research developments, the provisions of the schedule of regulations may be modified in accordance with section 10B-270. (Ord. No. 856, § 2; Ord. No. 1020, § 6.)

**Secs. 10B-252.1 and 10B-252.2. Repealed by Ordinance No. 85-23, § 1.**

*Subdivision III. Use Regulations Generally.*

**Sec. 10B-253. Uses permitted in all districts.**

The following uses are permitted in all districts:

- (a) All facilities owned or operated by the township.
- (b) Signs conforming to the provisions of this article.

78.138a

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**Appendix C**

**LIST OF EXHIBITS**

Submitted with the General Development Plan Application

**Drawings**

- |             |  |
|-------------|--|
| Title Sheet | Location/Zoning                            |
| GDP-1       | Land Use/Circulation Plan                  |
| GDP-2       | Open Space Preservation Plan               |
| GDP-3       | Utility/Stormwater Management Plan         |
| GDP-4       | Environmental Inventory: Hydrology         |
| GDP-5       | Environmental Inventory: Natural Resources |
| GDP-6       | Environmental Inventory: Soils             |

**Reports**

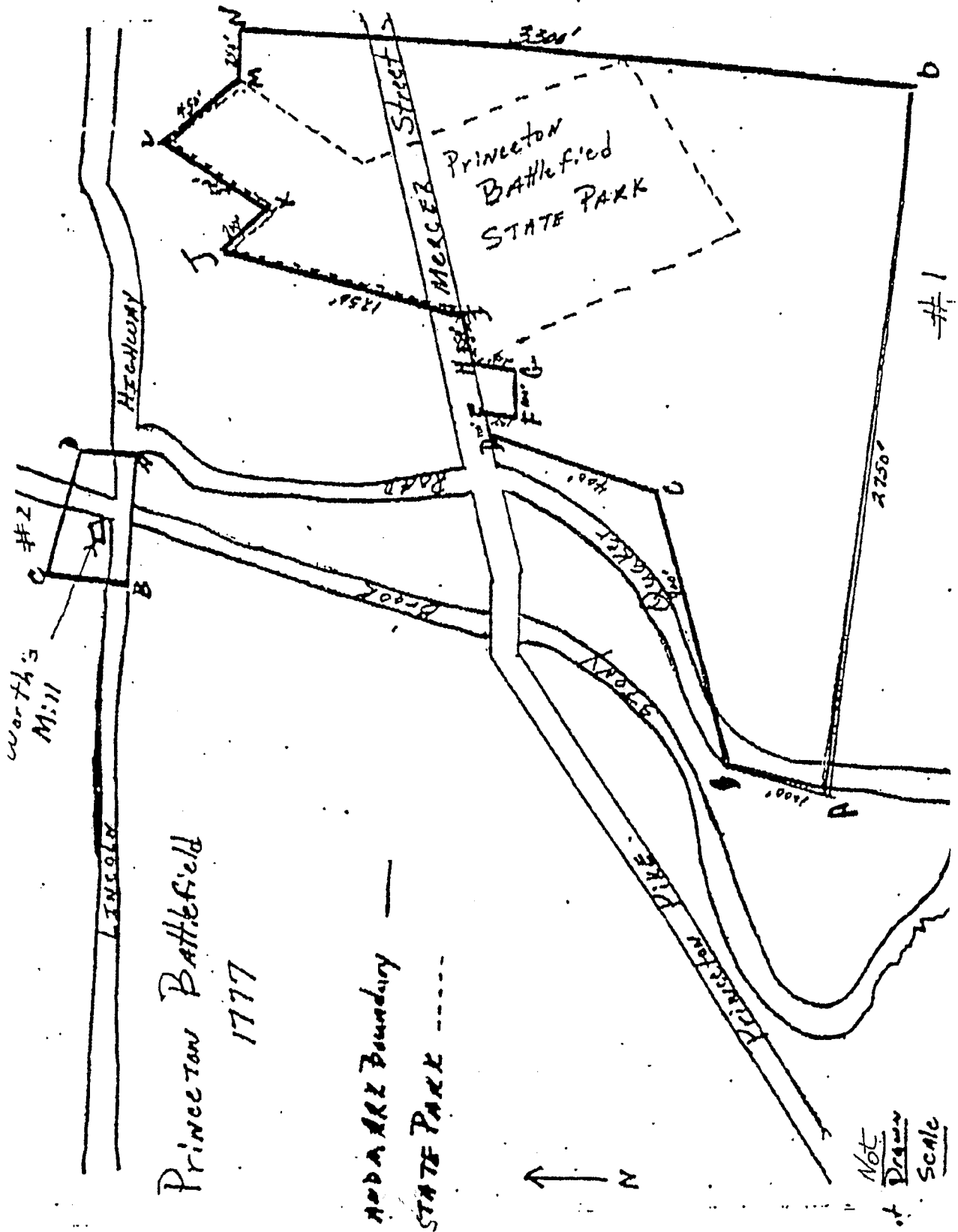
General Development Plan  
Traffic Assessment

#### Appendix D

Historic Resource Designations which include Attachment A: National Historic Landmarks; and Attachment B: National and New Jersey Register of Sites and Districts.

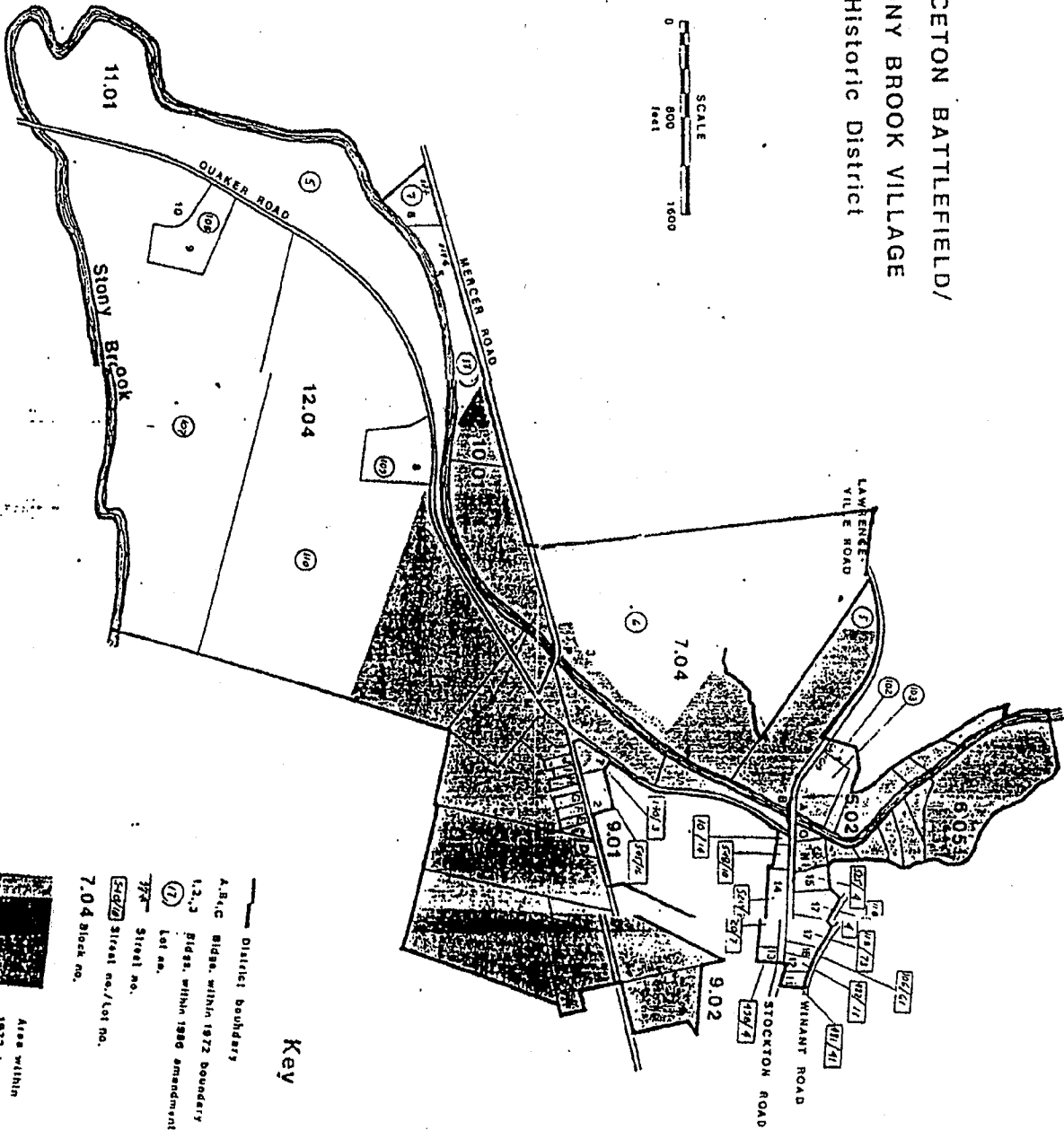
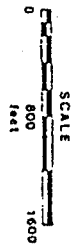
On file in the township Planning Board office are the National and New Jersey Register forms which contain the individual historic landmark district and site descriptions. The map attachments in this Appendix D outline the extent of the historic resources covered by these referenced landmarks, districts and sites.

ATTACHMENT A



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PRINCETON BATTLEFIELD/  
 STONY BROOK VILLAGE  
 Historic District



Key

- District boundary
- 1972 boundary
- Area within 1972 boundary
- 1, 2, 3 Bldgs. within 1972 boundary
- 4, 5, 6 Bldgs. within 1986 amendments
- 7 Lot no.
- 8 Street no.
- 9 Street no./lot no.
- 10 7.04 block no.

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**APPENDIX E:**

GDP Approval Resolution Adopted February 17, 1994 by  
the Regional Planning Board of Princeton

**REGIONAL PLANNING BOARD OF PRINCETON**

Valley Road Building  
369 Witherspoon Street  
PRINCETON, NEW JERSEY 08540  
(609) 924-5366

February 18, 1994

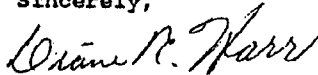
Thomas M. Letizia, Esquire  
Jamieson, Moore, Peskin & Spicer  
300 Alexander Park, CN 5276  
Princeton, New Jersey 08543-5276

Re: INSTITUTE FOR ADVANCED STUDY  
Quaker Road  
Section 12.04, Lots 102,107,110,128,130  
Section 11.01, Lots 3,4,45; R-HF-W/E-2  
Zones  
General Development Plan  
Historic Preservation Plan  
File No. SITE 93-7 (Twp)

Dear Mr. Letizia:

Attached please find a copy of the Findings of Fact for the above referenced application which was approved on September 30, 1993 at the Regular Meeting of the Regional Planning Board of Princeton, and memorialized by adoption of the Findings of Fact on February 17, 1994.

Sincerely,



Diane R. Harr  
Administrative Coordinator  
REGIONAL PLANNING BOARD OF PRINCETON

DRH/rgm  
Enclosure

cc: Carol Caskey, Tax Assessor  
Robert V. Kiser, Township Engineer  
Peter A. Kneski, Asst. Engineer/Zoning Officer  
Theodore K. Cashel, Fire Official  
Elizabeth Jablonsky, Construction Official  
Wanda Gunning, Chairman, SPRAB  
John S. Clawson, Chief Financial Officer

REGIONAL PLANNING BOARD OF PRINCETON

In the Matter of the Application of	)	FINDINGS OF FACT AND CONCLUSIONS OF LAW
The Institute for Advanced Study	)	
for Approval of a General Development	)	
Plan	)	
	)	File No. SITE 93-7 (TWP)

1. The relevant background is that the Institute for Advanced Study filed an action against the Board in the Superior Court of New Jersey challenging certain elements of the Princeton Community Master Plan adopted by the Board in 1990. The Planning Board and the Institute negotiated a Settlement Agreement dated December 8, 1992. Based on that Settlement Agreement, a court order dated February 22, 1993 was entered placing the litigation on the inactive list and granting other relief.

2. By the terms of the Settlement Agreement, the Planning Board agreed to recommend an amendment to the Township zoning ordinance as it affected the Institute's property, to consider an amendment to the Princeton Community Master Plan and to recommend a Township ordinance defining the procedure for the review and approval of general development plans. The Institute's zoning has been changed and the Township Code has been amended to provide a procedure for adopting a general development plan, and the Princeton Community Master Plan has been amended. The Institute has now filed an application for approval of its proposed general development plan as contemplated by the Settlement Agreement.

3. A public hearing on the general development plan was conducted before the Regional Planning Board on July 15, 1993. A subsequent hearing was held on September 30, 1993. Proof of notice and publication have been filed with the Board. All interested parties have been given an opportunity to appear and be heard before the Board.

4. The applicant's general development plan (the "GDP") is contained in a booklet dated April 1993. The plan consists of 19 pages of text, 6 drawings, and 3 appendices, including the Settlement Agreement, sections of the Princeton Township Code, and a listing of the exhibits submitted with the GDP application, including a traffic assessment report.

5. Testimony on behalf of the Institute's GDP was presented by Alan I. Rowe, the Institute's Director for

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Administration and Finance, Gerald Lenaz, the applicant's planner, of the firm of Lenaz, Mueller & Associates, and Harvey Yesowitz, the applicant's traffic consultant of the firm of Harlyn Associates.

6. Section 4 of the Settlement Agreement (pages 7 through 13) defines the substantive content of the general development plan under the following specified issues:

- a. the development area;
- b. the preserved area;
- c. the use of open space;
- d. the treatment of the Institute and Quaker Woods;
- e. the treatment of the farm historic area;
- f. the treatment of the lands west of Quaker Road;
- g. buffers;
- h. access;
- i. unit yield;
- j. playing fields;
- k. relationship to Quaker Meeting and Princeton Friends School;
- l. Institute campus;
- m. school sites;
- n. Eno farmstead; and
- o. partial acquisition.

7. The benefit of a general development plan to a landowner is that it allows the property to be developed over an extended term -- defined by the general development plan. During this period, the landowner is allowed to develop the property in accordance with the approved development plan "notwithstanding any provision of [the Municipal Land Use Law], or any ordinance or regulation adopted pursuant thereto after the effective date of the approval." N.J.S.A. 40:55D-45.1a. What this means is that during the duration of the approved general development plan, the landowner has certain protections for the elements of the development shown on the approved GDP. Although the applicant is not protected from all changes in the zoning or other land use regulations, it is protected from those which would prevent it from obtaining the approvals required to implement the plan as shown on the GDP.

8. Although the Institute itself as well as the Planning Board and members of the public at large have expressed the hope that the Institute's property not be developed at all, all parties have approached the approval of the GDP as if the Institute's property will be developed. In fact, the Institute or its successors in interest to this property will have the right to develop the property subject to the zoning limitations and other constraints, as well as the limitations defined by the approved General Development Plan.

9. Since the terms of the General Development Plan were spelled out in some detail in the Settlement Agreement, the main focus of attention at the July 15, 1993 hearing was the consistency of the General Development Plan with the Settlement Agreement and with the substantive and procedural ordinances thereafter adopted by the Township to implement the provisions of the Settlement Agreement.

10. At the conclusion of the hearing on July 15, 1993, the applicant agreed to a deferral of the Board's decision and the chairman agreed to appoint an ad hoc committee of Board members to review the open issues and to make recommendations to the full Board at the time of the continuation of the hearing. Counsel for the Board prepared a memorandum to the Board's ad hoc committee dated July 29, 1993 identifying twelve open issues as follows:

Area covered by GDP plan. The submitted GDP covers 743+ acres. The Settlement Agreement defines the "lands of the Institute" for which a GDP would be sought as including 589+ acres. The issue is whether the land encompassed by the existing campus is to be part of the GDP. As to the Institute campus, page 12 of the Settlement Agreement states that "the remaining Institute lands as shown on Exhibit A are to be limited to existing E-2 use, and not further limited." To the extent that the GDP submitted by the applicant includes the Institute's campus and seeks to protect all of the E-2 zoning provisions (not just the use provisions), the submitted plan can be viewed as being beyond the scope of the Settlement Agreement. The ad hoc Committee should determine whether the GDP approach which has the effect of protecting the Institute against bulk zoning changes in the E-2 district during the period of a GDP is or is not a problem for the community.

Access: number of roads. The Settlement Agreement on page 10 provides that the GDP will include two access points. "The first is shown on the plan to intersect with Quaker Road between the Quaker Meeting House and the flood plain indentation. The second as shown on the plan will connect with Maxwell Lane." In its GDP submission, the applicant has presented one access road and one emergency access road. The emergency access road is designed to provide connection through the existing campus of the Institute to Maxwell and Olden Lanes. The ad hoc Committee must decide whether the main road and the emergency road satisfy the requirement of two access points. The Board could defer a decision on this issue -- leaving it to the time of preliminary subdivision approval to decide whether the second access road is to be a permanent road or an emergency road.

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Access road locations. The settlement discussion was that the location of the access road intersection with Quaker Road should be located as far away from the Quaker Meeting House as practical. The proposed location does not satisfy this requirement and is adjacent to the Quaker Meeting property. There is also a question about the emergency access and its relationship to Olden Lane.

Roadway design from Quaker Road. On top of page 12 of the GDP, there is a description of the main access road. It is believed that this may have too much detail and the actual design should be left for the preliminary approval stage.

Soccer fields. The applicant has presented a location near its main entrance road which it describes as the interim location for two soccer fields. A future location is designated in preserved Area C south of the Eno Farm. Apparently, this is the Township's preferred location, but it is believed that it cannot be used now because of certain agreements between the Institute and the tenant of the Eno Farm. There is a question about whether the Institute has fully explored this issue with the tenant. This should be pursued since the southerly location appears more desirable. There is also a problem with respect to the noise which will be generated from the interim location near the entrance road and its impact on the Quaker Meeting property. It is also a waste of resources to build the soccer fields at one location and then to have to abandon them and build the fields at another location.

Under some circumstances, the Institute would be required to abandon the soccer fields at the interim location and be responsible for their construction at the other location. If the interim location is retained, the GDP should be clear on the issues which would compel the Institute to relocate and reconstruct the soccer fields at its expense. The issues concerning the soccer fields should also be reviewed with Township Committee since its approval will be necessary.

School site. On page 12 of the Settlement Agreement, there is a reference to what happens if the Regional Board of Education acquires a school site within a development area on the Institute property. Some reference to a school site and its impact should be included in the General Development Plan.

Wildlife. This is covered to some extent on page 5 of the proposed GDP. There is some feeling that additional descriptions and explanations, particularly as it relates to the importance of this site in the flyway, should be included in the GDP.

Electromagnetic radiation. It was suggested that there be some exploration of the increased power in overhead electric

lines which need to be brought down Quaker Road in order to provide the power for this development. It is understood that once the lines leave Quaker Road, electric service would be installed underground.

Urdike Farm. It is recognized that the Urdike Farm is not part of the GDP. However, Urdike Farm is covered by the zoning and the Institute does have a right of first refusal. The possible development of the Urdike Farm should be discussed as it relates to the GDP.

Lot sizes. On page 9 of the proposed GDP, it is stated that the 276 single-family units will have an average lot size of 1/4 acre and a floor area of each residence "of at least 2,700 square feet". It would be clearer to refer to the Settlement Agreement as providing for "a permissible" floor area of at least 2,700 square feet per residential unit. The point is that the units need not be at least this size, but rather that the Institute be allowed to build units of at least this size.

Township obligations. The Settlement Agreement requires the Township to amend its Wastewater Management Plan and also to seek an amendment of the State Development Plan to put the development Area A within the state's Area 3 category. Mr. Kiser and Mr. Collier should advise the ad hoc Committee as to the status of these efforts.

Fiscal impact. This requirement of the Township ordinance has been waived, but the GDP provides on page 18 that the applicant will submit this information at the time of its submission of a preliminary subdivision application. The plan should also include a statement that any other items that were waived as part of this submission will be submitted, if requested by the Board, at the time of application for preliminary approval. This would include a specific phasing plan for the development.

11. In September, the ad hoc committee met on several occasions to review the open issues and it rendered a report to the full Board dated September 29, 1993, a copy of which is annexed to these Findings as Exhibit A. At the September 30, 1993 hearing, the Board also considered a memo with recommendations from the Township Sidewalk and Bikeway Advisory Committee. At the hearing, the applicant also presented a memorandum dated September 30, 1993 responding to each of the issues in the ad hoc committee's memo of September 29, 1993. A copy of the applicant's reply is attached hereto as Exhibit B.

12. The open issues identified by the ad hoc committee were the subject of the public hearing held on September 30, 1993. Mr. Collier reviewed the Board's position on the several issues identified in Exhibit A and Thomas C. Jamieson, Esq.

responded on behalf of the applicant with reference to Exhibit B. The discussion and resolution of each of these issues may be summarized as follows.

a. Issue 1 -- Area Covered By GDP. -- The GDP initially submitted by the applicant indicated that the area covered by the GDP was 743 ± acres. The Board objected to this characterization since the Settlement Agreement defined the lands covered by the GDP at being 589 ± acres. The primary difference in acreage relates to the acreage constituting the Institute's campus area in the E-2 zoning district. The ad hoc committee's report of September 29, 1993 did not take a position on this issue, but instead referred this issue to the full Board. At the September 30, 1993 hearing, it was determined that the Institute's campus area was not within the area referred to in the Settlement Agreement as "lands of the Institute." The resolution of this issue was to remove the reference to the GDP as being 743 ± acres. Instead, the plan will state that the GDP includes a condition that the Institute's 147 ± campus area is to be used for educational and related purposes as currently permitted by the E-2 zoning district. In addition, it was agreed that instead of the GDP locking-in the existing E-2 zoning, there would be a provision whereby the Institute would agree that reasonable modifications to the setback and height provisions could be enacted and that the test for any other zoning modifications would be the same test as would permit other zoning changes in the GDP, namely the standard under N.J.S.A. 40:55D-45.1(a). Essentially, the Board approved the general provisions as suggested by the applicant in Exhibit B.

b. Issues 2, 3, and 4 -- Access and Roadway Design. One question identified by the Board was whether the submitted GDP is consistent with the Settlement Agreement. Instead of presenting two access roads, the Institute's presentation was for one access road and one emergency access road. A related issue was whether the second access road would have its connection to Mercer Road through Maxwell Lane. Questions were also raised as to the location of the Quaker Road access road relative to the Quaker Meeting House. The Board also questioned the amount of detail provided in the original plan as to the road design. The ad hoc committee's report (Exhibit A) contained a specific response as to each of these concerns. At the hearing, the exchange of ideas resulted in a Board determination that there would be two access roads without determining at this time that one would be secondary serving only emergency purposes. It was also determined that the roadway through the Institute's property to Mercer Road would have its point of access from Maxwell Lane. As to the details relating to the precise design and location and status of these two roads, it was determined that these decisions would be deferred until such time as an actual plan is presented for preliminary approval. This would allow the Board at that

time to take into consideration all intervening changes which may have occurred in the community and its circulation routes.

c. Issue 5 -- Soccer Fields. The applicant's initial plan showed an interim location for two soccer fields near the Quaker Road access. The southerly preferred location was precluded because of arrangements with the tenant of the Eno Farm. The Board requested that the Institute more fully explore this issue. A related issue concerned the noise which would be generated from the interim location as it would impact on the Quaker Meeting property. It was also suggested that these issues be explored with the Township Committee since its approval would ultimately be necessary. The ad hoc's committee's response was that the preferred location for the soccer fields would be the southerly location near the Eno Farm and that the "interim location" near the Quaker Meeting property is less acceptable. Whichever site is selected will need to be approved by the State Historic Preservation Office. The applicant's response to these issues was that the location near Eno Farm is precluded at this time; however, as to other issues, the Institute was open to the Board's recommendations. After a full discussion by the Board at the hearing on September 30, it was determined that the General Development Plan at this time should be limited to language which is consistent with the Settlement Agreement. This would be reflected by language stating that the precise location of the fields and whether the interim fields should be constructed are to be determined by the Township and the Institute pursuant to the provisions of paragraph 4(i) and 5(d) of the Settlement Agreement.

d. Issue 6 -- School Site. As a result of the Board's July hearing, it was determined that some reference should be set forth in the GDP as to the possible acquisition of a school site and how that acquisition would affect Development Area A. The ad hoc committee in Exhibit A provided suggested language as to how to deal with this issue, including the location of the school site within Development Area A and that the number of permitted units would be reduced proportionately to the acreage acquired. The Institute in Exhibit B agreed to the general content suggested by the ad hoc committee. The Board concurred and voted to require language such as this be included in the GDP.

e. Issue 7 -- Wildlife. Following the July hearing, the Board determined that the issue of wildlife was not covered sufficiently and that additional material should be included in the GDP -- particularly as to the flyway. The ad hoc committee suggested some particular language as to the importance of this area as part of the Northeast Flyway and as a permanent bird habitat. The Institute was requested to include this language and to supplement it with other authority supporting the importance of this area for both migratory and nesting birds.

f. Issue 8 -- Electromagnetic Radiation. Following the July hearing, the Board determined that this issue was not adequately addressed. The ad hoc committee suggested that attention be given to the location of electrical power substations and other equipment to minimize future exposure to electromagnetic radiation. It was also suggested that recommendations be obtained from Township Engineer Kiser as to the location of the transformers. The Institute's response in Exhibit B was that attention would be given to the location of the power substation and the relation of the transformers to occupied structures. The Board accepted the applicant's revised language with such further information as might be provided by Township Engineer Kiser or from other sources.

g. Issue 9 -- Updike Farm. Following the July hearing, the Board suggested that the plan be supplemented to discuss any possible development of the Updike Farm as it relates to the GDP. The ad hoc committee's report, Exhibit A, noted that the Updike Farm is not included in the GDP, but is covered by the same zoning district. The Board determined that the supplemental material set forth on Exhibit B with respect to the Updike Farm would be adequate.

h. Issue 10 -- Unit Sizes. In the original GDP, the reference to unit sizes could be read to mean that all of the units would have to be at least 2700 square feet. The intent was that the applicant be allowed to construct units of this size, but not required to do so. The suggested language provided by the applicant in Exhibit B was determined to adequately address this issue, namely, that the permissible floor area allowed for each of the residences be at least 2700 square feet.

i. Issue 11 -- Township Obligations. This was listed not as an amendment to the GDP, but rather as an item for follow-up reporting. The ad hoc committee's report contains the current status of each of these items. It is not necessary that this material be referenced in the revised GDP.

j. Issue 12 -- Fiscal Impact. Following its July meeting, it was suggested that the plan should include a statement that fiscal impact and any other items that have been waived shall be submitted as part of the applicant's submission at the time of subdivision approval if requested by the Board. The ad hoc committee agreed with this recommendation, and the applicant in Exhibit B agreed to add a sentence to the effect that any items which were waived as part of the GDP would be submitted if requested by the Board at the time of an application for preliminary approval. The Board agreed that the GDP should be modified in this manner.

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k. Issue 13 -- Bikeways and Paths. The ad hoc committee suggested that bikeways and paths should be generally located on the plan and a commitment made as to building them so as to enhance the chance of completing a regional pedestrian system. The Board agreed and determined that a sentence should be added to the GDP's circulation plan addressing the inclusion of bikeways and paths as they relate to the completion of a regional pedestrian system.

l. Issue 14 -- Historic Significance. The ad hoc committee determined that information about the rationale for the historic resources of the area should be added to the GDP, including references to the specific designations and agencies. The Institute in its Exhibit B set forth a general reference to these areas being designated as historic resources. The Board voted to require the applicant to supplement the GDP with precise references setting forth the actual historic designations.

m. Issue 15 -- Other Issues. In light of the changes, the overall plan should be revised and supplemented and other changes should be made to the maps and text for overall consistency.

13. The Board adopted the foregoing actions and directed the applicant and its consultant to revise the plan and maps in a manner consistent with the approval voted by the full Board. The revised plan shall then be submitted to the Board's planner and counsel for review and they are authorized to work with the applicant to produce an approvable plan. Assuming that there are no major changes which require action by the full Planning Board, the approvable plan shall then be submitted to the ad hoc committee which is hereby delegated the power to grant final approval to the GDP as so revised.

APPROVED: February 17, 1994



State of New Jersey  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JON S. CORZINE  
Governor

Natural and Historic Resources, Historic Preservation Office  
PO Box 404, Trenton, NJ 08625  
TEL: (609) 292-2023 FAX: (609) 984-0578  
www.state.nj.us/dep/hpo

LISA P. JACKSON  
Commissioner

October 10, 2006  
HPO-J2006-36 PROD  
Log #06-2162-1

MEMORANDUM

TO: Cathryn Schaffer, Project Review Officer  
Land Use Regulation

FROM: Dorothy P. Guzzo, Administrator  
Historic Preservation Office

*D. Guzzo*

PROJECT: Mercer County, Princeton Township  
Proposed Faculty Housing at the Institute for Advanced Study  
Block 10401, Lot 1 and Block 10501, Lot 1  
LUR file #1110-04-0009.2

**Summary:** Portions of the Battle of Princeton occurred on the project site. The project site is situated adjacent to the Princeton Battlefield State Park and situated partially within the boundary of the Princeton Battlefield National Historic Landmark. Cultural resource surveys of the above-referenced property conducted by Dr. Keith Bonin, Deep Search Metal Detecting Club, Hunter Research, Inc., and The Louis Berger Group, Inc. have identified numerous military artifacts associated with the Battle of Princeton, and have been registered as the IAS site (28-Me-363). This new SHPO Opinion finds the project area, including the IAS site (28-Me-363), to be eligible for listing on the National Register of Historic Places under Criteria A and D as a boundary increase to the Princeton Battlefield/Stony Brook Village Historic District. However, the cultural resource survey report does not meet the Secretary of the Interior's Standards for Archeological Documentation and requires revisions (see report comments below). Nonetheless, construction of the proposed housing development will have an adverse effect on the IAS site and on the historic site of the Battle of Princeton. Pursuant to N.J.A.C. 7:7A-4.3(b)5, adequate measures to mitigate unavoidable impacts must be completed.

The Institute for Advanced Study, founded in 1930, remains one of the foremost research institutions in the world. The Institute is strongly associated with the

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immigration of the finest European scientists and mathematicians to America in the years leading up to and during WW II. Those scientists made a major contribution to the rise of America as a powerhouse of scientific and mathematical inquiry in the 20<sup>th</sup> century. This **new SHPO Opinion** finds the Institute for Advanced Study Historic District to be eligible for listing on the National Register of Historic Places. Those buildings and plan elements that are over 50 years of age are contributing elements of the District. Buildings that are less than 50 years of age would need to be evaluated for exceptional significance before their status could be determined.

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Thank you for providing the opportunity to review and comment on the potential for the above-referenced project to affect historic and archaeological resources. The following comments are in response to a permit application transmittal received by the Historic Preservation Office (HPO) on August 9, 2006 and consisted of the following cultural resource survey report:

Grzybowski, Susan D., Martha H. Bowers, Gerard Scharfenberger, and Hunter Research, Inc.

2006 Cultural Resource Survey and Assessment of Effects, Proposed Faculty Housing, Institute for Advanced Study, Princeton Township, Mercer County, New Jersey. The Louis Berger Group, Inc., East Orange, NJ. Prepared for Institute for Advanced Study, Princeton, NJ.

#### **Identification of Historic Properties**

##### Architecture

The Battle of Princeton took place, in part, on the project site. The existing open fields and tree lines of the project site are therefore an eligible extension of the Princeton Battlefield Historic District. The project site is part of the battleground.

Both the 2002 *New Jersey Women's Historic Sites Survey* and the 2004 *Princeton Township Cultural Resources Survey Intensive Report* identified the Institute for Advanced Study as eligible for listing on the National Register of Historic Places. I concur that the Institute is eligible under Criteria A, B and C. The Institute, co-founded by Louis Bamberger and Caroline Bamberger Fuld, is significant for its association with a large number of the 20<sup>th</sup> centuries greatest scientists and mathematicians including Albert Einstein, Kurt Godel, J. Robert Oppenheimer, Erwin Panofsky, Homer A. Thompson, John von Neumann, George Kennan and Hermann Weyl.

##### Archaeology

The above-referenced report summarized the results of background research and previous phases of archaeological survey of the project site and documented the results of a more recent archaeological survey conducted by The Louis Berger Group, Inc. The report notes the project site is partially within the Princeton Battlefield National Historic Landmark which was designated as such on October 15, 1966. The project site is also adjacent to Princeton Battlefield State Park which was listed on the National Register of Historic Places on November 21, 1972, and subsequently expanded on October 10, 1989.

Successive phases of archaeological survey of three fields associated with the proposed project have recovered approximately 47 military artifacts that can be attributed to the Battle of Princeton. Subsequent preliminary analysis of the artifact assemblage from these successive phases of survey has attributed various artifacts to past use by both the Continental and British armies. The presence of these Revolutionary War period artifacts, in addition to their attribution to the Continental or British armies, has provided evidence of the use of this particular location during the Battle of Princeton which was previously not possible solely through the documentary record. These artifact deposits also have the potential to provide new and important insights into troop movements and military strategy during the Battle of Princeton through comparative spatial analysis of the artifact assemblage. It is important to note that the current project site would have been included within the boundaries of the landmark designation had the State of New Jersey and the National Park Service had this information at the time the boundaries of the Princeton Battlefield National Historic Landmark were being established. Therefore, in my opinion, the IAS site (28-Me-363) is eligible for listing on the National Register of Historic Places under **Criterion A**, for its association with the Battle of Princeton and **Criterion D**, for having provided and having the potential to provide new important information about the conduct and sequence of the Battle of Princeton, as a boundary increase to the Princeton Battlefield/Stony Brook Village Historic District.

#### Assessment of Effect

##### Architecture

The construction of housing on a portion of the battlegrounds of the historic Battle of Princeton will have an adverse effect on the Princeton Battlefield/Stony Brook Village Historic District, including the boundary increase. The Report glosses over this effect. The only way to avoid the adverse effect would be to move the project to a different site. Discussions between the Department and the Institute have not resulted in a feasible proposal for State acquisition. If the Department accepts mitigation as the appropriate response to the adverse effect, I suggest that the mitigation include funding for a new master plan for the Princeton Battlefield. The master plan could open new opportunities for both preservation of land and interpretation of the Battle. These new opportunities would partially compensate for the opportunity lost when the new housing is constructed on the site of a portion of the Battle of Princeton.

The project will have no adverse effect on the Institute for Advanced Study Historic District. Existing treelines will screen the housing from the great lawn. The new housing is in the modern architectural idiom of much of the other housing at the Institute. The new housing is a continuation of a history of developing housing for Institute members and faculty, on the Institute grounds. Because of its location, the proposed housing does not impact historic landscape features of the Institute for Advanced Study, notably the great lawn in front of historic Fuld Hall. The modern architecture of the proposed housing is consistent with the style of existing residential (and more recent institutional buildings) at the Institute for Advanced Study.

### Archaeology

The construction of the proposed faculty housing at the above-referenced project site will have an adverse effect on both the Princeton Battlefield National Historic Landmark and the Princeton Battlefield/Stony Brook Village Historic District, which includes the IAS site (28-Me-363). The information provided within the above-referenced report indicates that the proposed project has been designed to minimize the visual impacts to the Princeton Battlefield National Historic Landmark through the use of a 200-foot wide buffer zone situated between the Princeton Battlefield Historic Park and the proposed housing. The assessment of effects also indicates that the design of the proposed housing was intended to blend in with the surrounding landscape and minimize the visual intrusion of the proposed project on the battlefield. The assessment of effects further shows that the portion of the project site labeled "Field D" on the cultural resources survey maps will also not be subject to development in order to further minimize visual intrusion.

While the HPO appreciates the efforts that the Institute for Advanced Study has made to minimize and avoid impacts to the Princeton Battlefield that may be caused by the proposed housing project, there are several issues that need to be addressed. First, it is important to note that the effects of construction of housing on the battleground itself will not be mitigated through these measures. Second, while the HPO supports the use of a 200-foot buffer in minimizing direct impact to the archaeological deposits present within the National Historic Landmark and visual impact to the Princeton Battlefield State Park, the use of a 200-foot buffer without a preservation covenant, deed restriction, or protective easement on the land does not ensure that this area will remain a buffer between the housing development and the state park in perpetuity.

Third, Field D of the project site has not been subject to archaeological survey to identify archaeological deposits because of the existence of 1–2 feet of fill soils overlying natural soils making metal detection impractical. The HPO understands that Field D was not surveyed archaeologically because it will not be affected by the current project, as designed. However, there are no provisions included in the report which would ensure the protection of any archaeological resources that may be present on this portion of the project site or preserve the open nature of the field as a visual buffer for the Princeton Battlefield State Park. In order for the proposed minimization of impacts as noted above to be acceptable, an archaeological preservation covenant, deed restriction, or other protective easement must be placed on the 200-foot buffer within Field A and the portion of the property labeled as Field D on the artifact provenience maps.

### **Report Comments**

While efforts have been made to minimize the visual impact of the project on the Princeton Battlefield State Park and National Historic Landmark, the project, as proposed, will still have a direct effect on the Princeton Battlefield/Stony Brook Village Historic District, including the IAS site (28-Mi-363). The archaeological consultant concludes that no significant archaeological deposits are present within the fields that comprise the project site and that past metal detecting surveys and archaeological surveys

of the project site have exhausted its research potential. As a result, the consultant does not recommend additional archaeological survey. These statements are based upon the following two assumptions: 1) the report adequately demonstrates that the information potential of the portion of the battlefield to be destroyed has been adequately sampled with little probability of additional, significant information being lost to the planned development and 2) the current report meets the *Secretary of the Interior's Standards and Guidelines for Archeological Documentation* by providing sufficient information and analysis to document the significant archaeological deposits found on the project site. However, the information presented in the survey report does not support these claims.

The contention that past metal detecting and archaeological surveys have exhausted the research potential is not supported by either qualitative or quantitative analysis of past and current survey results. Information on file at the HPO indicates that despite fifteen years of metal detecting survey within the same locations of Monmouth Battlefield, significant artifacts are still being discovered. Therefore, the assertion that the research potential of the project site has been exhausted must be demonstrated through appropriate qualitative and quantitative analysis and take into consideration the significant finds being made at Monmouth Battlefield an elsewhere despite numerous years of metal detecting. This analysis must be included in the revised copy of the cultural resource survey report.

Related to the above, the report has not included adequate analysis of archaeological deposits already recovered from the project site, and therefore, does not meet the *Secretary of the Interior's Standards for Archeological Documentation*. While artifact cluster maps were included in the report and some basic artifact attribute analysis was performed, there was no attempt to perform even basic spatial analysis of analyzed artifacts to gain insight into troop movements, military strategy, etc. Thorough spatial analysis of artifact find spots has been demonstrated to be a crucial component to the understanding of the conduct and sequence of activities and battles at other battlefield sites (Scott and Fox 1989; Scott et al. 1989). Without additional analysis, including but not limited to thorough spatial analysis, the survey report is inadequate in demonstrating that the archaeological deposits present on the project site cannot contribute to further insight relating to troop positions and activities. This analysis must be conducted and included as part of a revised report.

Finally, although the report presents the results of cultural resource surveys conducted by both Hunter Research, Inc. in 2003 and The Louis Berger Group, Inc., in 2004 and 2005, it does not present in depth evaluations of past researcher's hypotheses formulated during their respective periods of site investigation. For example, the proposal for archaeological survey conducted by Hunter Research, Inc. and a survey conducted by the Battlefield Restoration and Archaeological Volunteer Organization (BRAVO) present a working hypothesis for past Revolutionary War activity on the project site based upon documentary research that was conducted. While the current report alludes to this hypothesis, it is not evaluated comprehensively within the context of finds from successive phases of archaeological investigation. A more detailed evaluation of the hypothesis presented in both the archaeological survey proposal written by Hunter

Research, Inc. and the survey completed by BRAVO in light of the successive phases of survey must be accomplished and included in the revised copy of the report submitted to the HPO.

Thank you for providing the opportunity to review and comment on the potential for the above-referenced project to affect historic and archaeological resources. We look forward to receiving a revised copy of the cultural resource survey report which incorporates the above comments. Please do not hesitate to contact Kate Marcopul of my staff at (609) 984-5816 with questions regarding archaeology or Dan Saunders of my staff at (609) 633-2397 with questions regarding historic landscapes, historic architecture, or historic districts.

D.P.G.



**State of New Jersey**

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Natural and Historic Resources, Historic Preservation Office  
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JON S. CORZINE  
Governor

LISA P. JACKSON  
Commissioner

December 10, 2007  
HPO-L2007-58  
Log #07-1133-5

**MEMORANDUM**

**TO:** Cathryn Schaffer, Project Review Officer  
Land Use Regulation

**FROM:** Dorothy P. Guzzo, Administrator  
Historic Preservation Office *Dorothy Guzzo*

**PROJECT:** Mercer County, Princeton Township  
Proposed Faculty Housing at the Institute for Advanced Study  
Block 10401, Lot 1 and Block 10501, Lot 1  
LUR file #1110-04-0009.2

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**Summary:** Archaeological research has demonstrated that the project site is clearly the location of a significant engagement during the nationally significant Battle of Princeton. As a result, the project site has been determined to be eligible for listing on the National Register of Historic Places. The fact that the Battle of Princeton was a small Battle (in terms of bullets fired and men involved) in comparison to what happened at Monmouth Battlefield in no way diminishes its significance. The project will result in the destruction of this nationally significant resource. The applicant has not presented alternatives to the current project plan.

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In October 2006, the HPO was provided the opportunity to review and comment on a previous version of the cultural resource survey and assessment of effects report for the above-referenced project. At that time, the HPO concluded that the arguments presented in the report did not support the consultant's contention that the research potential of the IAS site had been exhausted. In addition, the HPO determined that the

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report did not meet the Secretary of the Interior's Standards for Archaeological Documentation, and requested that spatial analysis of artifact distributions be conducted to gain insight into various aspects of the Battle of Princeton including troop movements and military strategy. In response to this request, the HPO received the following revised report:

Grzybowski, Susan D., Martha H. Bowers, and Kristofer M. Beadenkopf  
June 2007 *Cultural Resource Survey and Assessment of Effects, Proposed Faculty Housing, Institute for Advanced Study, Princeton Township, Mercer County, New Jersey.* The Louis Berger Group, Inc., East Orange, NJ. Prepared for Institute for Advanced Study, Princeton, NJ.

The revised report presents the results of spatial analysis of artifact distributions, as well as a spatial synthesis of both extant and non-extant landscape features, based upon written accounts of the Battle of Princeton, and military-related artifact material recovered from multiple surveys conducted on the project site. This spatial analysis facilitated the development of preliminary interpretations of troop movements that occurred during the Battle of Trenton that can be tested as part of future survey efforts at Princeton Battlefield State Park.

While the HPO appreciates the effort expended in performing these additional analyses, the analysis was lacking in several aspects. First, the scale of the topographic maps used in the analysis (1:24,000) is not suitable for a study of Revolutionary War tactical engagement. As a result, detailed terrain analysis, including local nuances in topography, as it relates to military operations was not included in the discussion. In addition, there was no discussion of the frontages of the various military units involved in the battle or the area(s) required for maneuvering, where the units were physically able to "fit" within the local terrain.

In light of the above, the data from the archaeological investigations should be re-evaluated by an archaeologist specializing in battlefield archaeology. Specifically, the re-evaluation should integrate material culture, topography, and the broader historic context of 18<sup>th</sup> century tactical warfare. The re-evaluation should include interviews with: 1) Dr. Keith Bonin to gain access to his catalogue of artifacts from the IAS property and 2) local collectors to gain a sense of the scale of looting that has occurred on the property. In addition, the HPO recommends that topographic maps with a scale of 1:250 or similar size be used in an augmented tactical engagement study.

#### **Assessment of Effects**

The HPO does not concur with the conclusion that the construction of faculty housing will not affect the IAS site. The IAS site was determined to be eligible for listing under Criterion A, for its association with events significant in our past, and Criterion D, for having yielded important information in history. As such, the project amounts to the destruction of a significant portion of the Battle of Princeton, and will have an adverse affect on the IAS site because it will affect the site's ability to convey its significance.

Specifically, after the construction of the project, the project site would no longer be eligible for listing on the New Jersey and National Registers of Historic Places.

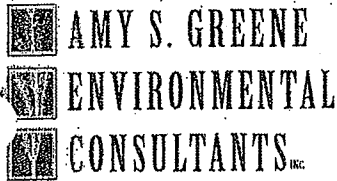
Pursuant to the Rules for the Freshwater Wetlands Protection Act, the applicant must demonstrate that "the proposed activity avoids or minimizes impacts to the maximum extent practicable..." The applicant has not presented a consideration of alternative sites. The Institute for Advanced Study owns a substantial amount of property east of the project site. As part of exploring ways to avoid impacts to the IAS site, as required by the rules, HPO requests the applicant submit an enhanced alternatives analysis that explores the feasibility of constructing faculty housing at an alternate location on the IAS Campus. For your information, an Alternative Analysis Outline is available on the HPO web site at [http://www.state.nj.us/dep/hpo/4sustain/protect\\_buildings.pdf](http://www.state.nj.us/dep/hpo/4sustain/protect_buildings.pdf). In addition, any Master Plans that have been developed for the future of the IAS Campus must be included with the alternatives analysis.

In light of the above, the HPO respectfully requests that the permit not be issued until both the additional archaeological analysis and alternatives analysis referenced above are submitted to the HPO.

It should be noted that while the IAS Campus is significant in its own right, it does not have the transcendent significance of the Battle of Princeton. We understand that the Institute may be concerned that building the housing elsewhere on the campus may have an adverse effect. However, the alternatives analysis should explore locations where it would be possible to construct housing on the IAS Campus in a way that does not diminish the significance of the IAS, and in fact enhances the Campus as a place. New construction along the outside of Einstein Drive, and inside the hedgerow along Olden Lane should be considered within the analysis.

Thank you for your consideration of historic and archaeological resources. If you have any questions, please contact Kate Marcopul (archaeology) at 609-984-5816 or Dan Saunders (architecture) at 609-633-2397.

D.P.G.



In Reply: Refer to Project #3422

October 20, 2011

Ms. Kip Cherry  
Princeton Battlefield Society  
24 Dempsey Avenue  
Princeton, NJ 08540

RE: Environmental Review  
Proposed Faculty Housing Development  
Block 10401, Lot 1 and Portion of Block 10501, Lot 1.01  
Township of Princeton, Mercer County, New Jersey  
ASGECI Project #3422

Dear Ms. Cherry:

#### INTRODUCTION

This letter presents the findings of an Environmental Review completed by Amy S. Greene Environmental Consultants, Inc. (ASGECI) for a proposed faculty housing development at the above-referenced site. The subject development is proposed by the Institute for Advanced Study (IAS) and reportedly encompasses approximately 7.3 acres. This review included an analysis of existing information and mapping provided to ASGECI by Princeton Battlefield Society (Society), a review of existing, available digital information published by the New Jersey Department of Environmental Protection (NJDEP) and the U.S. Fish and Wildlife Service (Service) and performance of a field visit to observe the presence of wetlands, waters and streams on the referenced site. The field visit was performed by Amy S. Greene and Douglas Chabrak of ASGECI on September 26, 2011 accompanied by Kip Cherry of the Society. Please refer to Figure 1 Site Location Map, Figure 2 USGS Topographic Map and Figure 3 Landscape Project Version 2.1 Map. Site photographs with descriptions are also attached to this letter.

The proposed development as depicted on a plan entitled *Soil Erosion and Sediment Control Plan of Faculty Housing Prepared for Institute for Advanced Study Situated in Princeton Township, Mercer County, New Jersey*, prepared by Van-Note – Harvey Associates, P.C., dated August 20, 2010 includes the construction of seven (7) single-family dwellings, eight (8) townhouse units, an access roadway and cul-de-sac tying into Maxwell Lane, a stormwater management basin and conveyance system, and associated grading to facilitate these features. The environmental characteristics discussed in this report are illustrated on the referenced plan which is attached to this letter.

#### REVIEW OF EXISTING INFORMATION

ASGECI reviewed the following documentation provided by the Society:

- *Site Grading Plan of Faculty Housing Prepared for Institute for Advanced Study Situated in Princeton Township, Mercer County, New Jersey*, prepared by Van-Note – Harvey associates, P.C., dated August 20, 2010;

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- *Soil Erosion and Sediment Control Plan of Faculty Housing Prepared for Institute for Advanced Study Situated in Princeton Township, Mercer County, New Jersey*, prepared by Van-Note – Harvey Associates, P.C., dated August 20, 2010;
- *Plan Showing Freshwater Wetlands of Block 10401, Lot 1, Prepared for Institute for Advanced Study Situated in Princeton Township, Mercer County, New Jersey*, prepared by Van-Note – Harvey Associates, P.C., dated September 7, 2000;
- NJDEP Freshwater Wetlands Letter of Interpretation – Extension Application prepared by Van-Note – Harvey Associates, P.C., NJDEP File No. 1110-99-0003.4, September 2005;
- NJDEP Freshwater Wetlands Letter of Interpretation/Line Verification-Reissuance, Block 10401, Lot 1, NJDEP Program Interest No. 1110-04-0009.2, November 21, 2005;
- NJDEP Permit Extension Act Verification Request, Block 10401 Lot 1, NJDEP Program Interest No. 1110-04-0009.2, July 1, 2010;
- NJDEP Freshwater Wetlands Letter of Interpretation/Line Verification-Reissuance, Block 10501, Lot 1.01, NJDEP Program Interest No. 1110-04-0009.1, November March 14, 2005;
- NJDEP Permit Extension Act Verification Request, Block 10501 Lots-1 & 1.01, NJDEP Program Interest No. 1110-04-0009.1, July 1, 2010; and,
- NJDEP Revisions to Approved Flood Hazard Area Permit, Block 10401, Lot 1 and Block 10501, Lot 1, NJDEP Program Interest No. 1110-04-0009.2 FHA 060001/FHA 090001, October 27, 2009, expiration October 13, 2011

ASGECI also reviewed the following existing, available information:

- Mercer County Soil Survey;
- NJDEP Freshwater Wetlands and Streams coverage in GIS;
- NJDEP Landscape Project Maps of Endangered and Threatened Species Habitat;
- NJ Natural Heritage Program Data;
- FEMA Floodplain mapping;
- Aerial photography, as available;
- NJ Water Quality Classification; and
- U.S. Fish and Wildlife Service records.

In accordance with the NJ *Freshwater Wetlands Protection Act rules*, applicants may request a Regulatory Line Verification Letter of Interpretation (LOI) from NJDEP to determine the extent of regulated wetlands, wetland transition areas and State open waters on a property.

Based upon our review of available information, it is apparent that an LOI was obtained from the NJDEP for Block 10401, Lot 1 on October 4, 2000. This LOI was subsequently extended by NJDEP on November 21, 2005 until October 4, 2010. Rather than expiring on October 4, 2010, the LOI is automatically extended by the Permit Extension Act until June 30, 2013 as confirmed by NJDEP in a letter dated July 1, 2010.

Additionally, it is apparent that an LOI was obtained from the NJDEP for Block 10501, Lot 1.01 on January 20, 2000. This LOI was subsequently extended by NJDEP on March 14, 2005 until January 20, 2010. Rather than expiring on January 20, 2010, the LOI is automatically extended by the Permit Extension Act until June 30, 2013 as confirmed by NJDEP in a letter dated July 1, 2010.

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The existing LOI for Block 10401 indicates that the site is absent of jurisdictional wetlands and transition areas and only contains State open waters. State open waters do not require a regulated transition area under the *Freshwater Wetlands Protection Act* (NJSA 13:9B) and implementing rules at NJAC 7:7A. The LOI dated November 21, 2005 stated that the State open water requires a 25-foot wide buffer under the *Flood Hazard Area Control Act Rules* (NJAC 7:13).

The existing LOI for Block 10501 indicates that onsite wetlands are present and are intermediate resource value and require a 50-foot wide transition area and offsite wetlands are exceptional resource value and require a 150-foot wide transition area. The LOI further indicates the site contains State open waters. State open waters do not require a regulated transition area under the *Freshwater Wetlands Protection Act* (NJSA 13:9B) and implementing rules at NJAC 7:7A. The LOI dated March 14, 2005 stated that the State open water requires a 25-foot wide buffer under the *Flood Hazard Area Control Act Rules* (NJAC 7:13).

The NJDEP Revisions to Approved Flood Hazard Area Permit, Block 10401, Lot 1 and Block 10501, Lot 1, dated October 27, 2009 indicates that a Flood Hazard Area Permit was granted for the site on October 13, 2006 which verified the limits of the flood hazard area and authorized the construction of a footbridge and stormwater outfall within regulated areas. This approval has expired on October 13, 2011 and cannot be extended either by formal application to NJDEP or the Permit Extension Act. Therefore, the IAS must obtain a Flood Hazard Area Verification under the new rules adopted November 5, 2007. A Verification will confirm the limits of the flood hazard area and riparian zone onsite.

The referenced engineering site plans show various jurisdictional lines pursuant to certain State regulatory programs. ASGECI noted the following jurisdictional lines on the referenced plans which are applicable under certain regulatory programs:

- 100-year floodplain and associated 100-foot wide stream corridor boundary line in accordance with the Delaware and Raritan Canal *Commission Regulations for the Review Zone of the Delaware and Raritan Canal State Park* (NJAC 7:45);
- Freshwater wetlands limit line and associated 50-foot wide transition area pursuant to the *Freshwater Wetlands Protection Act Rules* (NJAC 7:7A); and,
- 25-foot wide riparian zone (obsolete rules at NJAC 7:13).

The NJ Landscape project maps some of the onsite wooded areas as well as large adjacent wooded areas to the south as habitat for the State threatened Barred Owl (*Strix varia*). A New Jersey Natural Heritage Program (NHP) letter was obtained for the subject site on October 17, 2011. This letter indicates that their database has a record of occurrence for Barred Owl onsite. Please refer to the NHP letter attached to this report.

According to the *Federally Listed and Candidate Species Occurrences in New Jersey by County and Municipality* published by the US Fish and Wildlife Service (USFWS) dated October 2010, Princeton Township is listed as containing a potential for occurrences of the federally and state endangered Indiana Bat (*Myotis sodalis*). This potential relates to its summer roosting habitat associated with trees of 6-inch diameter at breast height (DBH) or greater.

The NJDEP Geographic Information System (GIS) database indicates the presence of one (1) watercourse onsite known as an unnamed tributary to Stony Brook. This watercourse originates onsite at a reinforced concrete pipe located just east of the proposed limit of disturbance. This watercourse flows south offsite

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and eventually into Stony Brook. The unnamed tributary is classified by the *Surface Water Quality Standards* (NJAC 7:9B) as a general non-trout freshwater (FW2-NT).

The unnamed tributary is not mapped by either the NJDEP or the Federal Emergency Management Agency (FEMA) as containing a regulated floodplain.

#### SITE VISIT

A field visit to observe the presence of wetlands, waters and streams on the referenced site was performed by Amy S. Greene and Douglas Chabrak of ASGECI on September 26, 2011 accompanied by Kip Cherry of the Society. The subject site was observed to be mostly a meadow which appears to be cut once or twice a year, with the balance being wooded or overgrown with shrubby vegetation. The wooded areas are mainly contained to the perimeter of the site as well as within two (2) hedgerows extending into the site. Two (2) other hedgerows define the eastern and western limits of the site.

Based on the field observations it was noted that the NJDEP mapped watercourse is consistent with current site conditions. It was further observed that the subject site contains a total of four (4) separate additional wetland areas which were not identified as jurisdictional wetlands in the current LOI (i.e. not mapped as wetlands) and are not mapped on the project plans. See attached for the approximate location of the additional wetland areas noted on the referenced plan. Our identification of these additional wetland areas was based on visual observation of hydrophytic vegetation and wetland hydrology. Please note that a subsurface analysis of the soils for hydric soil characteristics was not performed by ASGECI as part of this review. Each additional wetland area is briefly described below:

1. Wetland #1 is located just south of an existing ranch style house at the end of Stonehouse Drive. This area is located within the existing meadow and contains wetland hydrology in the form of soils saturated to the surface. This area was approximated to be 0.25 acres in size. This area contains wetland vegetation such as Soft Rush (*Juncus effusus*, FACW+) and Sedges (*Carex* spp.). This feature may be isolated;
2. Wetland #2 was noted east of the proposed limit of disturbance within the meadow and is dominated by obligate wetland vegetation species (Arrow-leaved Tearthumb – *Polygonum sagittatum*, OBL), with lesser amounts of other wetland species including New York Ironweed (*Vernonia noveboracensis*, FACW), Soft Rush and Sensitive Fern (*Onoclea sensibilis*, FACW). Since the vegetation is dominated by an obligate (OBL) wetland plant, the area is considered a wetland pursuant to the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (1989). Furthermore, the soils were saturated to the surface suggesting a positive occurrence of wetland hydrology. This wetland is not isolated as it was observed to discharge into the unnamed tributary and is approximately 0.35 acre in size;
3. Wetland #3 is located east of the proposed limit of disturbance within the meadow. This feature is similar to the preceding feature and is also dominated by Arrow-leaved Tearthumb and contained soils saturated to the surface at the time of the site visit. A portion of this wetland appears to have been previously delineated by others according to the site grading plan. This wetland is not isolated as it was observed to discharge into the unnamed tributary and is approximately 0.09 acre in size; and,
4. Wetland #4 is also located within the meadow west of the unnamed tributary partially within the proposed limit of disturbance. This feature is similar to the preceding features and is also dominated by Arrow-leaved Tearthumb and American Water Horehound (*Lycopus americanus*, OBL) and contained soils saturated to the surface at the time of the site visit. This wetland is not isolated as it was observed to discharge into the unnamed tributary and is approximately 0.06 acres in size.

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Princeton Battlefield Society  
October 20, 2011  
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## REGULATORY IMPLICATIONS

### Wetlands

The first issue relates to the current LOI's and the four (4) additional wetland areas described above, which were apparently omitted from the wetland delineation maps referenced in the LOI's as jurisdictional wetlands. ASGECI recommends that the applicant be required to field delineate and map and submit a letter request to NJDEP asking them to amend the LOI's to include the four (4) omitted wetlands in the LOI's for the site. Additionally, the request should include a statement to reveal the current Landscape Project mapping regarding the onsite mapping of habitat for the State protected Barred Owl within the forested wetlands on the site. Wetlands that are documented habitat for endangered and threatened species are classified as exceptional resource value and have an associated regulated wetland transition area of 150 feet. The current Barred Owl habitat mapping may therefore result in an increased wetland transition area width from 50 feet wide to 150 feet wide from the onsite forested wetlands.

If the missed wetlands and their associated wetland transition areas are included in the LOI's and the transition areas are increased to 150 feet wide, the project as proposed will encroach on wetlands and wetland transition areas regulated by NJDEP under the NJ Freshwater Wetlands Protection Act, which will significantly affect the applicant's ability to develop the property as proposed. The non-isolated wetlands (i.e. connected to the tributary) will not be able to be filled without obtaining an Individual Permit (IP) from NJDEP pursuant to the rules. An IP would likely not be issued to IAS for the project. Site disturbances located within the wetland transition area, regardless of its width, will need to be authorized by NJDEP prior to construction or site preparation. The need for any wetlands permits will trigger a cultural resources review in coordination with the State Historic Preservation Office (SHPO) in order to assess the project's potential effect on archeological and historic resources listed or eligible for listing on the State and National Registers of Historic Places. This may result in a separate set of site constraints, better analyzed by another qualified firm or entity.

### Flood Hazard Areas and Riparian Zones

Another site constraint to development relates to the riparian zone required along the unnamed tributary. Current rules at NJAC 7:13-4.1 require a 50-foot wide riparian zone, contrary to the 25-foot wide buffer shown on the site plans which expired on October 13, 2011. The removal or disturbance of vegetation is regulated within the riparian zone and based on our review of the plans, the proposed limit of disturbance may be located just inside the 50-foot wide riparian zone. The rules at NJAC 7:13 also regulate placement of fill and structures within the Flood Hazard Area of regulated streams. The site plans illustrate the limit of the 100-year floodplain which presumably was approved by NJDEP in 2006, however this approval has since expired. In order to accurately determine the location of the regulated Flood Hazard Area and to assess project compliance with the current NJ Flood Hazard Area Control Act rules, the applicant should be required to obtain a Flood Hazard Area Verification from NJDEP to establish the limits of the riparian zone and flood hazard area.

### Protected Species

As explained above, the forested portions of the site area mapped as habitat for the State listed threatened Barred Owl and the Federally and State listed Endangered Indiana bat. The forested portions of the site are also habitat for migratory birds. If the proposed project requires a wetlands and/or flood hazard area permit from NJDEP potential adverse impacts to both State and Federally protected species would have to

Ms. Kip Cherry  
Princeton Battlefield Society  
October 20, 2011  
ASGECI #3244

be addressed during the permit review process. However, regardless if a State wetlands permit is required, the applicant must be in compliance with the federal *Endangered Species Act* (ESA) and the *Migratory Bird Treaty Act* (MTBA). This is because every person of the United States must comply with these laws even if there is no federal nexus to their project or proposed action. For this project, potential adverse impacts under the ESA are regarding Indiana Bat and its summer roosting habitat (trees 6 inches dbh and greater). The applicant should therefore consult with the USFWS to determine measures to avoid adverse impact to bats and migratory birds.

#### Delaware and Raritan Canal Commission (DRCC)

Pursuant to the *Commission Regulations for the Review Zone of the Delaware and Raritan Canal State Park* (NJAC 7:45), the subject site is located within review Zone B and is considered a "major project" subject to the standards at NJAC 7:45 implemented by the Delaware and Raritan Canal Commission (DRCC). The project will be reviewed by DRCC from a stormwater management aspect as well as for stream corridor impacts. The rules define a regulated Stream Corridor as any watercourse which flows into the Park, its tributaries, the 100-year floodplain and all land within 100 feet of the 100-year floodplain (i.e. 100 foot wide buffer). The upstream limit of the regulated Stream Corridor is the point where the waterway drains less than 50 acres.

The engineering site plan delineates the 100-year floodplain of the onsite stream and the associated 100-foot wide buffer; these areas are collectively regulated by DRCC as the Stream Corridor. Pursuant to the D&R Canal rules, the 100-year floodplain limit must be verified by NJDEP which apparently was completed on October 13, 2006 but has since expired on October 13, 2011. The proposed development plan shows disturbances within the buffer for the proposed paved roadway and associated side slope grading, as well as for a small part of a residential dwelling and lot grading. Pursuant to NJAC 7:45-9.3, these activities are prohibited within the stream corridor and cannot be authorized by DRCC without obtaining a waiver of strict compliance from DRCC. Therefore the proposed development plan is inconsistent with the D&R Canal regulations.

#### CONCLUSIONS

As presented herein, the subject site contains jurisdictional wetlands and their associated wetland transition areas which are not depicted on the proposed development plans. Additionally, current NJDEP mapping shows the presence of documented habitat for the state listed threatened Barred Owl within the forested portions of the site. Onsite wetlands may therefore require a 150-foot wide transition area. ASGECI recommends that the applicant map the additional wetland areas and submit a request to NJDEP to modify the LOI's for the site. If the accurate location of regulated wetlands and wetland transition areas results in the need for a Freshwater Wetlands Permit from NJDEP, analysis of the project's affect on listed or eligible historic and/or archeological resources would have to be performed and submitted to NJDEP SHPO for review

Since the Flood Hazard Area Permit obtained has expired, the proposed project plans do not accurately depict the riparian zone regulated by NJDEP under the *Flood Hazard Area Control Act rules* and may not accurately depict the location of the Flood Hazard Area Boundary. A Flood Hazard Area verification should be requested from NJDEP to obtain a determination of the location of the riparian zone and flood hazard area in order to determine if the project complies with the *Flood Hazard Area Control Act rules*.

Ms. Kip Cherry  
Princeton Battlefield Society  
October 20, 2011  
ASGECI #3244

Development is proposed within the Stream Corridor regulated by the DRCC under the D&R Canal Commission regulations. The development as proposed is not in compliance with these rules and the DRCC will not approve the project plan without a waiver of strict compliance.

The USFWS should be consulted in order to avoid adverse effects on the Federally listed endangered Indiana bat and migratory birds.

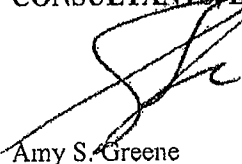
The apparent issues relative to unmapped wetlands, the absence of a verification of the flood hazard area and riparian zone, the prohibited activities proposed within the DRCC stream corridor and absence of documentation of compliance with the federal ESA and MTBA should be brought to the attention of the municipal review board.

The results of this assessment are preliminary and based upon the best available information at the time of ASGECI's research and field investigation of the site, as well as existing regulations. Conclusions contained herein are the professional opinion of ASGECI and are based upon interpretations of the existing rules and regulations as discussed.

If you have any questions or require additional information, please call me at 908-788-9676, ext. 12 or Douglas Chabrak of our office at ext. 36.

Sincerely,

AMY S. GREENE ENVIRONMENTAL  
CONSULTANTS, INC.



Amy S. Greene  
President

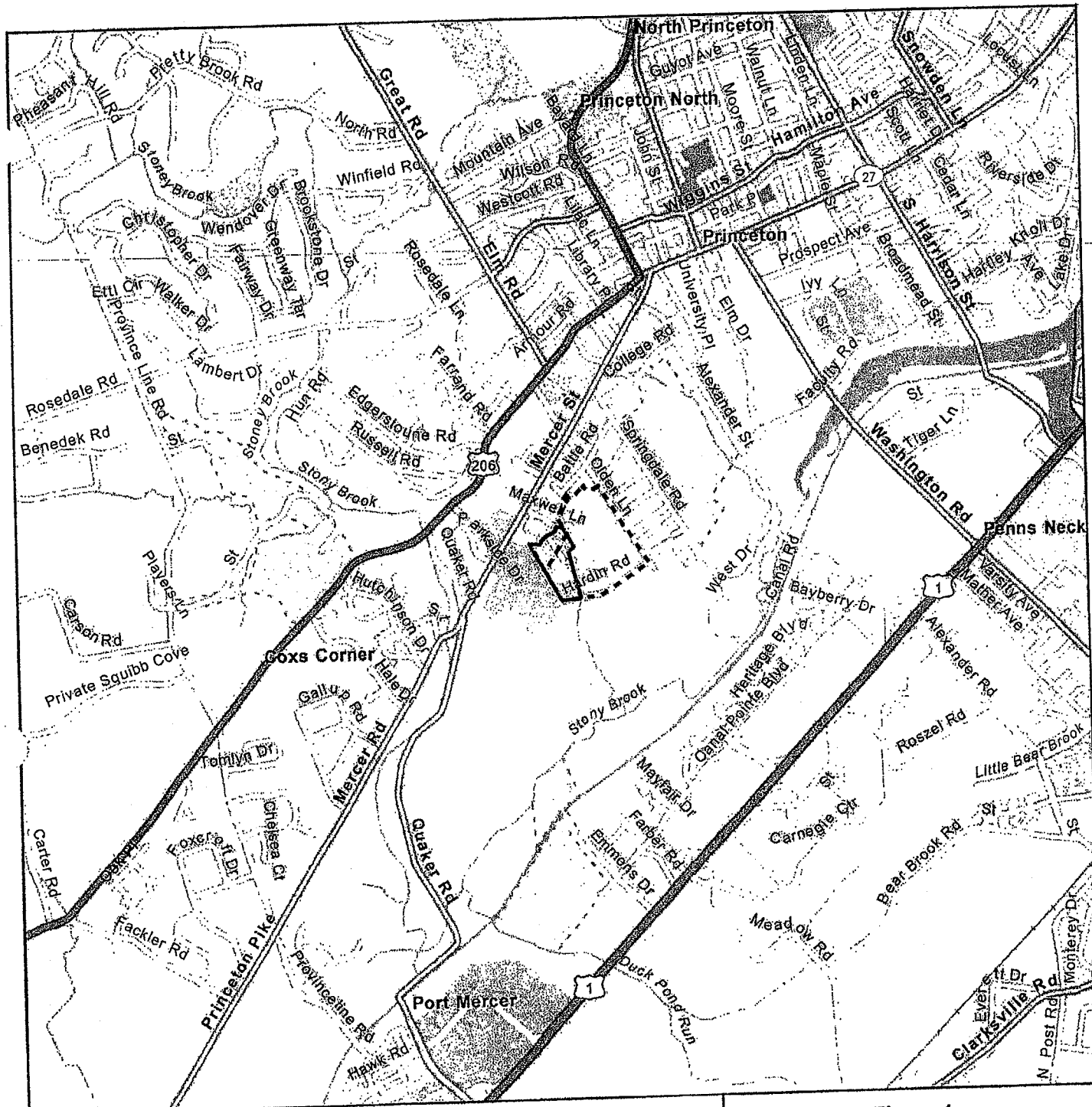


Douglas J. Chabrak  
Project Manager

cc: Bruce Afran, Esq.  
ASGECI: Tom Brodde; Doug Chabrak; file #3422

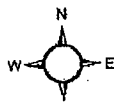
151x

SITE FIGURES



**Legend**

-  Project Area
-  Parcel Boundary

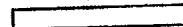


**Figure 1**  
**Site Location Map**

Proposed IAS Faculty Housing  
Block 10401; Lot 1 and  
portion of Block 10501; Lot 1.01  
Princeton Township  
Mercer County, New Jersey

ASGECI Project # 3422

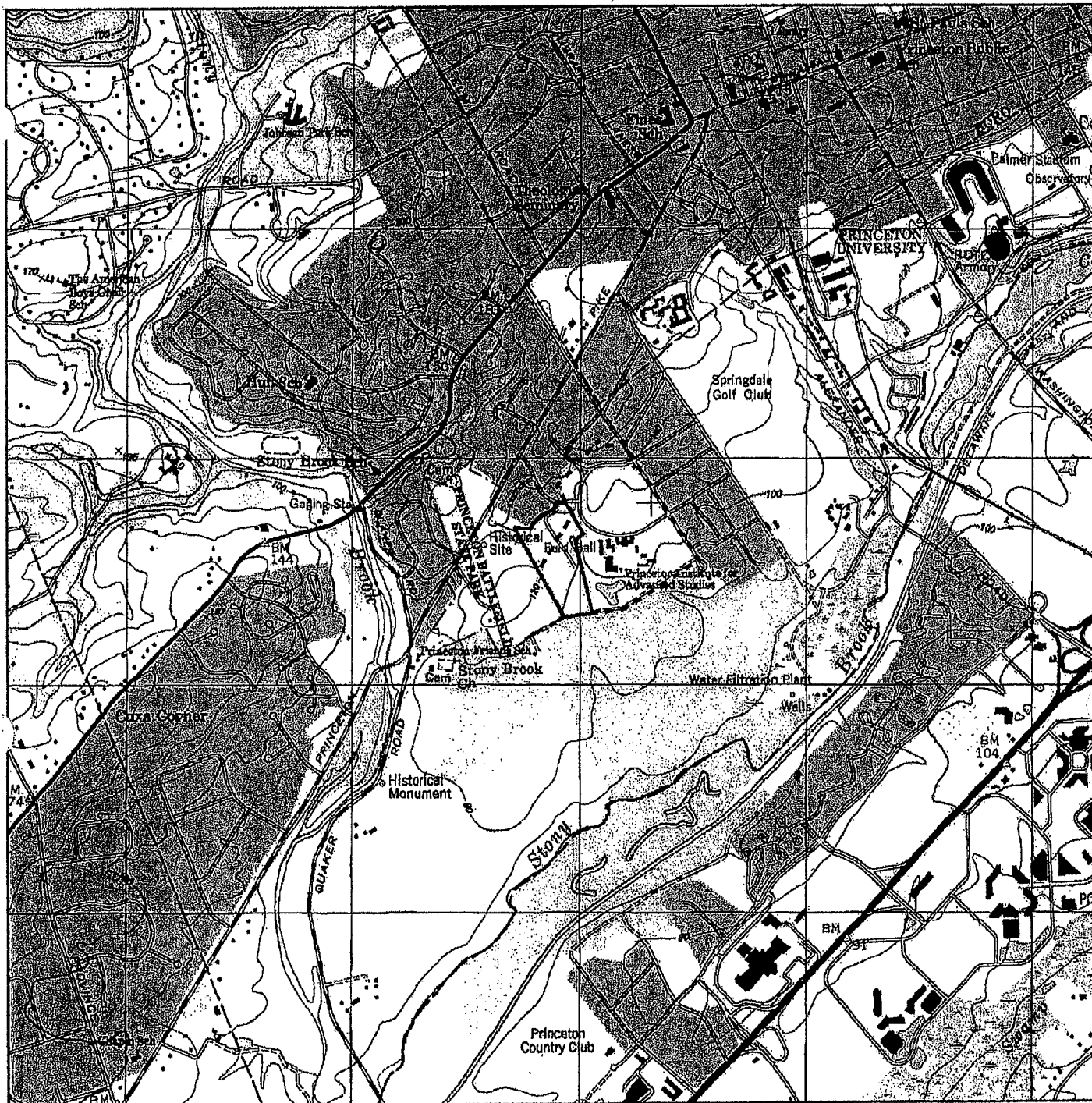
3,000





Feet

 AMY S. GREENE  
ENVIRONMENTAL  
CONSULTANTS  
PA0151

Source:  
ESRI Street Map North America, utilizing Tele Atlas North America, Inc.,  
published by ESRI® Data & Maps: StreetMap™, Redlands, California, 2010.



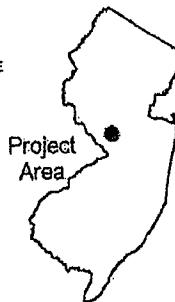
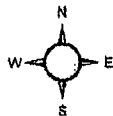
**Legend**

-  Project Area
-  Parcel Boundary

New Jersey State Plane Coordinates in NAD83 for the approximate center of site -  
 North: 545,570' // East: 4444,312'

Latitude and Longitude Coordinates in NAD83 for approximate center of site -  
 N: 40° 19' 52.0" / W: 74° 40' 17.4"

Source:  
 Collarless / Seamless Bit-Mapped 7.5 Minute Color Topographic Images of New Jersey, United States Geological Survey (USGS), Digital Raster Graphic (DRG) Topographic Series Map, Princeton NJ Quadrangle, USGS, Reston, Va., January 8, 1996, distributed by Digital Data Services, Inc., Lakewood, CO.

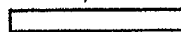


**Figure 2**  
**USGS Topographic Map**

Proposed IAS Faculty Housing  
 Block 10401; Lot 1 and  
 portion of Block 10501; Lot 1.01  
 Princeton Township  
 Mercer County, New Jersey

ASGECI Project # 3422

2,000

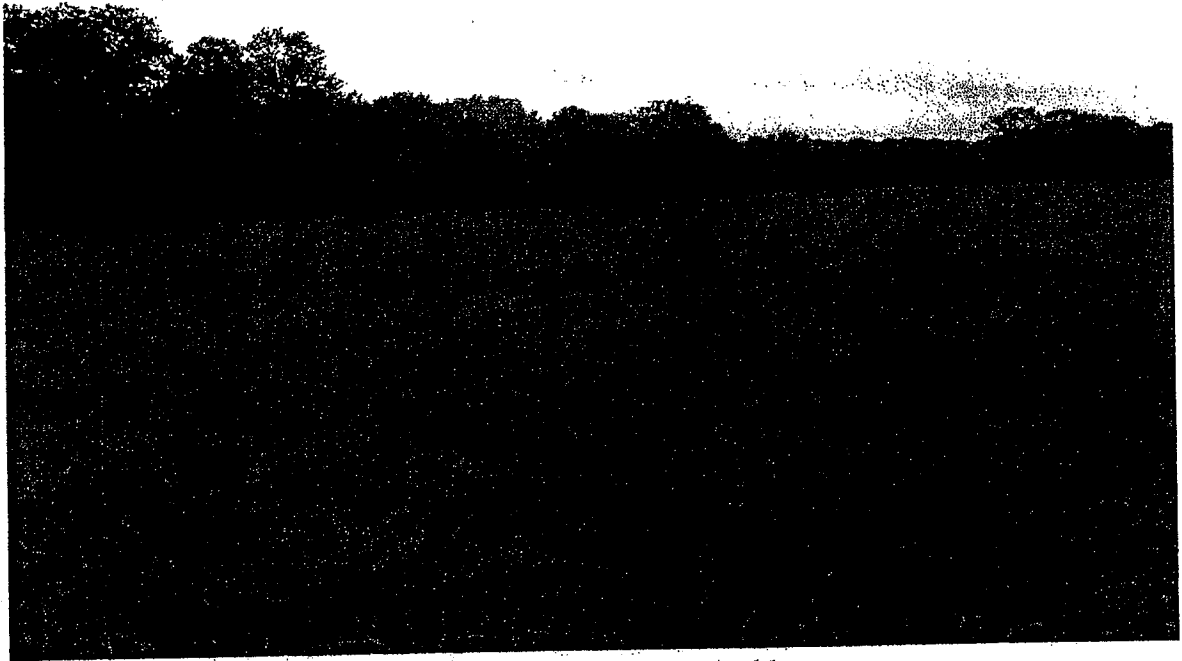


Feet

 **AMY S. GREENE**  
**ENVIRONMENTAL**  
**CONSULTANTS**



SITE PHOTOGRAPHS WITH DESCRIPTIONS



**Photo A** - View looking southeast from Stonehouse Drive at Wetland 1.



**Photo B** - View looking east at Wetland 2.



Photo C - View looking north at Wetland 2.

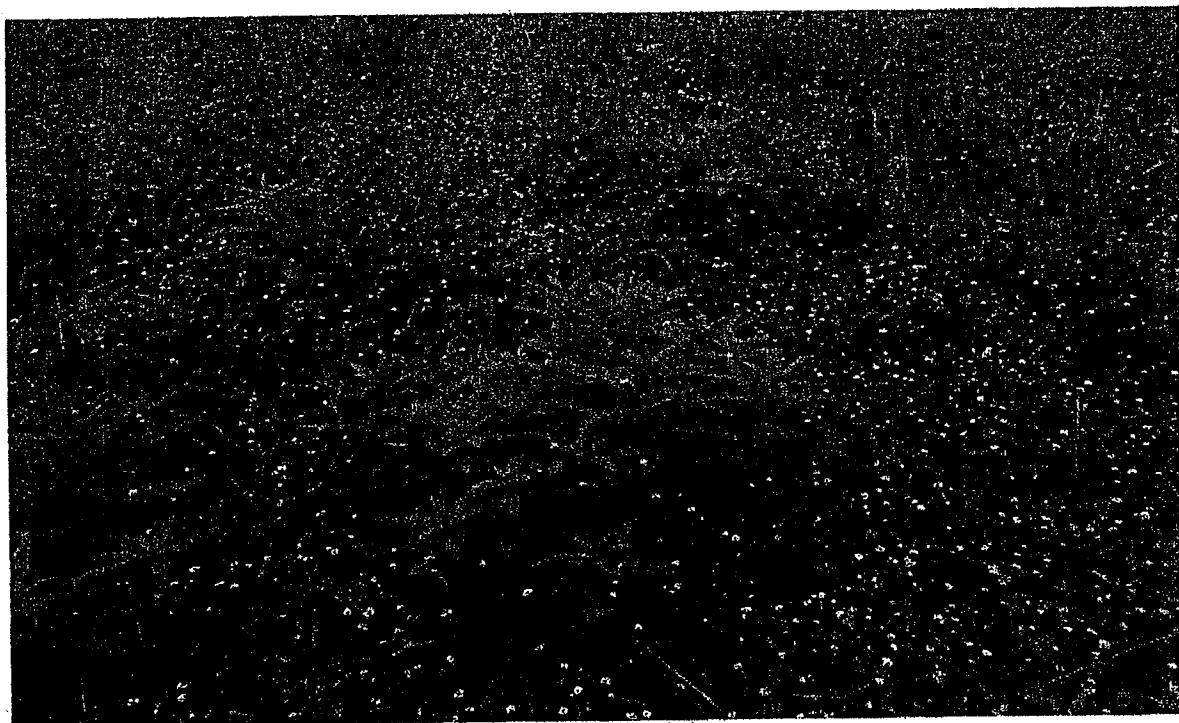
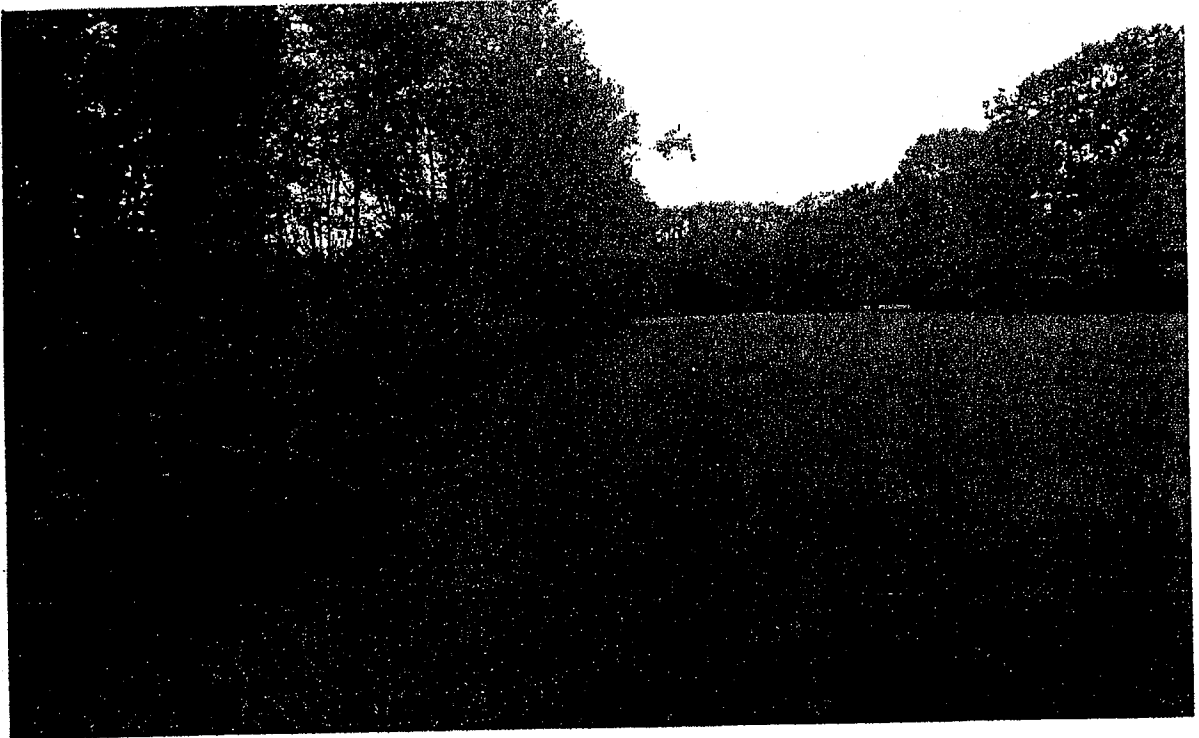


Photo D - Close up view of wetland vegetation in Wetland 2. The small white flower heads are Arrow-leaved Tearthumb, an obligate wetland plant species.



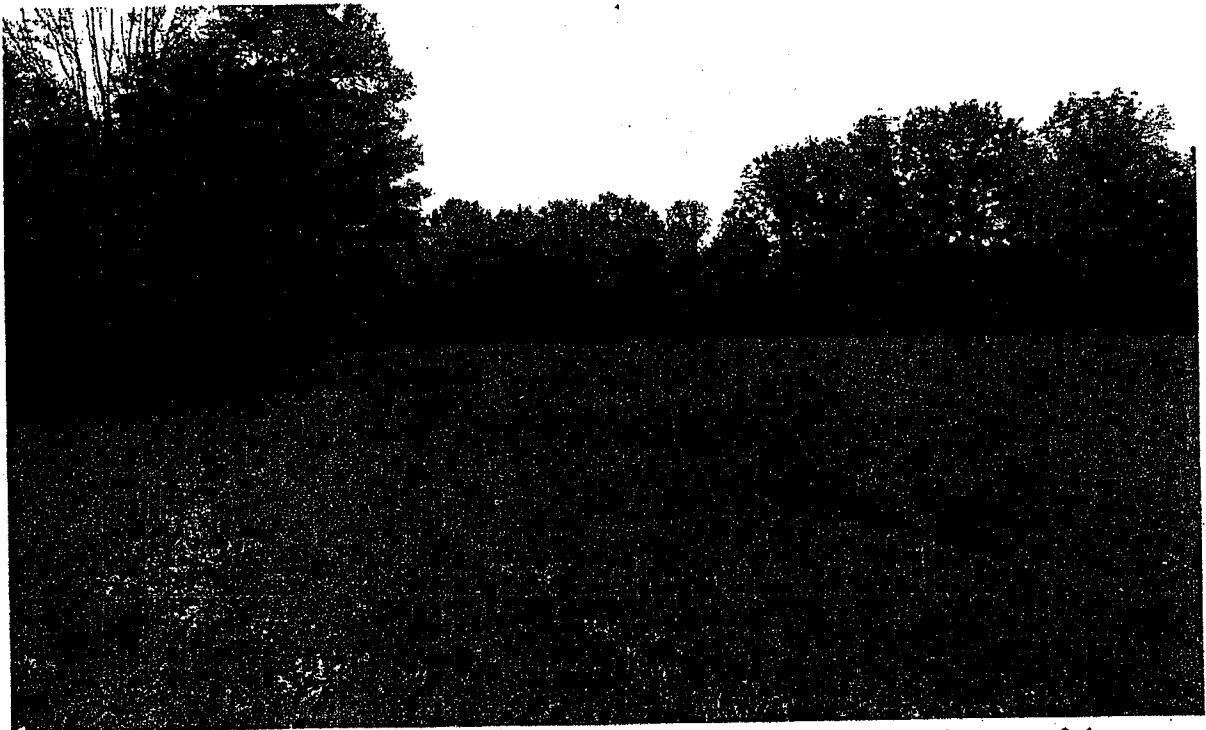
**Photo E** - View looking north at Wetland 2. Note dominance of Arrow-leaved Tearthumb.



**Photo F** - Looking northwest at Wetland 3.



**Photo G-** View looking east at Wetland 3. Note dominance of Arrow-leaved Tearthumb.

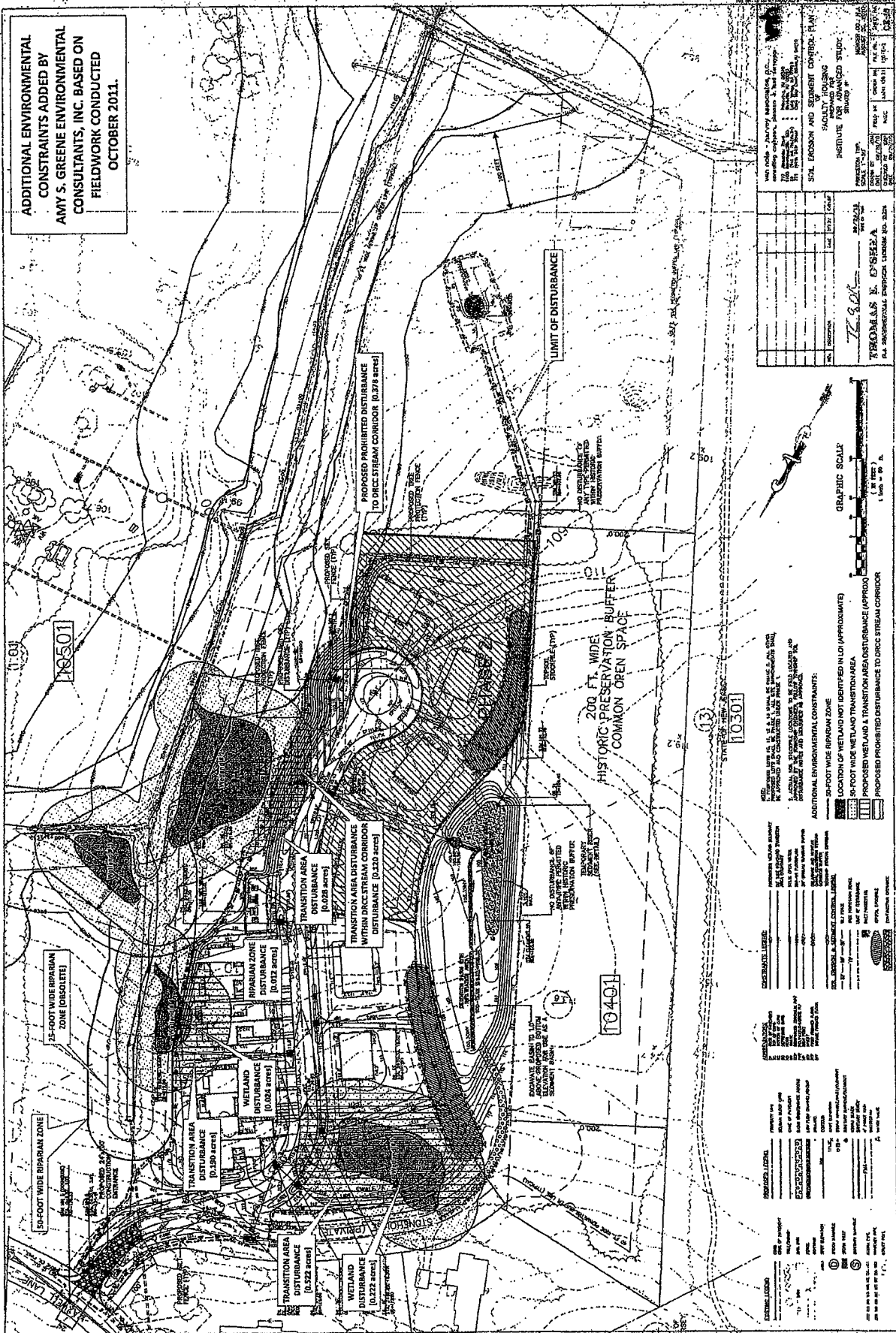


**Photo H-** View looking south at Wetland 4. Dominance of Arrow-leaved Tearthumb in center of photo.

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**CONSTRAINTS ON ENGINEERING SITE PLAN**

ADDITIONAL ENVIRONMENTAL CONSTRAINTS ADDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS, INC. BASED ON FIELDWORK CONDUCTED OCTOBER 2011.



NO.	REVISION	DATE	BY	CHKD.
1	ISSUED FOR PERMITTING	08/20/13	JK	JK
2	ISSUED FOR PERMITTING	08/20/13	JK	JK
3	ISSUED FOR PERMITTING	08/20/13	JK	JK
4	ISSUED FOR PERMITTING	08/20/13	JK	JK
5	ISSUED FOR PERMITTING	08/20/13	JK	JK
6	ISSUED FOR PERMITTING	08/20/13	JK	JK
7	ISSUED FOR PERMITTING	08/20/13	JK	JK
8	ISSUED FOR PERMITTING	08/20/13	JK	JK
9	ISSUED FOR PERMITTING	08/20/13	JK	JK
10	ISSUED FOR PERMITTING	08/20/13	JK	JK
11	ISSUED FOR PERMITTING	08/20/13	JK	JK
12	ISSUED FOR PERMITTING	08/20/13	JK	JK
13	ISSUED FOR PERMITTING	08/20/13	JK	JK
14	ISSUED FOR PERMITTING	08/20/13	JK	JK
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16	ISSUED FOR PERMITTING	08/20/13	JK	JK
17	ISSUED FOR PERMITTING	08/20/13	JK	JK
18	ISSUED FOR PERMITTING	08/20/13	JK	JK
19	ISSUED FOR PERMITTING	08/20/13	JK	JK
20	ISSUED FOR PERMITTING	08/20/13	JK	JK

PROJECT NO. 10301  
 SHEET NO. 13 OF 14  
 DATE: 08/20/13  
 PROJECT: FACILITY HOUSING  
 INSTITUTION: ARMY CORP OF ENGINEERS  
 PROJECT LOCATION: 10301  
 PROJECT DESCRIPTION: FACILITY HOUSING  
 PROJECT LOCATION: 10301  
 PROJECT DESCRIPTION: FACILITY HOUSING

GRAPHIC SCALE  
 1" = 100' HORIZONTAL  
 1" = 20' VERTICAL

ADDITIONAL ENVIRONMENTAL CONSTRAINTS:  
 50-FOOT WIDE RIPARIAN ZONE  
 35-FOOT WIDE RIPARIAN ZONE  
 200 FT. WIDE HISTORIC-PRESERVATION BUFFER COMMON OPEN SPACE  
 PROPOSED PROHIBITED DISTURBANCE TO DRCC STREAM CORRIDOR (APPROX. 0.378 ACRES)

LEGEND:  
 1. PROPOSED PROHIBITED DISTURBANCE TO DRCC STREAM CORRIDOR (APPROX. 0.378 ACRES)  
 2. 50-FOOT WIDE RIPARIAN ZONE  
 3. 35-FOOT WIDE RIPARIAN ZONE (DISOULETS)  
 4. WETLAND DISTURBANCE (0.028 ACRES)  
 5. TRANSITION AREA DISTURBANCE (0.110 ACRES)  
 6. TRANSITION AREA DISTURBANCE (0.028 ACRES)  
 7. WETLAND DISTURBANCE (0.028 ACRES)  
 8. TRANSITION AREA DISTURBANCE (0.028 ACRES)  
 9. WETLAND DISTURBANCE (0.028 ACRES)  
 10. TRANSITION AREA DISTURBANCE (0.028 ACRES)  
 11. WETLAND DISTURBANCE (0.028 ACRES)  
 12. TRANSITION AREA DISTURBANCE (0.028 ACRES)  
 13. WETLAND DISTURBANCE (0.028 ACRES)  
 14. TRANSITION AREA DISTURBANCE (0.028 ACRES)  
 15. WETLAND DISTURBANCE (0.028 ACRES)  
 16. TRANSITION AREA DISTURBANCE (0.028 ACRES)  
 17. WETLAND DISTURBANCE (0.028 ACRES)  
 18. TRANSITION AREA DISTURBANCE (0.028 ACRES)  
 19. WETLAND DISTURBANCE (0.028 ACRES)  
 20. TRANSITION AREA DISTURBANCE (0.028 ACRES)

DATE: 08/20/13  
 PROJECT: FACILITY HOUSING  
 INSTITUTION: ARMY CORP OF ENGINEERS  
 PROJECT LOCATION: 10301  
 PROJECT DESCRIPTION: FACILITY HOUSING

1624

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**NJ NATURAL HERITAGE PROGRAM LETTER**

PA0161

163x



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE  
Governor

Division of Parks and Forestry  
Mail Code 501-04  
ONLM - Natural Heritage Program  
P.O. Box 420  
Trenton, NJ 08625-0420  
Tel. #609-984-1339  
Fax. #609-984-1427

BOB MARTIN  
Commissioner

KIM GUADAGNO  
Lt. Governor

October 17, 2011

John Pabish  
Amy S. Greene Environmental Consultants, Inc.  
4 Walter E. Foran Boulevard, Suite 209  
Flemington, NJ 08822-4666

Re: Proposed IAS Faculty Housing Project - ASGECI #3422 (Block 10401, Lot 1; Block 10501, p.o. Lot 1.01)

Dear Mr. Pabish:

Thank you for your data request regarding rare species information for the above referenced project site in Princeton Township, Mercer County.

Searches of the Natural Heritage Database and the Landscape Project (Version 3 in the highlands region, Version 2.1 elsewhere) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the topographic map(s) submitted with the Request for Data into our Geographic Information System. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Natural Heritage Database and the Landscape Project habitat mapping for occurrences of any rare wildlife species or wildlife habitat on the referenced site. Please see Table 1 for species list and conservation status.

Table 1 (on referenced site).

Common Name	Scientific Name	Federal Status	State Status	Grank	Srank
barred owl	<i>Strix varia</i>		T/T	G5	S2B,S2N
Fowler's toad	<i>Bufo woodhousii fowleri</i>		SC	G5	S3
great blue heron	<i>Ardea herodias</i>		SC/S	G5	S3B,S4N

We have also checked the Natural Heritage Database and the Landscape Project habitat mapping for occurrences of any rare wildlife species or wildlife habitat within one mile of the referenced site. Please see Table 2 for species list and conservation status. This table excludes any species listed in Table 1.

Table 2 (additional species within one mile of referenced site).

Common Name	Scientific Name	Federal Status	State Status	Grank	Srank
bald eagle	<i>Haliaeetus leucocephalus</i>		E	G4	S1B,S1N
bald eagle foraging	<i>Haliaeetus leucocephalus</i>		E	G4	S1B,S1N
bobcat	<i>Lynx rufus</i>		E	G5	S1
brook floater	<i>Alasmidonta varicosa</i>		E	G3	S1
Cooper's hawk	<i>Accipiter cooperii</i>		T/T	G5	S2B,S4N
creeper	<i>Strophitus undulatus</i>			G5	S3
eastern box turtle	<i>Terrapene carolina carolina</i>		SC	G5T5	S3
green floater	<i>Lasmodon subviridis</i>		E	G3	S1
spotted turtle	<i>Clemmys guttata</i>		SC	G5	S3
triangle floater	<i>Alasmidonta undulata</i>		T	G4	S2

1644

We have also checked the Natural Heritage Database for occurrences of rare plant species or ecological communities. The Natural Heritage Database does not have any records for rare plants or ecological communities on the site or for rare plant species covered by the Flood Hazard Area Control Act rule within one mile of the site.

A list of rare plant species and ecological communities that have been documented from Mercer County can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html>. If suitable habitat is present at the project site, the species in that list have potential to be present.

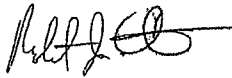
Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from [http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes\\_2008.pdf](http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes_2008.pdf).

If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive I-Map-NJ website at the following URL, <http://www.state.nj.us/dep/gis/depsplash.htm> or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292 9400.

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf>.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

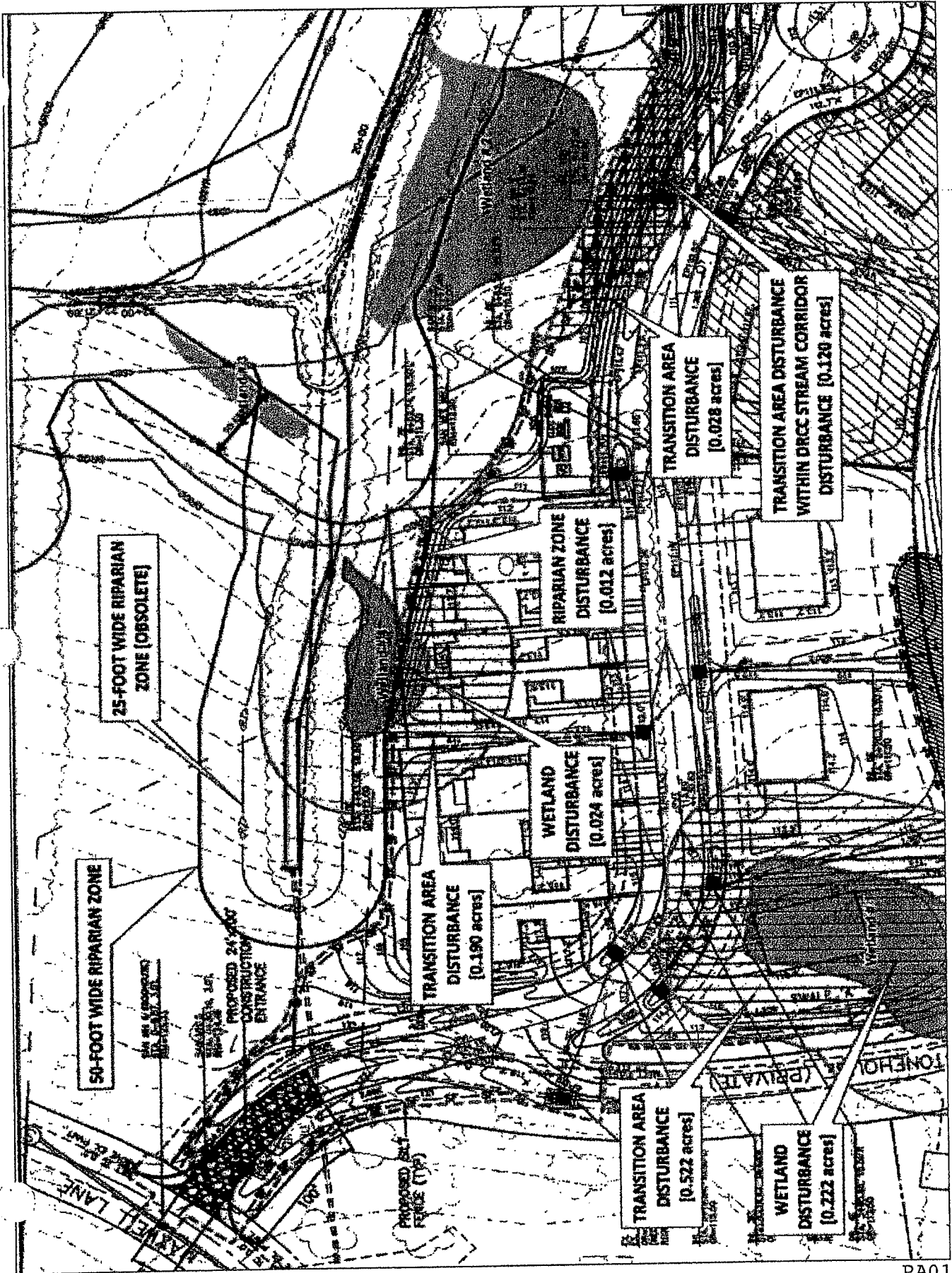
Sincerely,



Robert J. Cartica  
Administrator

c: NHP File No. 11-4007436-0083





50-FOOT WIDE RIPARIAN ZONE

25-FOOT WIDE RIPARIAN ZONE (OBSOLETE)

TRANSITION AREA DISTURBANCE [0.190 acres]

WETLAND DISTURBANCE [0.024 acres]

RIPARIAN ZONE DISTURBANCE [0.012 acres]

TRANSITION AREA DISTURBANCE [0.522 acres]

WETLAND DISTURBANCE [0.222 acres]

TRANSITION AREA DISTURBANCE [0.028 acres]

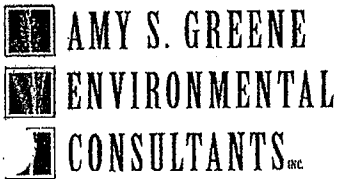
TRANSITION AREA DISTURBANCE WITHIN DRCC STREAM CORRIDOR [0.120 acres]

PROPOSED 24' WADG CONSTRUCTION ENTRANCE

PROPOSED 24' FENCE (TYP)

TONEHORN (PRIVATE)

1674



**SIGNED STATEMENT REGARDING WETLANDS INVESTIGATION  
FOR INSTITUTE FOR ADVANCED STUDY PROPERTY IN 2011**

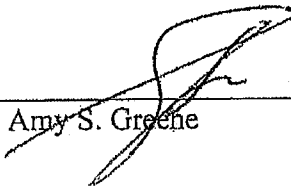
I, Amy S. Greene, President of Amy S. Greene Environmental Consultants, Inc., attest to the following statements as true and accurate regarding a Wetlands Investigation completed as to certain property of the Institute for Advanced Study, Block 10401 and 10501 in 2011, as set forth in the attached report

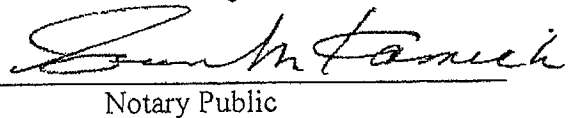
1. I certify that the attached report represents a true and accurate report of our survey of the Institute property as set forth therein;
2. The attached report was prepared for the Princeton Battlefield Society by myself and Douglas J. Chabrak of my firm on October 10, 2011; and,
3. The field visit was performed by myself and Douglas J. Chabrak of my firm on September 26, 2011.

**CERTIFICATION**

Sworn before me this day of

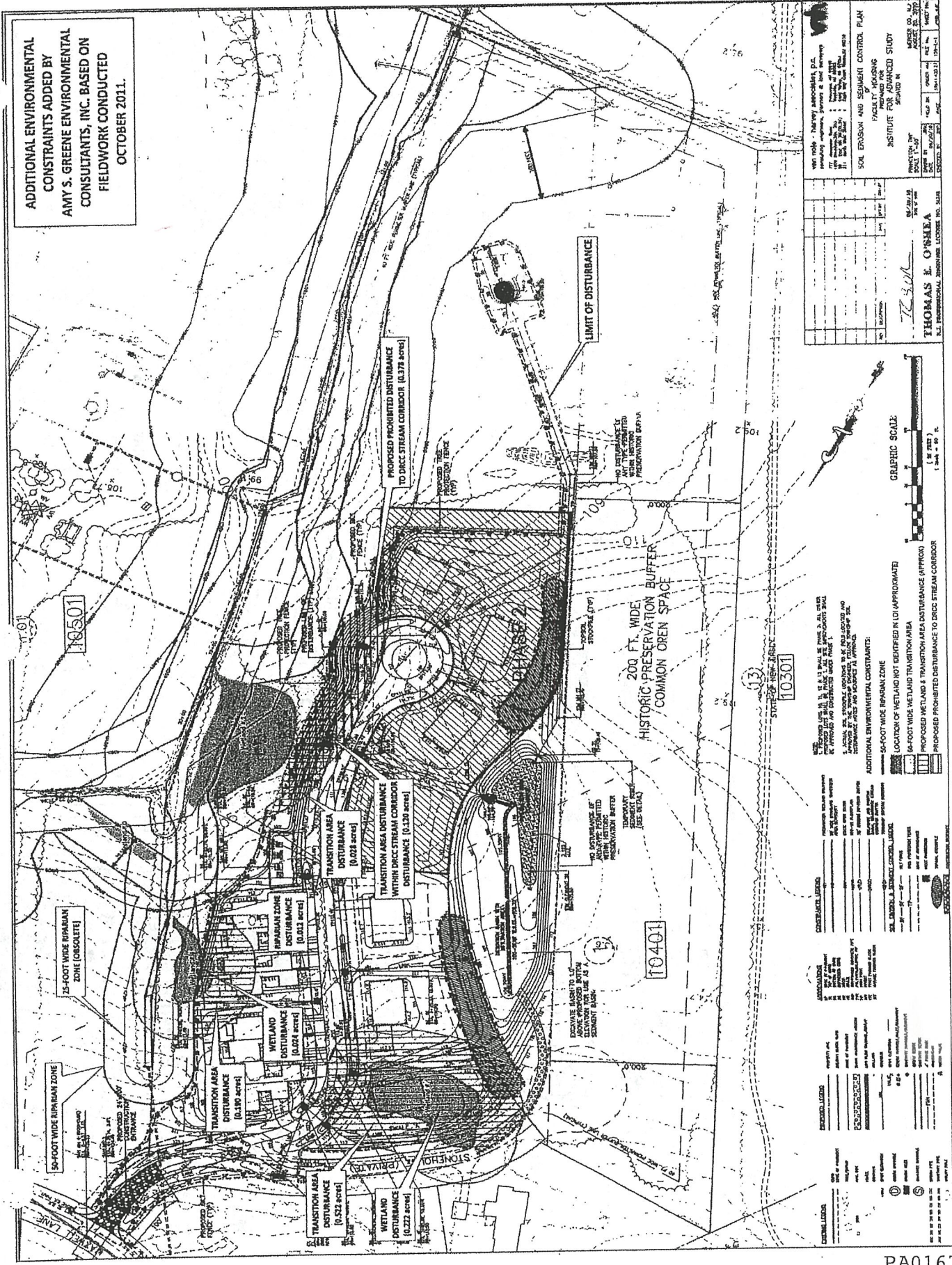
*February 23, 2012*

  
\_\_\_\_\_  
Amy S. Greene

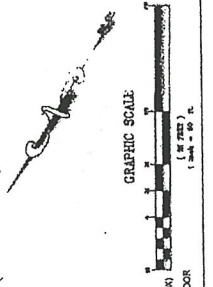
  
\_\_\_\_\_  
Notary Public

**SUSAN M. KAMICH  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires April 13, 2015**

ADDITIONAL ENVIRONMENTAL CONSTRAINTS ADDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS, INC. BASED ON FIELDWORK CONDUCTED OCTOBER 2011.

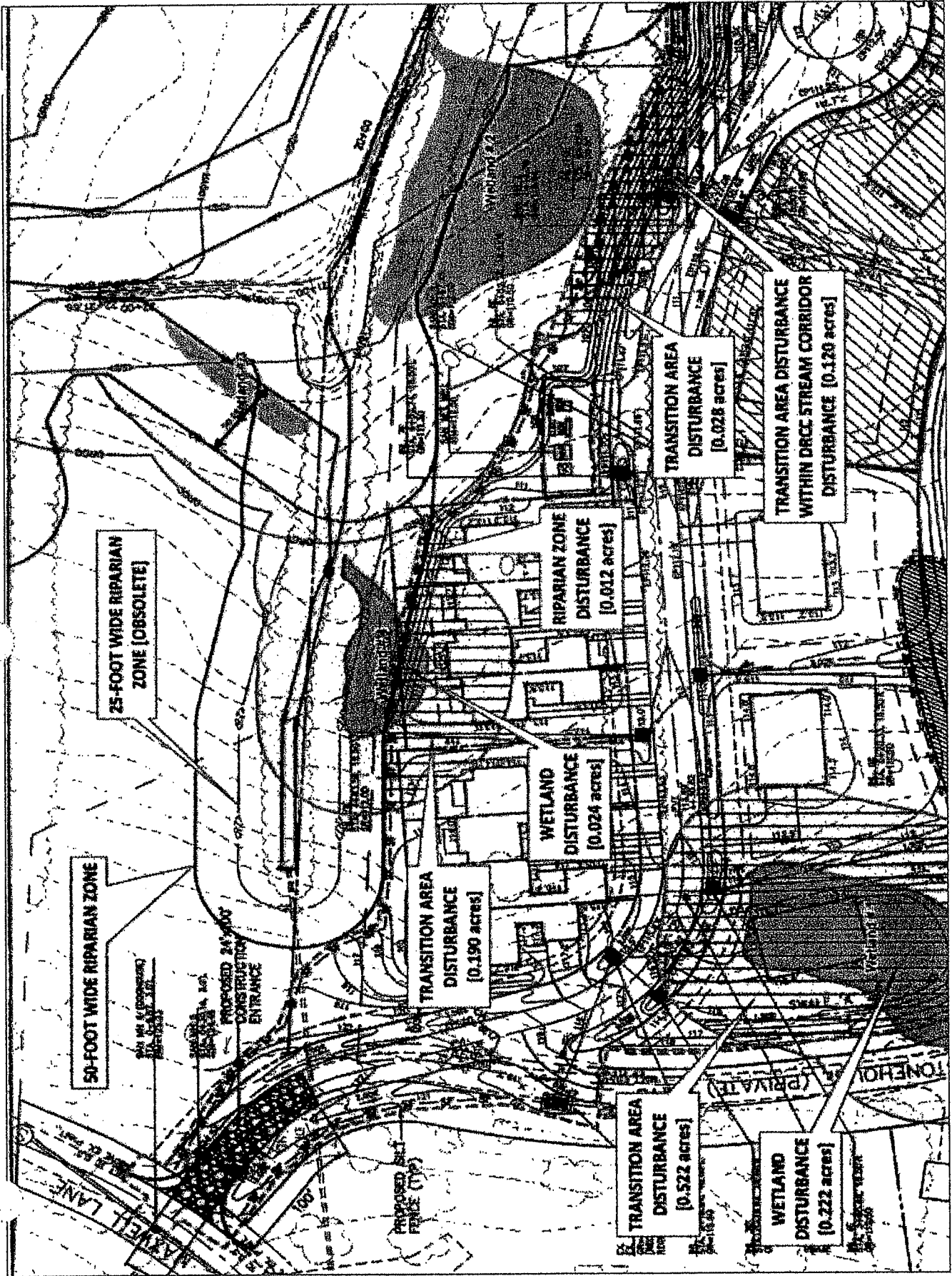


SOIL EROSION AND SEDIMENT CONTROL PLAN FACILITY: WAGONS INSTITUTE FOR ADVANCED STUDY STATION N	
PREPARED BY: DATE: SCALE: 1" = 100' SHEET NO. 16 OF 16	PROJECT NO. 11-001 DATE: 10/20/11 SHEET NO. 16 OF 16
THOMAS E. O'NEILL N.C. PROFESSIONAL ENGINEERING LICENSE NO. 5428	



<b>CONTOUR LINES</b> 10' INTERVALS 100' INTERVALS 200' INTERVALS 300' INTERVALS 400' INTERVALS 500' INTERVALS 600' INTERVALS 700' INTERVALS 800' INTERVALS 900' INTERVALS 1000' INTERVALS	<b>WETLAND DISTURBANCE</b> 50-FOOT WIDE RIPARIAN ZONE 25-FOOT WIDE RIPARIAN ZONE WETLAND DISTURBANCE TRANSITION AREA DISTURBANCE PROPOSED PROHIBITED DISTURBANCE TO DRCC STREAM CORRIDOR	<b>ADDITIONAL ENVIRONMENTAL CONSTRAINTS</b> 50-FOOT WIDE RIPARIAN ZONE LOCATION OF WETLAND NOT IDENTIFIED IN (D) (APPROXIMATE) 50-FOOT WIDE WETLAND TRANSITION AREA PROPOSED WETLAND & TRANSITION AREA DISTURBANCE (APPROX) PROPOSED PROHIBITED DISTURBANCE TO DRCC STREAM CORRIDOR
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\* Identical photo-color version - of Pg 167 located at front.  
1109X  
PA0167



170 x

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**CULTURAL RESOURCE SURVEY  
AND  
ASSESSMENT OF EFFECTS**

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**Proposed Faculty Housing  
Institute for Advanced Study  
Princeton Township, Mercer County, New Jersey**

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*Prepared For:*

**Institute for Advanced Study**  
Princeton, New Jersey



*Prepared By:*

**The Louis Berger Group, Inc.**  
East Orange, New Jersey



June 2007

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PA0169

1714

**CULTURAL RESOURCE SURVEY  
AND  
ASSESSMENT OF EFFECTS**

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**Proposed Faculty Housing  
Institute for Advanced Study  
Princeton Township, Mercer County, New Jersey**

*Prepared For:*

**Institute for Advanced Study**  
Princeton, New Jersey

*Prepared By:*

**The Louis Berger Group, Inc.**  
East Orange, New Jersey

*Prepared By:*

Susan D. Grzybowski  
Martha H. Bowers  
Kristofer M. Beadenkopf, RPA

*Contributions By:*

Gerard Scharfenberger  
and  
Hunter Research Inc.

*June 2007*

PA0170

1724

## II. ENVIRONMENTAL SETTING

The proposed 22-acre project area is situated in the western portion of the IAS campus. The project area is bounded to the west by Princeton Battlefield State Park, to the north by Stone House Drive, to the east by the main building complex of IAS, and to the south by undeveloped, natural woodlands (see Figure 2). The project area lies within the Piedmont Lowland physiographic province, a short distance from the boundary with the Coastal Plain physiographic province to the south. The Piedmont Lowland province consists of a gently undulating surface that slopes gradually from the New Jersey Highlands to the Coastal Plain. In terms of geological resources, lithic materials that could have been used by Native American groups for fashioning tools consist mainly of Triassic shale, sandstone, and argillite, with a small portion of the Piedmont lowland underlain by igneous rock.

Topographic relief within the project area is characterized as nearly level to gently sloping with elevations ranging from about 90 feet above sea level in the southern portion of the project area to a maximum of 120 feet along its northern edge, near Stone House Drive.

Soil types identified within the project area consist entirely of Bucks silt loam (BuB and BuC). The soils found within the project area are generally gently sloping, well drained, and found on broad uplands. Stratigraphically, these soils consist of a plowzone approximately 8 inches thick, underlain by a silt loam subsoil approximately 2.5 feet thick. Weathered bedrock is present in the lower levels of the subsoil, and hard shale or argillite bedrock is usually encountered at a depth of 40 to 60 inches below the surface. Bucks silt loam soils are well suited for agriculture, with corn, small grains, and grasses the most common crops grown (Jablonski 1972).

The principal drainage in the project area is Stony Brook, located approximately 3,000 feet south of the project area; it in turn flows into the Millstone River about 2.5 miles northeast of the project area. Additionally, an unnamed stream with associated freshwater wetlands borders the eastern periphery of the project area and an unnamed freshwater pond exists about 120 feet east and outside the limits of the project area. A review of historical maps suggests that the unnamed freshwater pond may be a man-made or modified hydrologic feature possibly associated with IAS landscape modifications. As such, this pond and source of potable water would not have been an exploitable natural resource during prehistoric (Native American) or early historic time periods.

Currently, the project area is characterized as agricultural-open field. "Since the time of the battle, the project site appears to have remained in predominantly agricultural usage; within living memory, the four field have been chiefly mowed and maintained as meadow" (Hunter 2003).

The IAS property, outside the project area, includes what is generally referred to as the Institute Woods, a 500-acre permanently conserved nature reserve that forms a key link in a network of green spaces in central New Jersey. Stony Brook flows through the Woods and is bordered by a broad flood plain, which has abundant beds of spring wildflowers such as yellow trout lilies, pink and white spring beauties, and purple violets. The aspen, gray birch, beech, oak, hickory, dogwood, sweet gum, and red maple trees provide habitat for summer breeding and spring and fall migrating bird species. The Woods are also an important stop-over point for migrating songbirds, particularly warblers. Trails connect to the adjacent Princeton Battlefield State Park and the Charles H. Rogers Wildlife Refuge. The Institute Woods are open to the public and can be enjoyed year-round by bird watchers, walkers, runners, and cross-country skiers.

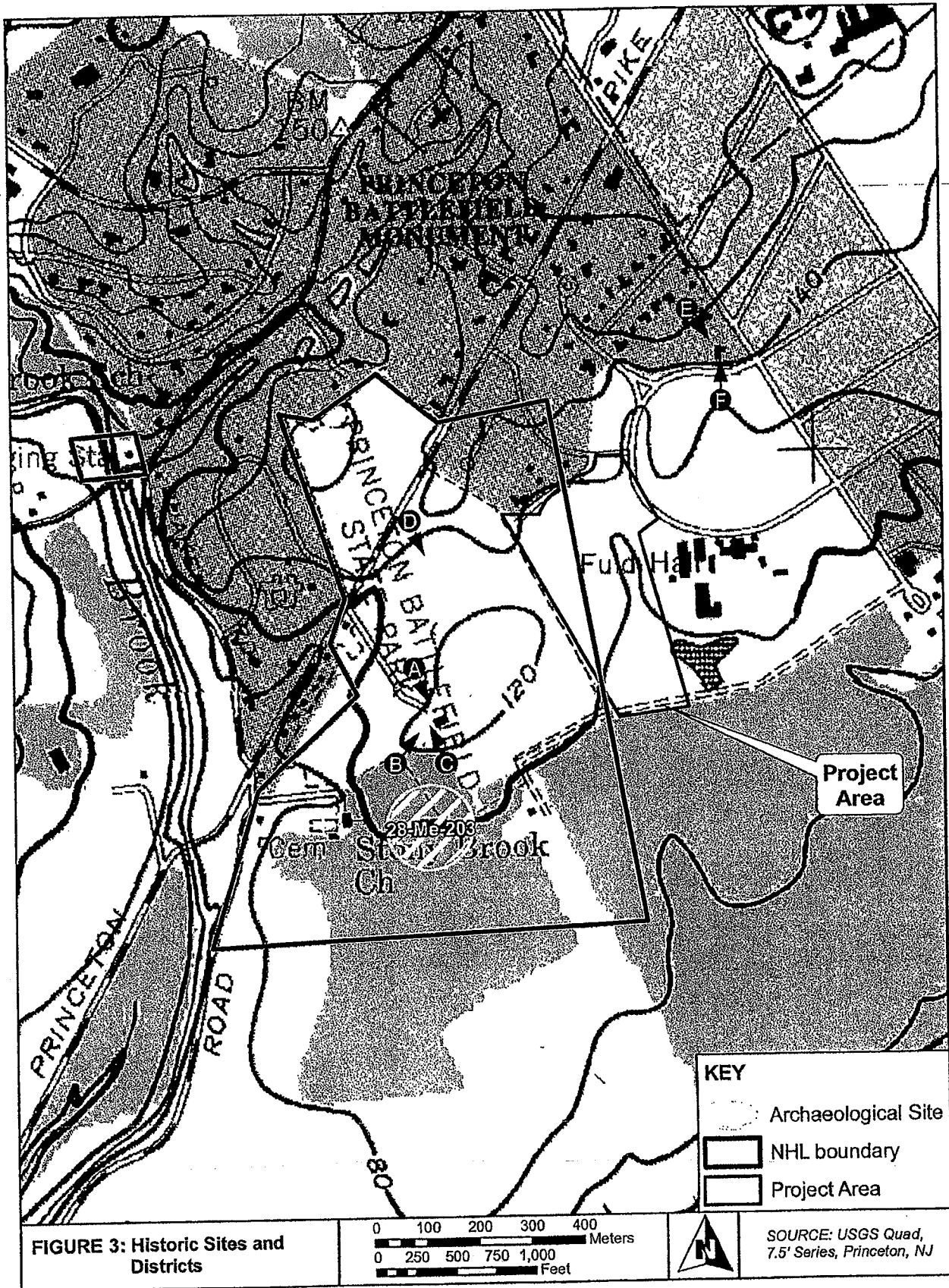


**PLATE 4:** Thomas Clarke House Looking North Toward Mercer Road and Monument. (View C, Figure 3)

In 1977 NPS, in a review of National Historic Landmarks, certified a new boundary for the Princeton Battlefield NHL that was smaller than, and not contiguous with, the 1972 Historic District boundary. The NHL boundaries encompassed two separate areas. One, of 1.8 acres, encompassed Stony Brook Bridge and Worth's Mill. The other portion of the NHL, encompassing 208 acres, included all of the State Park but also extended further east and southeast than did the Historic District. As a result of this 1977 boundary certification, the western portion of the 22-acre tract that is the site of the proposed faculty housing was effectively brought into the Historic Landmark (Figure 3 and Plate 5).

In 1989 the Princeton Battlefield Historic District was further enlarged by some 285 acres lying west and south of the 1972 district, to include the historic Stony Brook Settlement. The NHL boundaries, however, do not appear to have been changed from those certified in 1977.

A review of the New Jersey State Museum archaeological site files also indicates that the Princeton Battlefield State Park contains the roadbed of the Trenton and Mercer County Inter-Urban Trolley Line (28-Me-203). A SHPO opinion of eligibility was offered in 1988 for the late nineteenth- and early twentieth-century remains of the abandoned trolley alignment. According to the information recorded on the site form, "Although the trackage, ties, and most attendant features on the line (electric poles, signposts, etc.) were removed in 1932, the prepared bed consisting mainly of industrial refuse from a late nineteenth or early twentieth century property manufacturing site(s) in Trenton, is intact." The site is located more than 1,300 feet west of the southernmost portion of the project area.



Development, Bureau of Parks to show the relationship of battle movements to the then limits of the Princeton Battlefield State Park (Figure 32). As previously mentioned, the Institute for Advanced Study conveyed 32 acres to the state park in 1973. As such, the western limits of the project area as georeferenced for this figure delineate the current eastern boundary of the state park. It also should be noted that the distortion of this map indicates spatial discordance of features such as roads and water courses georeferenced to the modern Princeton USGS map.

Although many early maps show natural elevations and topographical features to various degrees, a map included in Dr. A.A. Woodhull's *The Battle of Princeton* is the only historical map to juxtapose battle positions against contour lines and elevations over the entire battlefield and surrounding vicinity (Figure 33). On this map the Thomas Clarke house (labeled "T.C.") is shown on a knoll with an elevation of 124 feet above mean sea level (amsl) west of the project area. This is significant, since the house is extant and its location can be verified. A fenceline and ditch (labeled "9"), which no longer exist, are depicted at the base of a slope between the 120- and 130-foot lines approximately 225 feet south of William Clarke's house and outside the limits of the proposed project area. This, according to Hageman, was a "worm fence," which was a zigzag fence composed of rails crossing one another at their ends. The William Clarke (labeled "W.C.") orchard is shown on a rise of between 140 and 150 feet amsl, approximately 1,700 feet northeast of the Thomas Clarke house and north of the project area. This orchard was square in shape, with the northeast corner lying 90 feet from the front façade of the former Mercer Manor and about 400 feet east of the spot where General Mercer was bayoneted in the vicinity of the Mercer Oak (Wertenbaker 1927:418). Much of the initial activity during the battle is shown to have occurred around the orchard and the area to the south, which is also east of the Thomas Clarke house but outside the project area. Similar to the Hageman map of 1879, troop positions and movements are not fully represented, often signified by only a number.

## G. CONCLUSION

The historical research has concluded that the project area was part of the farmland owned in 1772 by William Clarke, grandson of original settler and founder of Stony Brook, Benjamin Clarke. By the time William Clarke died in 1802, his property encompassed the farmstead situated north of the project area and approximately 143 acres of farmland that included the proposed project area. By 1854 the property including the project area had passed out of the Clarke family. The property exchanged hands numerous times until the middle of the twentieth century (c. 1945), when the Institute for Advanced Study purchased a portion of the original William Clarke tract from Robert C. Maxwell. Since the eighteenth century, the project area has been principally used for agricultural pursuits with no buildings, structures, or other improvements.

Regarding the Battle of Princeton on January 3, 1777, historic documentation indicates that the battle took place over a fairly large area and that skirmishes occurred throughout much of the settlement that was Princeton. A number of references describe and battlefield maps illustrate that the principal engagements occurred immediately north and west of the project area (surrounding the William Clarke farmstead/orchard (north of the project area at Mercer Road) and from the knoll surrounding the Thomas Clarke house (west of the project area) northward toward the William Clarke farmstead. Based upon the historic resources, however, it is likely that some military action may have taken place within the project area as these fields were immediately adjacent to the principal engagement areas and it appears that there were no discernible boundaries or woodlots to restrict troop movements.

The following section provides the results of the metal detecting surveys and archaeological investigations conducted within the project area that were undertaken in an effort to ascertain whether or not the area contained evidence of any military activity associated with Battle of Princeton. Subsequent chapters provide detailed information and analysis of the recovered artifacts and synthesis of the historical accounts and archaeological remains related to the Battle of Princeton.

*40 CFR PART 233.13*

*MEMORANDUM OF AGREEMENT  
WITH THE REGIONAL  
ADMINISTRATOR (EPA)*

MEMORANDUM OF AGREEMENT BETWEEN

THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION & ENERGY  
AND THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

I. GENERAL

A. Purpose

This Memorandum of Agreement (hereinafter "Agreement") between the New Jersey Department of Environmental Protection & Energy (NJDEPE) and the United States Environmental Protection Agency (Region II) (EPA), is entered into to enable the State of New Jersey to carry out the policies, regulations and procedures necessary to administer the permit program established pursuant to Section 404 of the Clean Water Act (CWA), 33 U.S.C. 1344, hereinafter referred to as "the 404 program," thereby fulfilling the requirements of the Freshwater Wetlands Protection Act, P.L. 1987, c. 156. This agreement does not create any substantive standards relating to any aspect of the permit program or impose any legal obligations on the public.

B: Parties and Effective Date

(1) This agreement is entered into by the State of New Jersey through the Commissioner of the NJDEPE ("Commissioner") and the United States Environmental Protection Agency through the Regional Administrator of Region II ("Administrator").

(2) This agreement shall be executed by the Commissioner and the Administrator and shall become effective at the time the NJDEPE's authorization to administer the 404 program takes effect, which shall be the date set out in the Federal Register of EPA's decision to approve the State's application to administer the 404 program.

(3) Nothing in this agreement shall be construed to restrict in any way EPA's authority to fulfill its oversight and enforcement responsibilities under the CWA, nor shall it restrict NJDEPE's enforcement responsibilities under New Jersey law.

(4) This agreement will remain in effect until such time as NJDEPE's program authorization is modified or withdrawn by EPA or is voluntarily transferred by NJDEPE to the Army Corps of Engineers (ACOE) according to the criteria and procedures established in 40 C.F.R. 233.53.

C. Modification

This agreement may be modified pursuant to 40 C.F.R. 233.16 upon the initiative of either party. Amendments to this

agreement shall be in writing, and shall be effective upon the signature of both parties.

D. Confidentiality

(1) All of the information EPA transfers to NJDEPE will be provided subject to the procedures and limitations of 40 C.F.R. 233.3.

(2) Any information obtained or used in the administration of the State Program shall be available to EPA without restriction. If information has been submitted to NJDEPE under a claim of confidentiality, NJDEPE must inform EPA of such claim. All information submitted by NJDEPE subject to a claim of confidentiality shall be treated in accordance with the procedures of 40 C.F.R. Part 2., 40 C.F.R. 233.3(c) and N.J.A.C. 7:7A-11.4.

E. Computing Time Periods

In computing any period of time prescribed by this agreement, the day on which the designated period of time begins shall not be included. Saturdays, Sundays, and legal holidays shall be included. When a stated time expires on a Saturday, Sunday or legal holiday, the stated time period shall be extended to include the next business day.

F. Legal Framework

(1) The legal basis for the State's assumption of the 404 program is provided by Section 404(g)(1) of the Clean Water Act, which authorizes the Administrator of the EPA to approve state administered programs for regulating the discharge of dredged or fill material into State regulated waters as defined at 40 C.F.R. 232.2, and by N.J.S.A. 13:9B-27 of the Freshwater Wetlands Protection Act which mandates the State of New Jersey to take all appropriate actions to secure the assumption of the permit jurisdiction exercised by the U.S. ACOE pursuant to the Federal Act.

(2) The implementing regulations concerning assumption of the 404 program under the CWA are found at 40 C.F.R. 230, 232 and 233.

(3) The State's legal authority for the activities required for assumption is provided by N.J.S.A. 13:9B-1 et seq., and N.J.S.A. 58:10A-1 et seq., which authorizes the NJDEPE to issue permits for the discharge of dredged or fill material into waters of the United States within the boundary of New Jersey or subject to its jurisdiction.

(4) Prior to the assumption of the 404 program by NJDEPE, the North Atlantic Division of the United States Army Corps of

Engineers (Corps) has administered the 404 program in New Jersey. The Division Engineer of the North Atlantic Division has been delegated the authority to enter into a Memorandum of Agreement which will transfer the program to NJDEPE pursuant to CWA requirements.

(5) NJDEPE's Memorandum of Agreement with the Corps stipulates joint permit processing responsibilities for activities which involve non-assumable waters, as well as transfer of permitting authority from the Corps to NJDEPE. This agreement identifies the State waters to be regulated, joint processing procedures, general permit procedures, transfer of records, protection of navigation or anchorage, permitting for Corps water resource projects and permitting for emergency work. The legal effect of the Memorandum of Agreement between the NJDEPE and the Corps is conditioned upon approval of the State's program and of this agreement between NJDEPE and the EPA.

#### G. Policy Statement

(1) Each of the parties to this agreement is responsible for ensuring that its obligations under the CWA are met. Upon approval of the State's application from EPA, NJDEPE assumes primary responsibility for implementing certain provisions of the 404 program within New Jersey's boundaries. This will be accomplished under the authority of State law. EPA retains its responsibility to ensure full and faithful execution of the requirements of the CWA, including direct implementation in the event NJDEPE does not act in accordance with the CWA, or does not act in a timely fashion. The Commissioner and the Administrator agree to maintain a high level of cooperation and coordination between their respective staffs and to work in partnership to assure successful and effective administration of the 404 program.

## II. PERMIT APPLICATION REVIEW AND PERMIT ISSUANCE

### A. Lead Agency Responsibility for 404 Program

(1) NJDEPE is the lead agency in New Jersey for administering the State Program. The Commissioner shall administer the State Program as approved by EPA, using this MOA, applicable state and federal laws, and any separate working agreement which shall be entered into with the Administrator as necessary for full administration of the program. The strategies and priorities for permit review, compliance monitoring and enforcement of permits shall be established by the Commissioner and shall be reviewed annually by the Administrator.

(2) NJDEPE is responsible for expeditiously drafting, circulating for public review and comment, issuing, modifying, reissuing and terminating or denying State Program permits for all discharges of dredged or fill material into state regulated waters, as defined at 40 C.F.R. 232.2. The Commissioner has

delegated the State Program to Environmental Regulation subject to the provisions of N.J.A.C. 7:1-1.3. NJDEPE will use procedures and policies found in N.J.A.C. 7:7A and N.J.A.C. 7:1 in its administration of the program.

B. Waiver of Review

(1) Pursuant to Section 404(k) of the CWA, EPA waives the requirements of Section 404(j) regarding Federal review of NJDEPE permit applications for all but the following categories of permits:

- a. Draft general permits;
- b. Discharges with reasonable potential for affecting Federally listed or proposed endangered or threatened species as determined by the United States Fish and Wildlife Service;
- c. Discharges of dredged or fill material which have the potential for adverse impacts on the waters of a state other than New Jersey;
- d. Discharges known or suspected to contain toxic pollutants as identified by section 307(a)(1) of the CWA; hazardous substances identified pursuant to Section 311 of the CWA and Section 101(14) of the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. 9601 et seq.; toxic substances as defined by Section 3 of the Toxic Substance Control Act, 15 U.S.C. 2601 et seq.; and hazardous waste as defined by Section 1004(5) of the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq.;
- e. Discharges located in the proximity of a public water supply intake;
- f. Discharges within critical areas established under State or Federal law, including but not limited to National and State parks; fish and wildlife sanctuaries or refuges; National and historical monuments; wilderness areas and preserves; sites identified or proposed under the National Historic Preservation Act; and components of the National Wild and Scenic Rivers system;
- g. The filling of 5 or more acres of freshwater wetlands or State open waters and/or any regulated activity which results in significant reductions in the ecological, commercial, or recreational values of five or more acres of freshwater wetlands or State open waters;
- h. Culvert enclosures of more than 100 feet with more than 200 cubic yards of fill in waters regulated by NJDEPE;
- i. Channelization of more than 500 feet of a river or stream;

(2) The Administrator may terminate waiver of the review of categories of permit applications outlined in this MOA as well the waiver of review of specific permit actions at any time by sending the Commissioner written notice of implementation.

(3) The Department may request review by the EPA of specific projects based on the potential for significant adverse environmental impacts.

C. Review Procedures

(1) The Commissioner shall promptly transmit to the Administrator:

a. A copy of the public notice for any complete permit applications received by NJDEPE, except those for which permit review has been waived under this agreement. NJDEPE shall supply the Administrator with copies of public notices for permit applications for which permit review has been waived whenever requested by EPA.

b. A copy of a draft general permit whenever NJDEPE intends to issue or amend a general permit. The draft general permit shall comply with the requirements of 40 C.F.R. 233.21.

c. Notice of every significant action taken by NJDEPE related to the consideration of any draft general permit or permit application except those for which federal review has been waived.

d. A monthly report outlining all completed permit decisions and jurisdictional determinations. NJDEPE should supply the Administrator with a copy of any permit or jurisdictional determination whenever requested by EPA.

(2) If the information provided is inadequate to determine whether the permit application or draft general permit meets federal requirements, the Administrator may, within 30 days of receipt of the information, request the Commissioner to transmit to the Administrator the complete record of the permit proceedings before NJDEPE, or any portion of the record, or any other information, including a supplemental application, that the Administrator determines is necessary for review.

(3) Unless review has been waived under this agreement, the Administrator shall provide a copy of each of the documents specified at 40 C.F.R. 233.50 to the Corps, FWS, and the United States National Marine Fisheries Service (NMFS) in accordance with the procedures at 40 C.F.R. 233.50.

(4) If the Administrator intends to comment upon, object to, or make recommendations with respect to a permit application, draft general permit, or the Commissioner's failure to accept the recommendations of an affected state, the Administrator shall so

notify the Commissioner in accordance with 40 C.F.R. 233.50. If the Commissioner has been so notified, the Commissioner and the Administrator shall follow the procedures set forth at 40 C.F.R. 233.50.

(5) In the event that NJDEPE neither satisfies EPA's objections or requirement for a permit condition nor denies the permit, the Corps shall process the 404 permit application.

D. Prohibitions on Issuing Permits

No permit shall be issued by the Department in the following circumstances:

(1) When permit does not comply with the requirements of the CWA or regulations thereunder, including the Section 404(b)1 Guidelines (40 CFR Part 230).

(2) When the Regional Administrator has objected to the issuance of the permit under 40 C.F.R. Part 233.50 and the objection has not been resolved to the Regional Administrator's satisfaction.

(3) When the proposed discharges would be in an area which has been prohibited, withdrawn, or denied as a disposal site by the Administrator under Section 404(c) of the CWA, or when the discharge would fail to comply with a restriction imposed thereunder.

(4) If the Corps determines, after consulting with the Coast Guard, that anchorage and navigation of any navigable waters would be substantially impaired.

III. ENFORCEMENT

A. EPA will retain responsibility for all pending enforcement actions for which EPA has requested lead agency status prior to assumption.

B. State Enforcement

NJDEPE will take timely and appropriate enforcement action against persons in violation of the State Program permit conditions and against persons conducting unauthorized discharges of dredged or fill material into state regulated waters pursuant to N.J.A.C. 7:7A-15.

C. EPA Enforcement Oversight

(1) In instances where the EPA determines that the NJDEPE has not initiated timely and appropriate enforcement action regarding a State Program permit violation or an unauthorized discharge, EPA may proceed with any or all of the enforcement options available under Section 309 of the CWA.

(2) Prior to proceeding with federal enforcement action against a State Program permit violator or an unauthorized discharger, and for purposes of providing notice only, EPA shall inform NJDEPE that federal enforcement action is to be initiated forthwith. This notification shall be in the form of a telephone or written communication by the Administrator to the Commissioner or a designee. Except in the exercise by EPA of its emergency power under Section 504 of the CWA, such notification shall be provided in all cases of federal enforcement action regardless of the existence or extent of previous communication between EPA and NJDEPE on the matter. It is expected that preliminary staff discussions will take place between EPA and NJDEPE representatives before institution of federal enforcement action. If EPA fails to provide notice such failure does not invalidate EPA's ability to enforce.

#### D. Joint Enforcement

(1) Either agency may request the other to take independent or joint enforcement action on any case. Any such request shall be in writing and a response shall be given within 30 days of receipt. Where there may be an imminent and substantial danger to human health or welfare or the environment, such a request may be made by telephone or other means. The details of enforcement coordination will be specified in a yearly NJDEPE/EPA agreement, which will be drafted following state program approval and reviewed annually. The NJDEPE/EPA agreement shall not override the terms of this agreement.

#### IV. Program Maintenance

##### A. Duty to Maintain Program compatibility

(1) NJDEPE's State Program will be conducted in conformance with applicable regulations and definitions found in 40 C.F.R. Parts 230 and 233, and in N.J.A.C. 7:7A, unless provided otherwise in this agreement. Whenever any regulations found in 40 C.F.R. Parts 230 and 233 have been revised or amended in a manner which affects the State Program, the Administrator shall so notify the Commissioner. However, nothing precludes the State from adopting or enforcing requirements which are more stringent or from operating a program with greater scope than that required by 40 C.F.R. Parts 230 and 233.

(2) EPA will keep NJDEPE informed of the content and meaning of federal statutes, regulations, guidelines, standards, policy decisions, directives, and any other factors that affect the State Program. EPA will forward copies of all guidance documents, as they become available, to NJDEPE. Guidance documents are to be sent to: Land Use Regulation Program, Environmental Regulation, New Jersey Department of Environmental Protection and Energy, CN 401, 501 East State Street, Trenton, New Jersey 08625. EPA will also provide general technical

guidance to NJDEPE. EPA will share with NJDEPE any national reports developed by EPA from the data obtained through state reporting requirements. EPA shall provide NJDEPE with all guidance and technical resource documents unless EPA is notified that guidance and technical documents are being sent directly to NJDEPE by EPA headquarters.

(3) The Commissioner agrees to inform the Administrator of any proposed or adopted program changes which would affect NJDEPE's ability to implement the authorized program, any proposed transfer or responsibility to another agency, and any other modifications which are significant to administration of the program.

#### B. EPA Oversight of State Program

(1) The Administrator will assess the administration and enforcement of the State Program on a continuing basis for equivalence and consistency with the CWA, this agreement, and all applicable federal requirements and policies and for adequacy of enforcement. This assessment will be accomplished by: (1) timely EPA review of information submitted by NJDEPE in accordance with this agreement; (2) permit overview; (3) compliance and enforcement overview; and (4) annual review of NJDEPE program activities.

(2) The Administrator may also consider, as part of this regular assessment, written comments about NJDEPE's program administration and enforcement that are received from regulated persons, the public, and federal, state and local agencies. Any response by the Administrator to the public comment will be preceded by notice to the Commissioner in accordance with this paragraph. Copies of any such comments received by the Administrator will be provided to the Commissioner within thirty (30) days of their receipt by EPA. The Commissioner will have 30 days from receipt of the copies of such comments to provide the Administrator with NJDEPE's response. The Administrator will take NJDEPE's response into account prior to issuing a response to regulated persons, the public, or federal, state or local agencies. In addition, the Commissioner will be copied on all responses issued by the Administrator within 30 days of their issuance.

#### C. Annual Reports

(1) Within 90 days after completion of the State's fiscal year (June 30), the Commissioner shall submit to the Administrator a draft annual report in accordance with the requirements of 40 C.F.R. 233.52.

(2) The State shall make the draft annual report available for public inspection.

(3) Within 60 days of receipt of the draft annual report, the Administrator will complete review of the draft report and

transmit comments, questions, and/or requests for additional evaluation and/or information to the Commissioner.

(4) Within 30 days of receipt of the Administrator's comments, the State will finalize the annual report, incorporating and/or responding to the Administrator's comments, and transmit the final report to the Administrator.

(5) Upon acceptance of the annual report, the Administrator shall publish notice of availability of the final annual report.

D. Annual Review and Performance Evaluation

(1) EPA shall conduct annual performance evaluations of the State Program from NJDEPE's annual reports and other requested information. The performance evaluation shall determine the State Program's consistency with the program as approved, and with applicable regulations, guidance and policies. The annual review will be conducted within 60 days of receipt by the Administrator of the final State annual report, and will include a review of expenditures of federal funds.

(2) EPA shall submit a report of the evaluation findings to the NJDEPE outlining any perceived deficiencies in program performance and making recommendations for improving NJDEPE operations. If NJDEPE is requested by EPA to respond to the EPA program evaluation report, NJDEPE will have 60 days from the date of receipt of the report to respond in writing. NJDEPE's response shall address each EPA recommendation specifically.

(3) Either party to this agreement may call a meeting to discuss NJDEPE's annual report, the annual review process, and/or the performance evaluation.

E. Procedures for Revision of the State Program

(1) Either EPA or NJDEPE may initiate program revision. Program revision may be necessary when the controlling federal or state statutory or regulatory authority is modified or supplemented or for other reasons. The NJDEPE shall keep EPA fully informed of any proposed modifications to its basic statutory or regulatory authority, its forms, procedures, or priorities.

(2) Revision of the State Program shall be accomplished in accordance with the requirements of 40 C.F.R. 233.16 and of applicable State law.

F. Transfer or Withdrawal of State Program

(1) The EPA may withdraw program approval from NJDEPE upon a finding that the State Program no longer complies with the requirements of the CWA and implementing regulations, and that NJDEPE has failed to take corrective action.

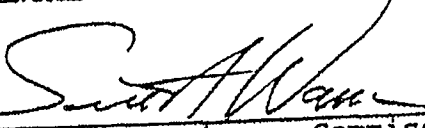
(2) The criteria and procedures for withdrawal of a state program, found at 40 C.F.R. 233.53, shall govern program withdrawal.

(3) NJDEPE may voluntarily transfer the State Program to the Corps using the procedures at 40 C.F.R. 233.53(a).

VII. Signatures


NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

Date: 3-4-97

By:   
Scott A. Weiner, Commissioner

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION II

Date: 6/15/93

By:   
William Myszynski  
Acting Regional Administrator

**Kip's Comments**  
**Senate Environmental Committee**  
**December 21, 2015**

Good morning. I'm Kip Cherry and the 1<sup>st</sup> VP of the Princeton Battlefield Society. I want to focus on several items.

**Background (Handout - Milner Map)**

First, as background, the Battle of Princeton, while relatively small, was a major battle in the American Revolution on January 3, 1777. It was a critical turning point in the Revolution. It was the first battle General Washington won against the professional British Army. By the end of 1776 the Americans were losing the American Revolution and they were losing hope. AFTER the Battle of Princeton, donations began to roll in to run the war, soldiers recommissioned and most importantly the NJ Militia took heart and by the end of 1777, after constant harassment by the militia, the British had essentially withdrawn from New Jersey. That's how important this decisive win was.

The Battle occurred in two phases. In the first phase, which took place in what we now call Princeton Battlefield State Park, Mercer's Regiment was badly routed. General Mercer, the name sake of our county, was horribly bayoneted, later to die, and his troops ran. General Washington rallied the troops and initiated the winning counterattack, which took place on what we call Maxwell Field, which is on private land. Jerry Hurwitz will add more in his testimony.

**Creating the State Park (Handout - Edge's Map)**

The State Park was created by the New Jersey Legislature in the mid-1940s at the request of Governor Edge and was further expanded by Governor Driscoll, who became Governor in 1947. Governor Edge was a remarkable person. He had been Governor

previously in the teens, then became a US Senator, then an ambassador to France, and then, as an elder statesman, he had returned to New Jersey and become Governor again. He was approached by members of a historical group based in New York City who had become very concerned about development in and around the battlefield. After being advised that the Federal Government was too busy concluding the Second World War, he agreed to take on forming a State Park, while continuing with his own efforts to refocus New Jersey's economy as the war concluded.

Here is a handout containing the Governor's parcel acquisition map, showing his plan to acquire Maxwell Field (you can see a detail there showing site). At the time the parcel was owned by Mr. Maxwell, but then it was purchased by the Institute for Advanced Study before Governor Edge had the opportunity to make the acquisition. I should note that Mr. Maxwell was a great Mercer admirer and had named his home Mercer Manor. I'd be glad to answer further questions on this at the end of my testimony.

### **The Wetlands and Section 106 (Referring to Greene's Map)**

Now, following up on what Ms Greene has presented, I would like to comment on the importance of wetlands and why the Princeton Battlefield Society is so concerned about them.

First, wetlands are very important as a source of drinking water and as an ecological incubator. As you know, development in wetlands and their buffers requires a Freshwater Wetlands Permit, which is essentially a federal permit issued by the State of New Jersey. The need for such a permit triggers a Section 106 review under the National Historic Preservation Act before a permit can be granted. Section 106 requires consideration of the historical significance of the site, its archaeology and its historic landscape.

So if there are wetlands the powerful Section 106 comes into play. If there are no wetlands, there is no Section 106.

Early in the siting process, acknowledged wetlands were identified and Section 106 was invoked and at that time the State's Historic Preservation Office, Dorothy Guzzo, made two determinations, one in 2006 and one in 2007, that included a requirement for an archaeological investigation.

Ms. Guzzo noted in 2006 that besides being eligible to be on the National Register, a portion of the site also IS a National Historic Landmark and I should add that National Historic Landmarks are automatically put on the National Register, a fact that Ms. Guzzo did not clarify in determining the site to be eligible for the National Register. I also should note that being a National Historic Landmark is the highest caliber of historic sites, along with the White House and the Empire State Building. Only a tiny percentage of sites on the National Register are National Historic Sites. Ms. Guzzo concluded that there was adverse impact and insufficient mitigation, including an adverse visual impact on the Park.

In 2007 she made a second determination, following an archaeological investigation and concluded that the site is clearly the "location of a significant engagement during the nationally significant Battle of Princeton." Ms Guzzo continued to conclude that there was insufficient mitigation and requested an alternative sites analysis and further archaeological analysis of troop movements. She also stated that, on this basis she requested that the permit not be granted. She also stated that "while the IAS Campus is significant in its own right, it does not have the transcendent significance of the Battle of Princeton."

At this point in the process, the project was reconfigured on the site by the applicant in order to move away from the identified wetlands,

dropping Section 106 out of the equation. The determination of the existence of additional “new” wetlands by DEP then and now would make a Freshwater Wetlands Permit required, which then would put Section 106 squarely back into the decisionmaking process. The matter of the accuracy of the LOI becomes critical and a stay on the LOI becomes highly appropriate.

### **Stormwater Movement (Handout - Stormwater Grading Plan)**

I'd like to follow-up on Ms. Greene's comments about stormwater and its importance to the wetlands and the unnamed tributary to the Stonybrook. The project contains a plan to collect about 90% of the stormwater from the site and redirecting it to an outfall 800' downstream. This deprives the wetlands and the stream from replenishment from the stormwater onsite. This essentially puts them on a starvation diet. As you have seen from Ms. Greene's presentation, the two “new” wetland areas along the stream are shaped a bit like a clam, with a foot sticking out that provides a pathway for the wetlands to overflow and feed right into the stream.

**The Dramatic Addition of Fill to Site (Referring to the Grading Plan)** And now I want to talk briefly about the addition of fill to the site. I want to look specifically at the IAS Regrading Plan (you each have a handout showing the plan), You can see the fill being added to the site – on average about 4-5 feet all through most of the site. You can see the numbers in red. These numbers show that the surface level of the ground is raised dramatically above it's surroundings creating a huge plateau with steep sides. On the East side, where the wetlands and stream are, the project calls for a long wall some 280' long. Again, the stormwater will be collected by the underground stormwater system and sent to the outfall, away from the site and away from the wetlands.

If you look at the contour lines marking the topography, you can see that the highest part of the development is 113 feet, and then right outside the wall the site falls away precipitously by 8 feet,

Richard Chenoweth will be getting into this in greater detail but we have concluded that 350 truckloads of fill will be brought into the site (a much larger number than we believed previously).

This fill will entirely change what is now the natural topography and the movement of stormwater across the site. Basically, the site will be built up to form a flat plateau. What will be removed is the current slope and the saddle area in the middle, all of which are a part of the natural, historic landscape of the battle, and forms the pre-existing collection area for waters feeding into the unreported wetlands and the stream beyond.

### **Visual Impacts on the State Park**

Ms. Guzzo raised the issue of visual impacts on the Park. The key to looking at visibility is to look at the height of the plateau and then imagine a house above it. Zoning allows a 30' house and then on top of that is the fill beneath the house. So you are talking about some real visibility with a total height of 34 or 35' or 3 ½ stories.

Right now you can see through the hedgerow to the field beyond – Maxwell Field. The buffer area, which still has its original rolling topography also will be disturbed and heavily planted in an attempt to block views from the park of the new housing. Both the houses and the landscaping will seriously degrade views from the park, as will the loss of the view of the abutting field from throughout the park, but particularly from the location of Moulder's Battery. I believe that the impact on views from the Park have been seriously underestimated or underappreciated by State Officials, particularly in the near term.

**Archaeology (Handout – Artifact, Artifact Array & Hedgerow Maps)** Remarkably after almost 240 years - artifacts are still being found on the site. The Ottery Group recently found 10 more artifacts, 5 more musket balls and 5 more grape shot.

Before the Ottery Group's contribution, we had roughly 56 artifacts found in multiple investigations over the last 30 years or so beginning with work performed by a math professor named Bonin. So with ten more now we have added 20% more and we think that from experience at the Monmouth Battlefield and other battlefields that there is much more to find.

Now some people have argued that we have found enough to know that a major battle occurred on this site and that is enough to know. But we are still looking for details of troop movements and each artifact adds to our knowledge. We also have new scientific methods that could glean new information including metal analysis, protein analysis and more recently DNA analysis.

And finally, note the hedgerow in the center of the counterattack battle area, which has been removed. The size of the trees, some of which are fairly large but not large enough to be prerevolutionary, indicate that the hedgerow did not exist at the time of the battle. Therefore we would expect artifacts in the hedgerow. Unfortunately the hedgerow was taken down so quickly and the area bulldozed, that there is no evidence of any archaeological investigation. The IAS did propose an archaeological protocol that PBS considered very weak, but the IAS claimed they were honoring nonetheless. We have seen no evidence that the protocol is being used during construction, which involves the "active monitoring and inspection of excavations and the material extracted..."

### **Loss of the Ability to Interpret and Learn More**

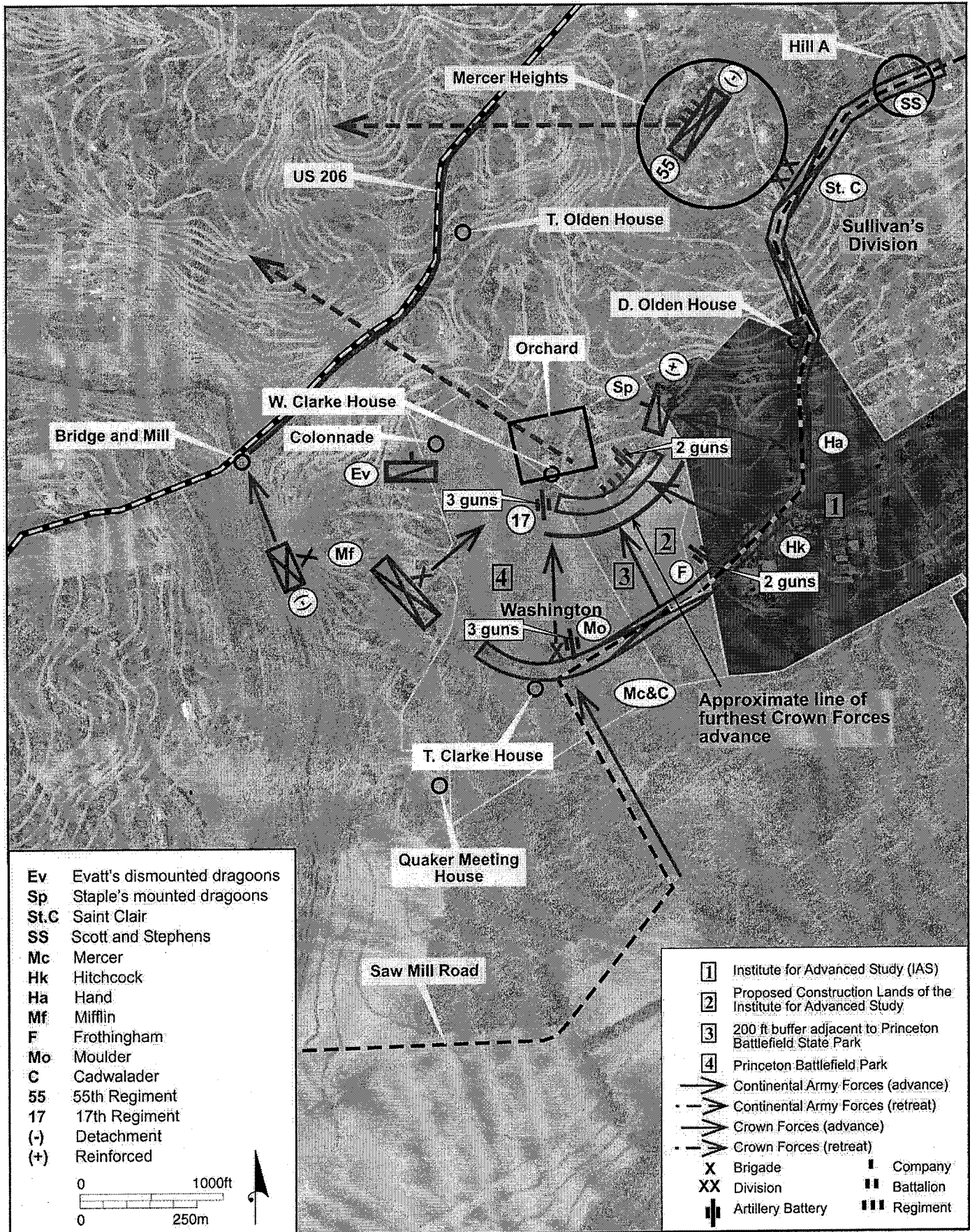
Another impact is just the inability to properly interpret the Battle or to deduce more from the historic landscape and topography and from the finding of additional artifacts. How do you describe a battle when the only site you have preserved is the phase of the battle that you lost?

Removing all vestiges of the counterattack site will be a great loss to the nation and beyond. And to bring in Heritage Tourism there is a financial loss too in not being able to present the counterattack site as an integral part of the story of the Battle of Princeton.

### **Property Acquisition (2-18-83 Payne Letter, Acting Director of the NJ State Park Service)**

Finally, our hope is that the IAS will work with us in allowing Maxwell Field to be purchased by the Civil War Trust. We have recently purchased an additional battlefield parcel owned by the D'Ambrisi Family who became very willing sellers and we see this as a model for future acquisitions. With the Princeton Battlefield Society initially coordinating the effort in approaching the State Park Service and Green Acres, a consortium was formed led in many ways by the Municipality of Princeton, and including the State, Mercer County, Friends of Princeton Open Space and the Civil War Trust. We would like to see this same kind of effort move forward for purchasing Maxwell Field. We note a 1983 letter from the State along this line.

Thank you, I'd be glad to answer any questions.

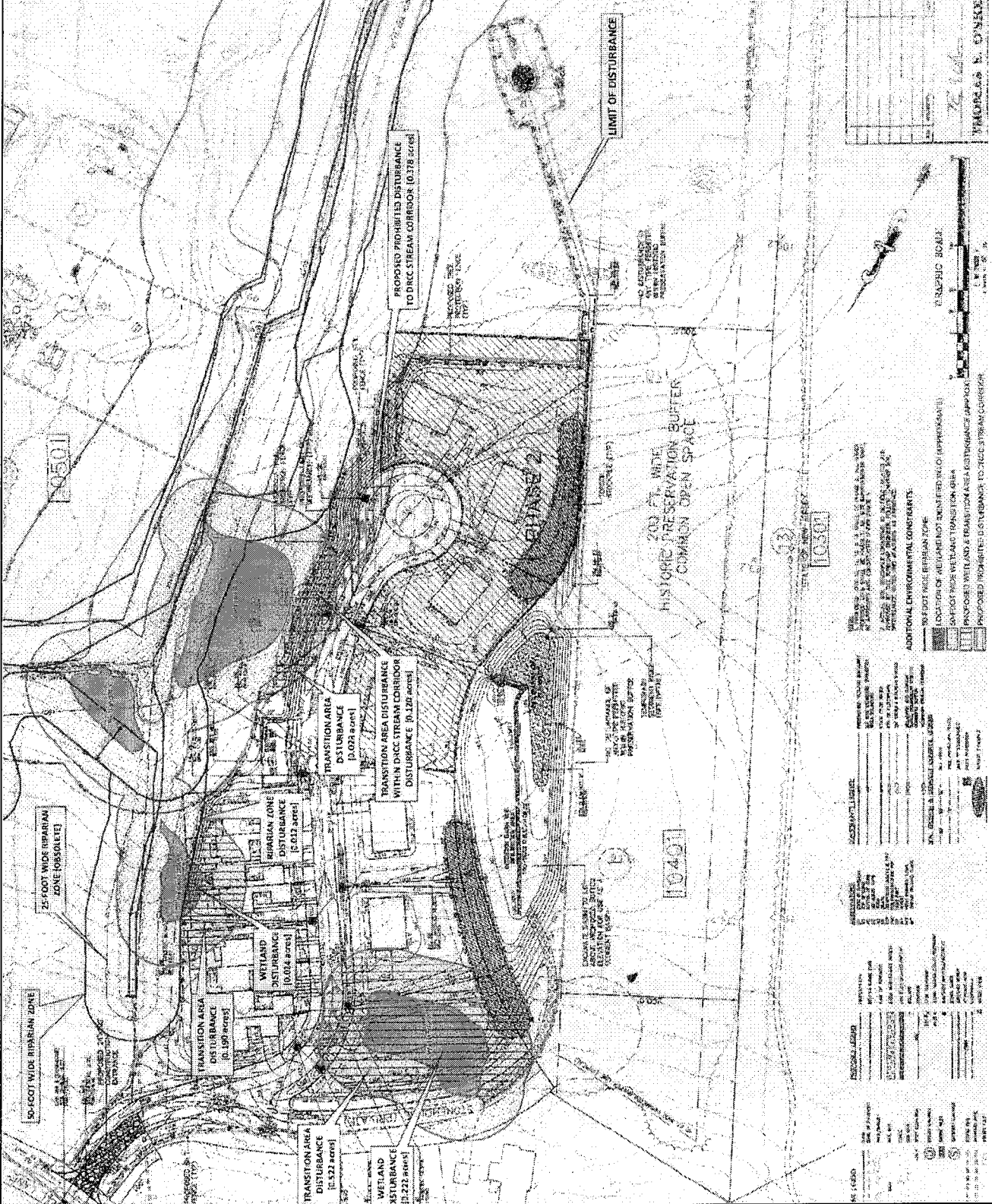


- Ev Evatt's dismounted dragoons
- Sp Staple's mounted dragoons
- St.C Saint Clair
- SS Scott and Stephens
- Mc Mercer
- Hk Hitchcock
- Ha Hand
- Mf Mifflin
- F Frothingham
- Mo Moulder
- C Cadwalader
- 55 55th Regiment
- 17 17th Regiment
- (-) Detachment
- (+) Reinforced

- 1 Institute for Advanced Study (IAS)
- 2 Proposed Construction Lands of the Institute for Advanced Study
- 3 200 ft buffer adjacent to Princeton Battlefield State Park
- 4 Princeton Battlefield State Park
- > Continental Army Forces (advance)
- -> Continental Army Forces (retreat)
- > Crown Forces (advance)
- -> Crown Forces (retreat)
- X Brigade
- XX Division
- Artillery Battery
- Company
- Battalion
- Regiment

Movements of forces during the battle at Clarke's farm, (American counterattack and Crown Forces retreat), showing State Park lands, Institute for Advanced Study lands, and lands proposed for construction. (Sources: JMA 2010, [http://www.ias.edu/files/IAS\\_Housing\\_Project\\_Map\\_Portrait.pdf](http://www.ias.edu/files/IAS_Housing_Project_Map_Portrait.pdf)).

ADDITIONAL ENVIRONMENTAL  
CONSTRAINTS ADDED BY  
AMY S. GREENE ENVIRONMENTAL  
CONSULTANTS, INC. BASED ON  
FIELDWORK CONDUCTED  
OCTOBER 2011.



196 x

AMY S. GREENE ENVIRONMENTAL CONSULTANTS' WETLANDS MAP INCLUDING THE WETLANDS REPORTED BY THE IAS TO DEP (BASED ON OCTOBER, 2011 FIELDWORK)



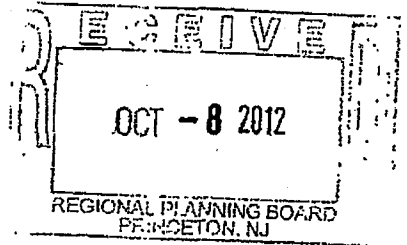
van note-harvey associates

- Since 1894 -

van note - harvey

## ENGINEERING REPORT

Institute for Advanced Study  
Faculty Housing  
Block 10401, Lot 1  
Block 10501, Lot 1  
Princeton Township  
Mercer County, New Jersey



Prepared For:  
Institute for Advanced Study  
Einstein Drive  
Princeton, New Jersey 08540-0631

*T. O'Shea*

**Thomas E. O'Shea**

New Jersey Professional Engineer #31228

VNHA #33641-420-21

May 5, 2006

Revised January 26, 2009

Revised August 13, 2010

Revised October 20, 2010

Revised November 3, 2010

Revised July 21, 2011

Revised October 3, 2011

Revised October 13, 2011

Last Revised June 6, 2012

777 Alexander Road, Suite 102, Princeton, NJ 08540

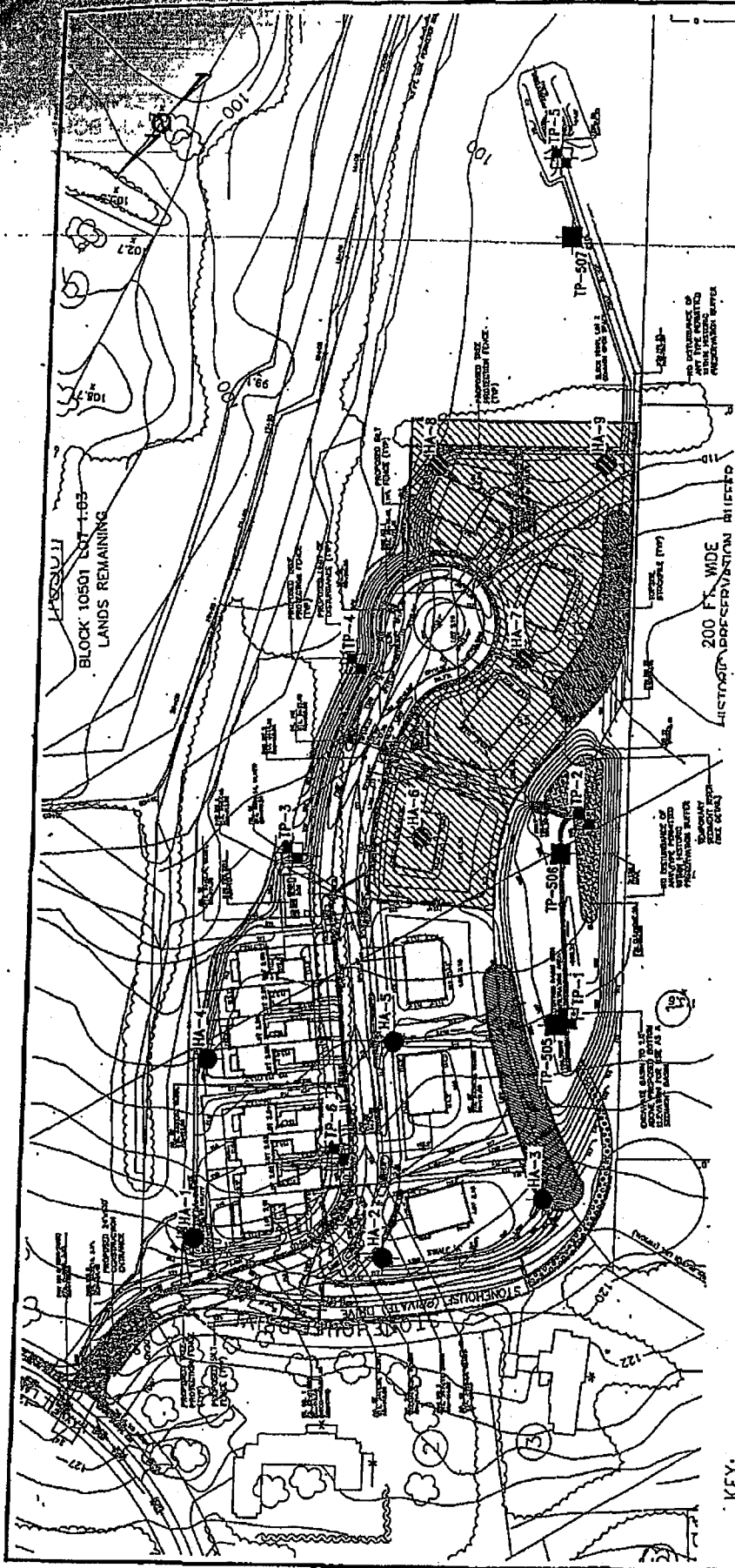
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<b>EXPLORATION LOCATION PLAN</b> <b>PROPOSED HOUSING DEVELOPMENT</b> <b>PRINCETON TOWNSHIP, NEW JERSEY</b> <b>INSTITUTE FOR ADVANCED STUDY</b>	
	
<b>MELLUCK-TULLY AND ASSOCIATES, P.C.</b> Geotechnical Engineers & Environmental Consultants 177 Canal Street South Bound Brook, New Jersey 08880 (202) 384-3400	
JOB NO.	4324-029*TC
FILE NO.	24812
DATE	4-12-11
SCALE	1"=100'
PLATE	2

- NOTES:**
- This drawing is part of Mellick-Tully and Associates, P.C. Report No. 4324-029\*TC and should be read together with the report for complete evaluation.
  - General layout was obtained from a drawing prepared by Venthola Murray, entitled, "Field Survey Layout".

- KEY:**
- TP-1 NUMBER AND APPROXIMATE LOCATIONS OF TEST PITS PROPOSED FOR THIS STUDY
  - TP-505 NUMBER AND APPROXIMATE LOCATIONS OF SOIL LOGS PREVIOUSLY PERFORMED BY MTA
  - HA-1 NUMBER AND APPROXIMATE LOCATION OF PROPOSED MANUAL AUGER BORINGS

198 x

### LOG OF HAND AUGER

COMPLETION DATE: 4/6/11  
JOB NUMBER: 4324-009\*1C

HAND AUGER NO. A-4  
SURFACE ELEVATION: +110.0 ft (±)

WATER LEVEL: 2'  
READING DATE: 4/6/11

DEPTH (FT.)	SAMPLES (1)	MOISTURE CONTENT (%)	DEPTH (INCHES)	DESCRIPTION	DEPTH
				11" Topsoil: Brown (10YR, 5/3) silt loam, moderate medium subangular blocky, moist, friable, clear wavy boundary, few fine roots	
	S1		11-18	Light gray (10YR, 7/1) silty clay loam, massive, moist, firm, clear wavy boundary, many coarse prominent reddish yellow (7.5YR, 6/6) mottles	
	S2		18-24	Reddish yellow (7.5YR, 6/6) sandy loam, moderate medium subangular blocky, moist, friable, clear wavy boundary, common medium distinct gray (10YR; 5/1) mottles	
	S3		24-30	Reddish brown (5YR, 5/3) sandstone - plates typically 1/4" x 1/4" x 1/4" with 30% sandy loam, moderate medium subangular blocky, moist, friable, common medium distinct gray (10YR, 5/1) mottles	
5				Hand Auger completed @ 2.5'	5
				Moderate groundwater seepage encountered @ 2'	
10					10

NOTES FOR COLUMNS:  
1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:  
TRACE 0 - 10%  
LITTLE 10 - 20%  
SOME 20 - 35%  
AND OVER 35%

Typist/Date: RES/nac 4/11

Sheet: 1 of 1 PLATE: 4D

MELICK-TULLY AND ASSOCIATES, P.C.  
Geotechnical Engineers and Environmental Consultants

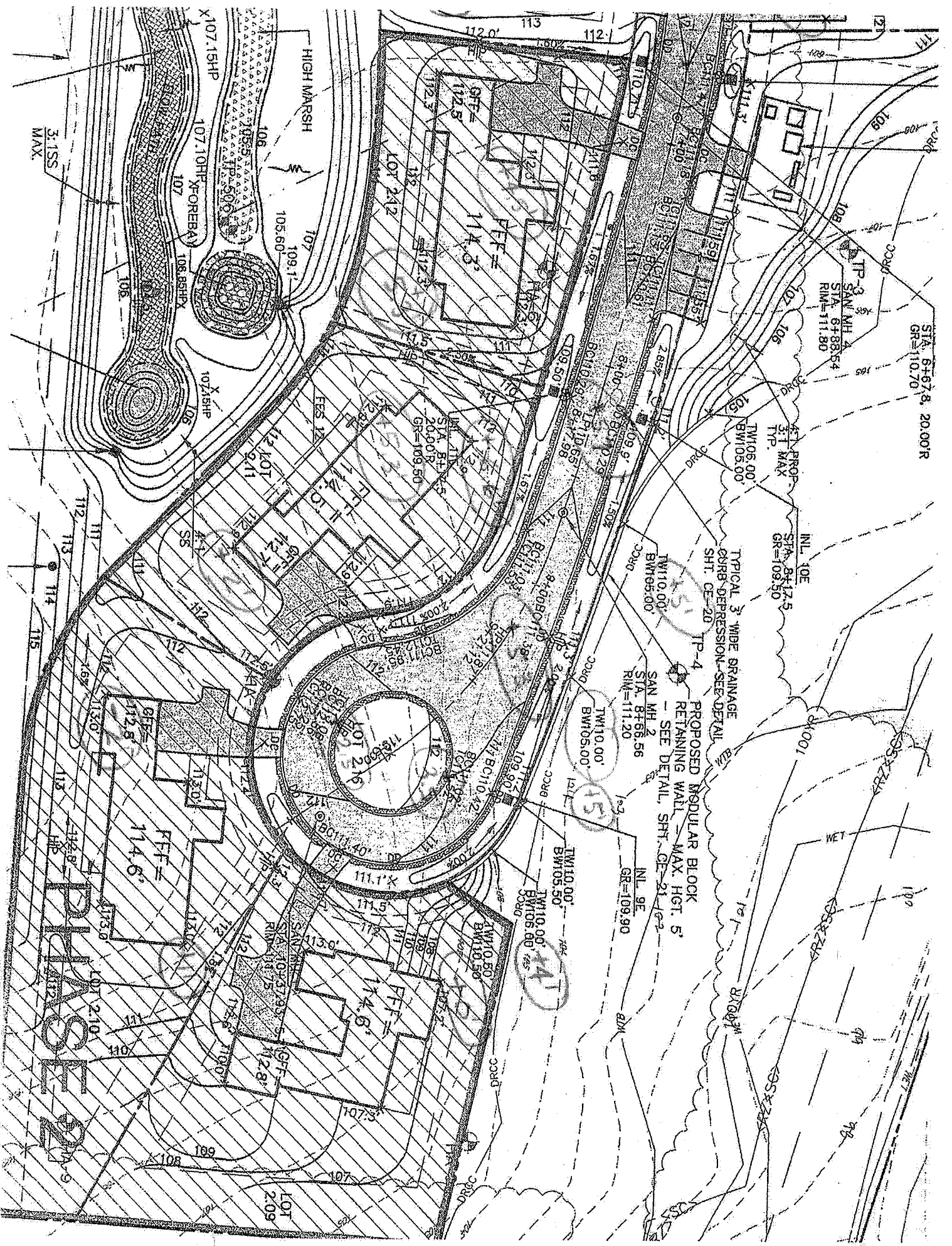
DRAFT

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Governor Edge's 1944 Battlefield Park Acquisition Map with Detail of Maxwell Field

200 ✓



SIA: 8467.8, 20.00'R  
GR=110.70

TP-3 SAN MH  
SIA: 8468.54  
RIM=111.80

4" PROP  
3:1 MAX  
TYP

SIA: 8412.5  
GR=109.50

TYPICAL 3' WIDE DRAINAGE  
CURB DEPRESSION-SEE DETAIL  
SHT. CE-20

TP-4 PROPOSED MODULAR BLOCK  
RETAINING WALL MAX. HGT. 5'  
SEE DETAIL, SHT. CE-21

SAN MH 2  
SIA: 8465.56  
RIM=111.20

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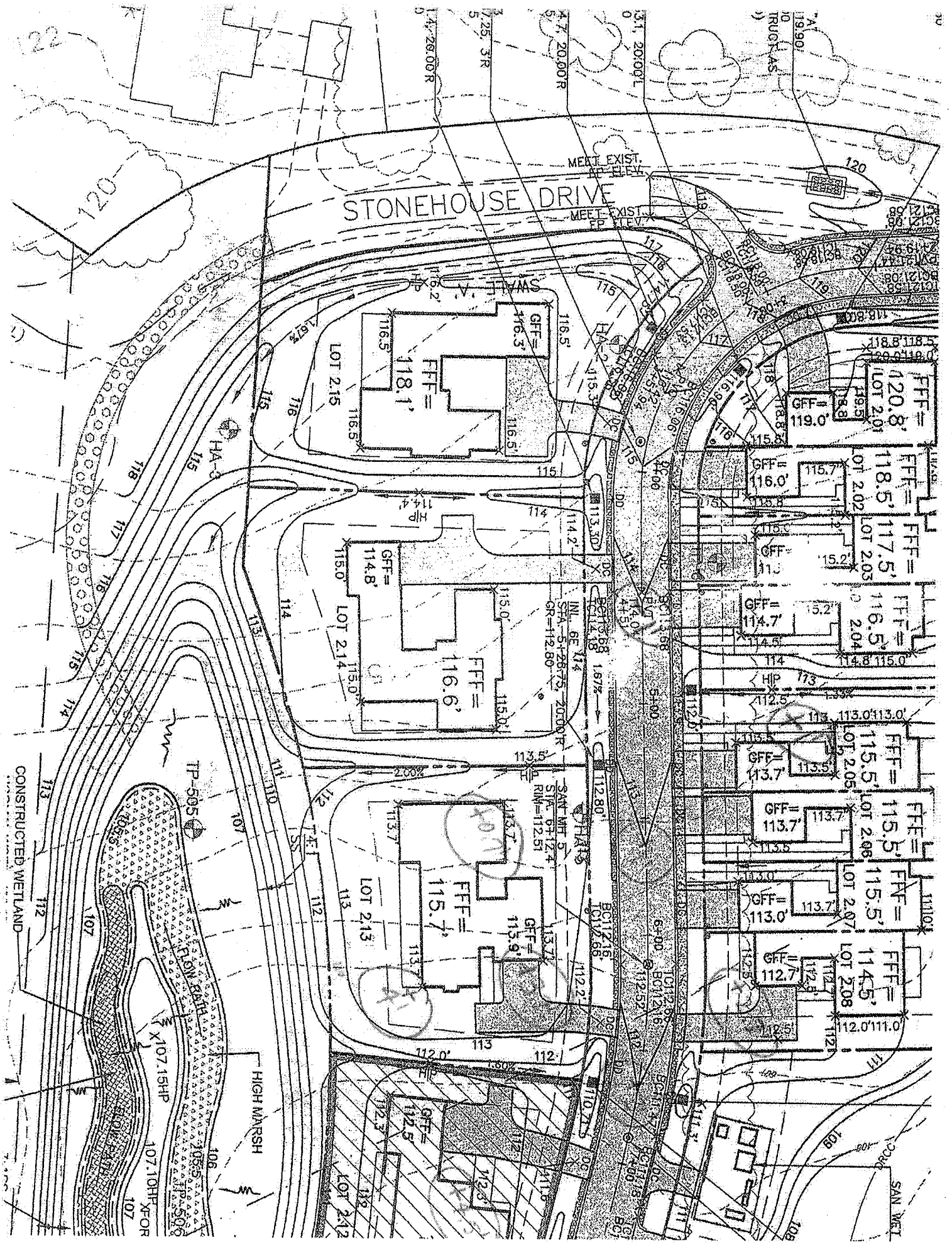
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2024

TESTIMONY  
TO THE NEW JERSEY SENATE COMMITTEE ON ENERGY AND ENVIRONMENT  
BY TOM PYLE<sup>1</sup>  
DECEMBER 21, 2015

**Why am I here?** To join a Second Battle of Princeton, another David vs. Goliath struggle over a controversial plan to build luxury housing on land that was part of the first Battle of Princeton. I hope this committee can prevent, or at least mitigate, two serious public offenses against a significant place...

**What two offences?** One is the possible destruction, without NJDEP's sufficient review, of a local wetland, a seasonal rivulet that flows into the nearby Stony Brook which sustains local wildlife and ultimately supplies drinking water.

The other is the possible desecration, without NJDEP's sufficient guardianship, of a fabled historical headwaters which, by what happened there, enabled the subsequent flow of America's epic national narrative.

**What place?** A modest plot called Maxwell Field, where likely occurred Washington's legendary counterattack, likely also where fell the first U.S. Marine to be killed in land combat, now a parcel owned by the Institute for Advanced Study adjacent to the current Battlefield Park.

**Involving whom?** Two organizations of equal good will but, like David and Goliath, of vastly unequal means.

David... is the **Princeton Battlefield Society**, a sincere band of average citizen patriots with nearly no donations, scrambling on our behalf to save more legacy of the Battle of Princeton... that crucible of the Revolution, concluding act of the Ten Crucial Days, field of glory where Washington rendezvoused with destiny to save our fledgling nation.

Goliath... is **The Institute for Advanced Study**, intellectual home of Einstein, a wealthy, rarified salon without students which...

- has a huge endowment ( \$750,000,000 in 2012<sup>2</sup>);
- is governed by powerful elites (including the president of the European Central Bank);
- is run by highly paid administrators (each averaging well over \$300,000 per year);
- is populated by a select set of 25 eminent scholars mostly of European origin;
- is a major U.S. non-profit of decidedly European sensibilities.

---

<sup>1</sup> BA (American History), Princeton University. Resident of Princeton, NJ. Email: thpyle@gmail.com

<sup>2</sup> As per the 2012 Form 990 of the Institute.

**What's at stake?** On the one hand, the Institute's lawful if lamentable lust to build more luxury housing on its own land. On the other, both a populous state's need to stem environmental encroachment, and a proud nation's dream to preserve more of a unique heritage site.

**What to do?** I ask this committee...

- First, by your oversight authority, to ensure that NJDEP in this case scrupulously exercise the stewardship over all environmental matters we have entrusted to it, both ecological and historical, and then quickly report its determinations to the public.
- Second, by your moral authority, to encourage the Institute, given its overwhelming advantages (and publicly granted tax-free status), to do more to help advance the Battlefield Society's noble cause... to, so to speak, level the playing field more between itself and the rest of us (preferably without leveling Maxwell Field) so that more of our nation's hallowed ground under its current stewardship can be discovered, interpreted, and preserved for America's posterity.

In closing, let us ponder the ironic precondition of this Second Battle of Princeton... For Einstein to have come to Princeton, first Washington had to win at Princeton!

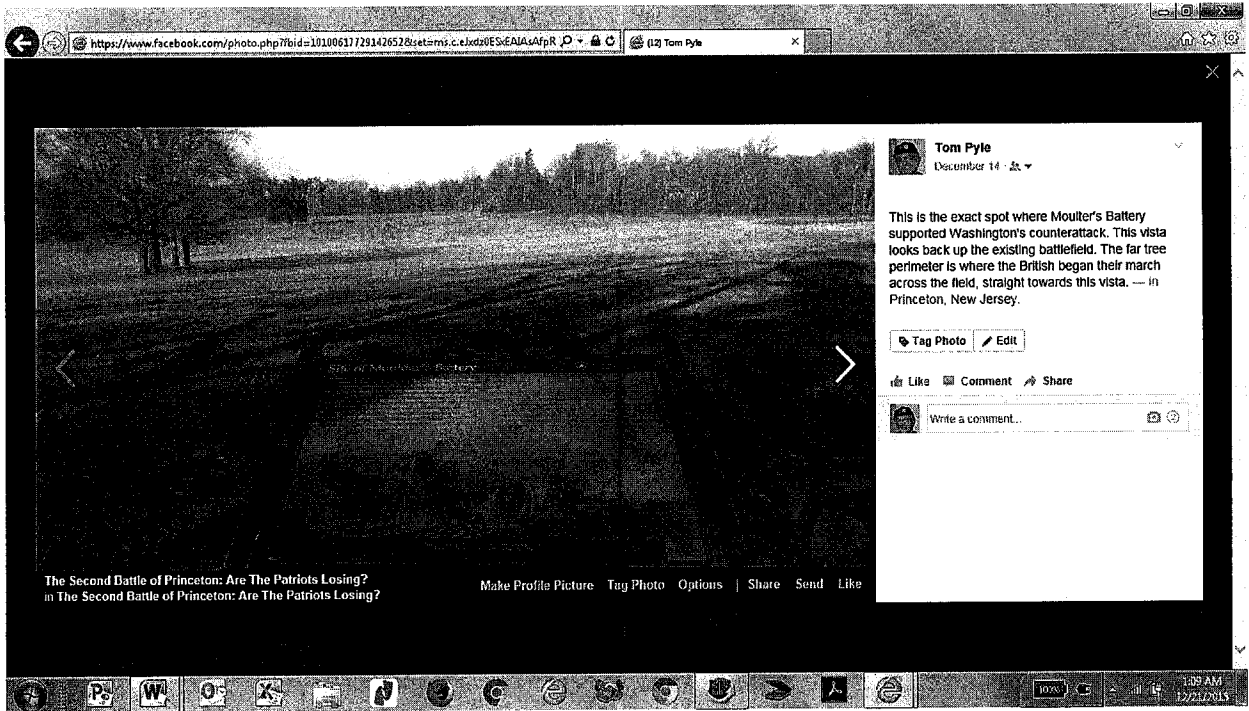
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## IAS Faculty Housing Project

- 1** Institute for Advanced Study (IAS)
- 2** Proposed site for IAS faculty housing (7 acres)
- 3** 200' buffer adjacent to Princeton Battlefield State Park, with at least 10 acres adjacent to Park scheduled to be conserved permanently
- 4** Princeton Battlefield State Park
- 5** Institute Woods (589 acres preserved in perpetuity)



206x

http://www.facebook.com/photo.php?fbid=101100611729177592&set=ms.c.&idx20ESv6AAsAfPpR



**Tom Pyle**  
December 14 · 2k

This view shows the scene from Moulter's Battery at a 45 degree angle. Note the tree perimeter at the right, which is the boundary of the current battlefield and the Institute's land. --- in Princeton, New Jersey.

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Write a comment

The Second Battle of Princeton: Are The Patriots Losing?  
in The Second Battle of Princeton: Are The Patriots Losing?

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**Tom Pyle**  
December 14 · 2k

This view shows the scene from Moulter's Battery at a 90 degree angle. Though the tree perimeter, something unnatural is barely visible... --- in Princeton, New Jersey.

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**Tom Pyle**  
December 14 · 🌐 · 📍

...namely, construction equipment — in Princeton, New Jersey.

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**Tom Pyle**  
December 14 · 🌐 · 📍

Indeed, the Institute has begun developing its "Maxwell tract", land on which a significant portion of the Battle of Princeton occurred. — in Princeton, New Jersey.

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in The Second Battle of Princeton: Are The Patriots Losing?

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**Tom Pyle**  
December 14 · Edited · [...](#)

If you push through the tree perimeter (now on the left) to get onto the Institute's adjoining land, this is the view. About 40% of the Battle of Princeton occurred on this tract. Note the active construction equipment. --- in Princeton, New Jersey.

[Tag Photo](#) [Edit](#)

[Like](#) [Comment](#) [Share](#)

[Write a comment...](#)

The Second Battle of Princeton: Are The Patriots Losing?  
in The Second Battle of Princeton: Are The Patriots Losing?

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**Tom Pyle**  
December 14 · [...](#)

The Institute has fenced off the portion it is now grading.... --- in Princeton, New Jersey.

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**Tom Pyle**  
December 14 · Edited · &&

My face shows strain from the sun in my eyes, but also from my chagrin at this hallowed ground where faculty housing is to be built. Historians believe that the first U.S. Marine to call in land combat fell in this area. — In Princeton, New Jersey

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**Tom Pyle**  
December 14 · &&

To see the development from the other side, I left the existing battlefield and drove my car up Princeton Pike to the institute's side entrance on Maxwell Road. — In Princeton, New Jersey

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2104

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**Tom Pyle**  
December 14 · Edited ·

Here's a view of the IAS's Fuld Hall from a distance, situated at the end of the parallel rows of trees bordering the former road that Einstein treaded when walking to work from his home nearby at 112 Mercer St. The Maxwell tract now under development is along the tree line at the right. — in Princeton, New Jersey.

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**Tom Pyle**  
December 14 ·

The corner of Einstein Drive and Maxwell Drive. The tract under development is visible between the trees. The border with the existing Battlefield is along the distant tree line on the far side of the tract. — in Princeton, New Jersey.

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211x

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**Tom Pyle**  
December 14 · 🌐

The job site headquarters — in Princeton, New Jersey.

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**Tom Pyle**  
December 14 · 🌐

The Maxwell tract being graded. The border with the existing Battlefield is along the tree line at the right. — in Princeton, New Jersey

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2124

Richard Chenoweth Statement

2015-12-21 NJ Senate Hearing on Battlefield

...

I have been interested in the Battlefield since the 1960s. As a college student, I photographed the 3 January 1777 reenactment of the battle. I believe the Battle of Princeton was the turning point of the American Revolution, and the counter attack led by General Washington which occurred exactly on the piece of land in question, was the turning point of the battle itself.

I'm an architect and an artist now, with a specialty in visualization, historic resources, and landscape. As a U.S. Capitol Historical Society Research Fellow, I created a digital reconstruction of the Capitol of the Jefferson-Madison administrations. My work was diligent and accurate original research based on drawings and letters from the Library of Congress. The Capitol I recreated was burned in 1814, and therefore my reconstruction has been the first historical look into the great chambers of the early republic. I also recreated the landscape of Capitol Hill based on historic maps.

Learning of the problematic development at the Princeton Battlefield, I began to create "before and after" topographic computer models to properly illustrate what exactly was happening. I found it very problematic that no compelling images or models had been created for this treasured historic and cultural landscape.

My computer models are volumetric solids. By creating a very accurate topographic plan of both the original landscape and then the regraded site area, I subtracted the difference between the two landscapes. My calculations indicate that roughly 4300 cubic yards of fill material would have to be added to the site to create the plinth that the houses will have to sit on top of. Using the estimate of 12 cubic yards of fill material as a basic "truckload," my calculations indicate an estimate of 360 truckloads of fill material will have to be added to the site to regrade it to its final finished state.

I have posted a number of comparable "before and after" images herewith to be included in my comments. They are 11x17 PDFs. They are posted here:  
<http://mostbeautifulroom.com/senate-hearing/>

I thank the Senate Committee very much for reading my comments and conclusions and having a look at my images describing the problem. I believe my work is the only

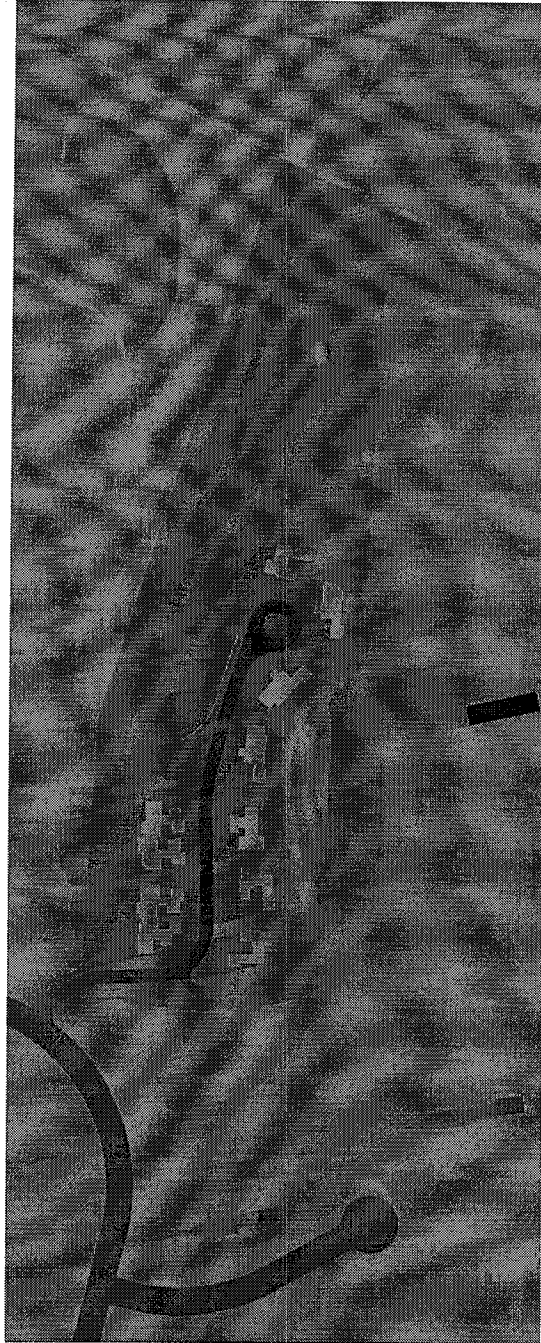
attempt at visualizing the problem that has been undertaken and it's an eye-opener.

Best regards,

Richard Chenoweth Architect (NJ, VA, MD)  
[www.mostbeautifulroom.com](http://www.mostbeautifulroom.com)  
[www.chenarch.com](http://www.chenarch.com)

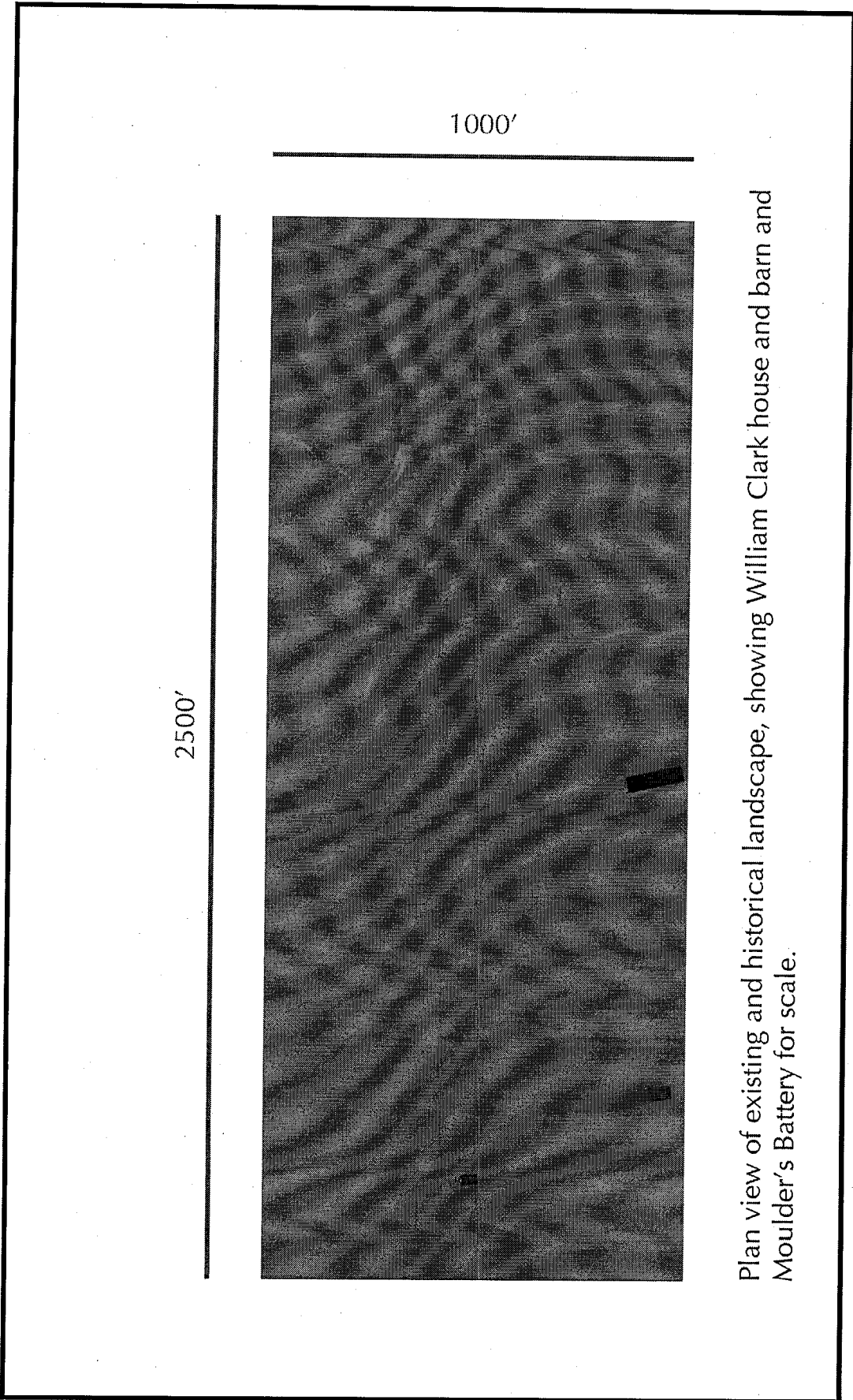
1000'

2500'



Plan showing potential development with William Clark house and barn and Moulder's Battery shown for scale and position.

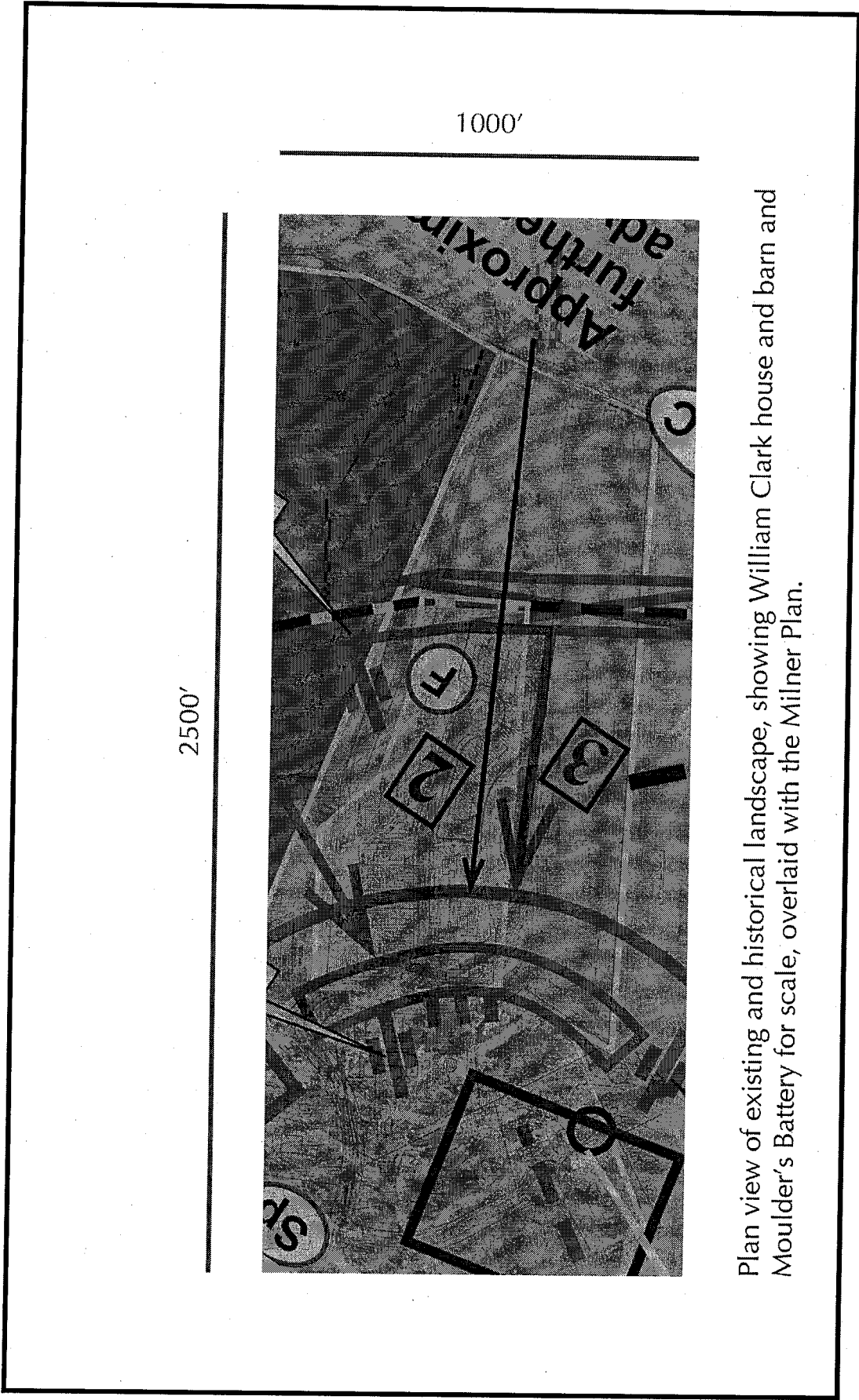
215 x



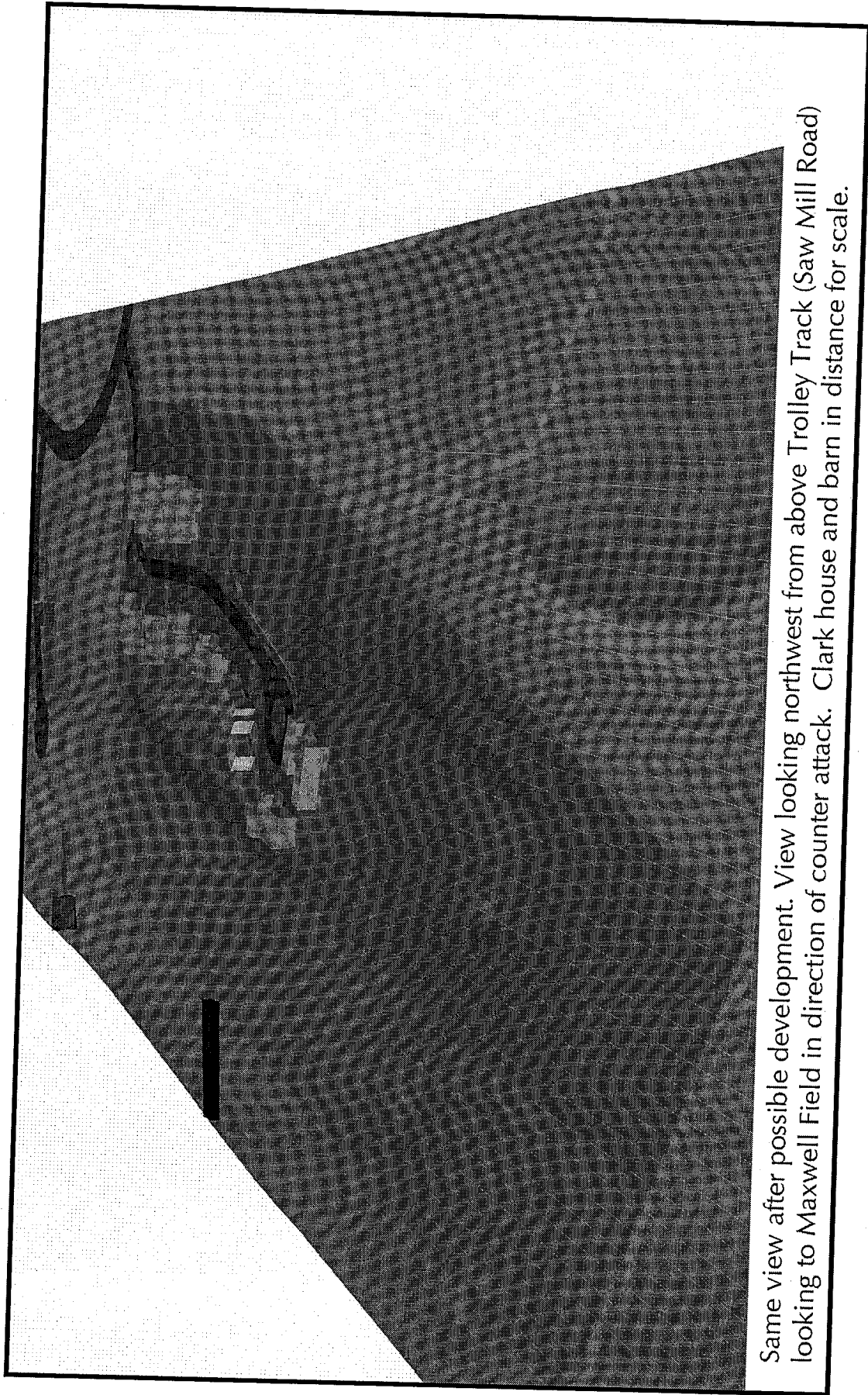
Plan view of existing and historical landscape, showing William Clark house and barn and Moulder's Battery for scale.

2164

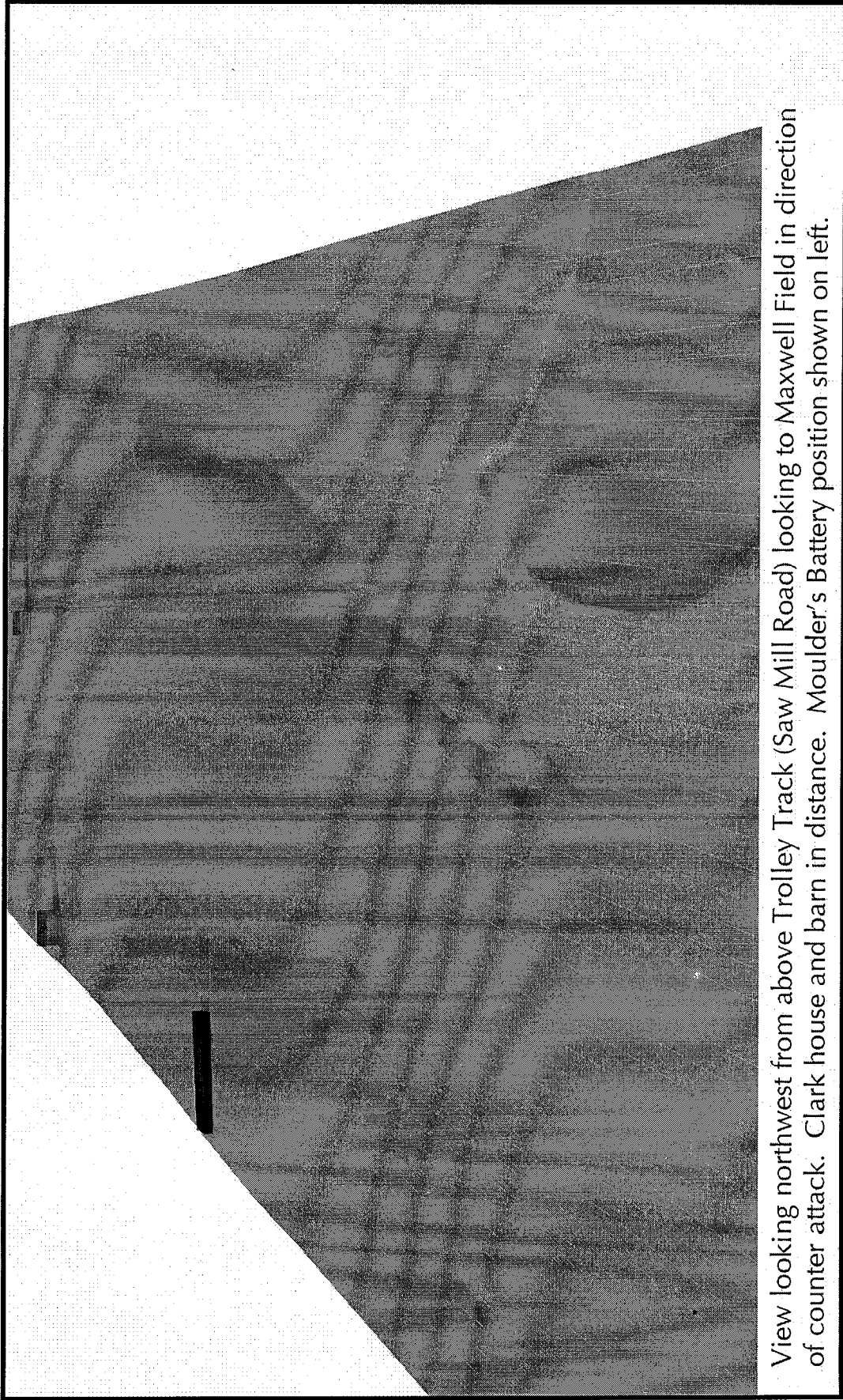
274



Plan view of existing and historical landscape, showing William Clark house and barn and Moulder's Battery for scale, overlaid with the Milner Plan.

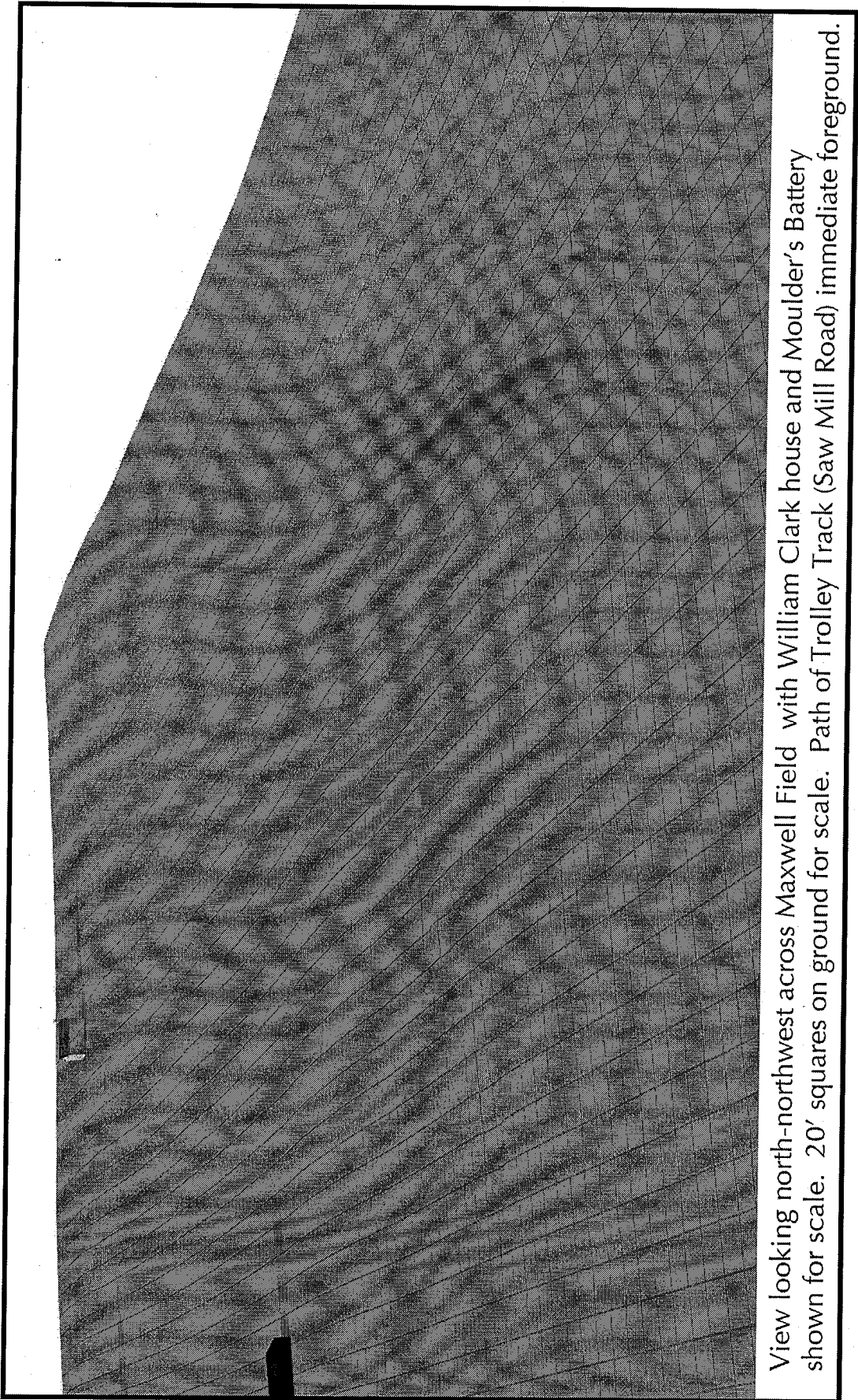


Same view after possible development. View looking northwest from above Trolley Track (Saw Mill Road) looking to Maxwell Field in direction of counter attack. Clark house and barn in distance for scale.



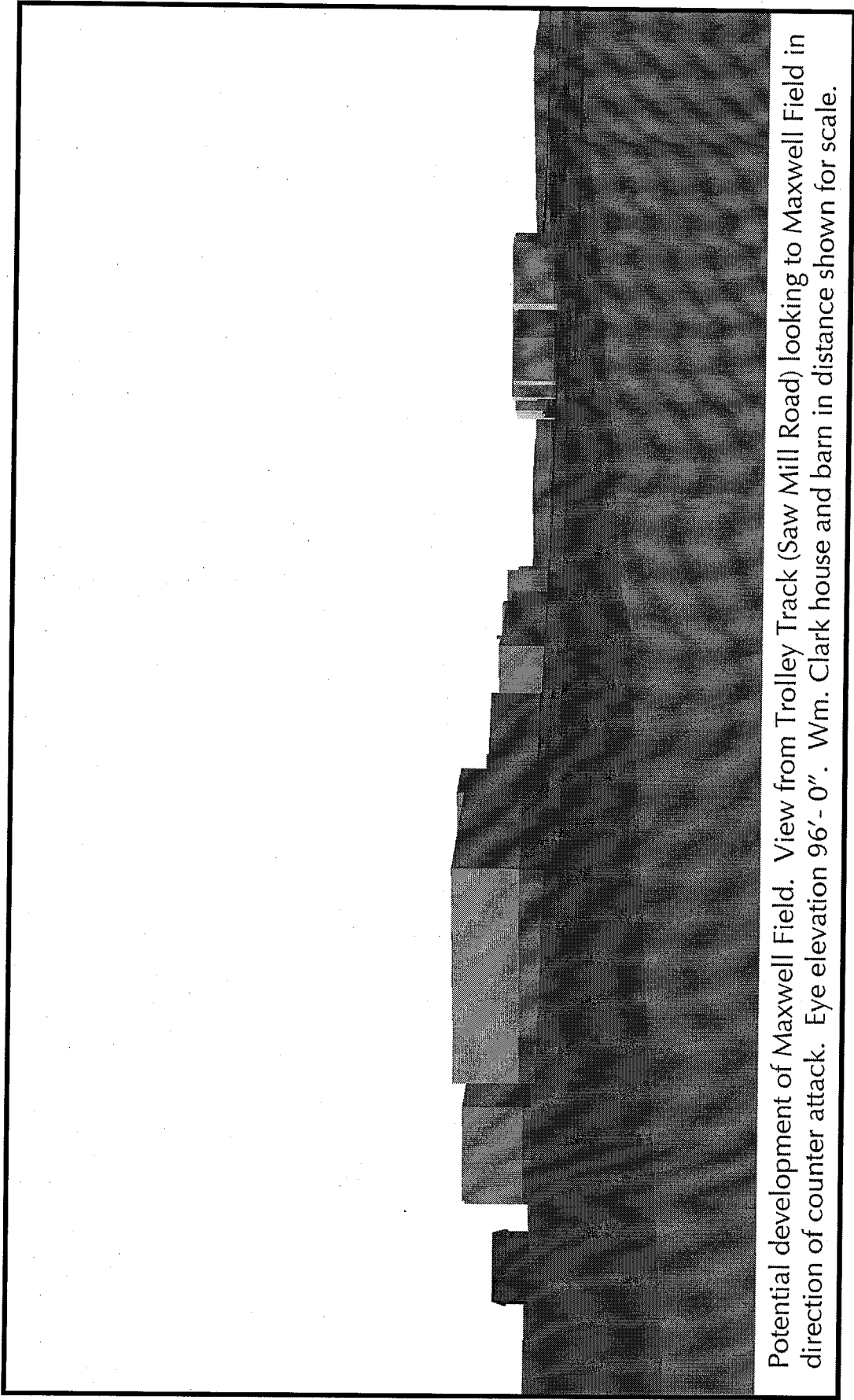
View looking northwest from above Trolley Track (Saw Mill Road) looking to Maxwell Field in direction of counter attack. Clark house and barn in distance. Moulder's Battery position shown on left.

2194



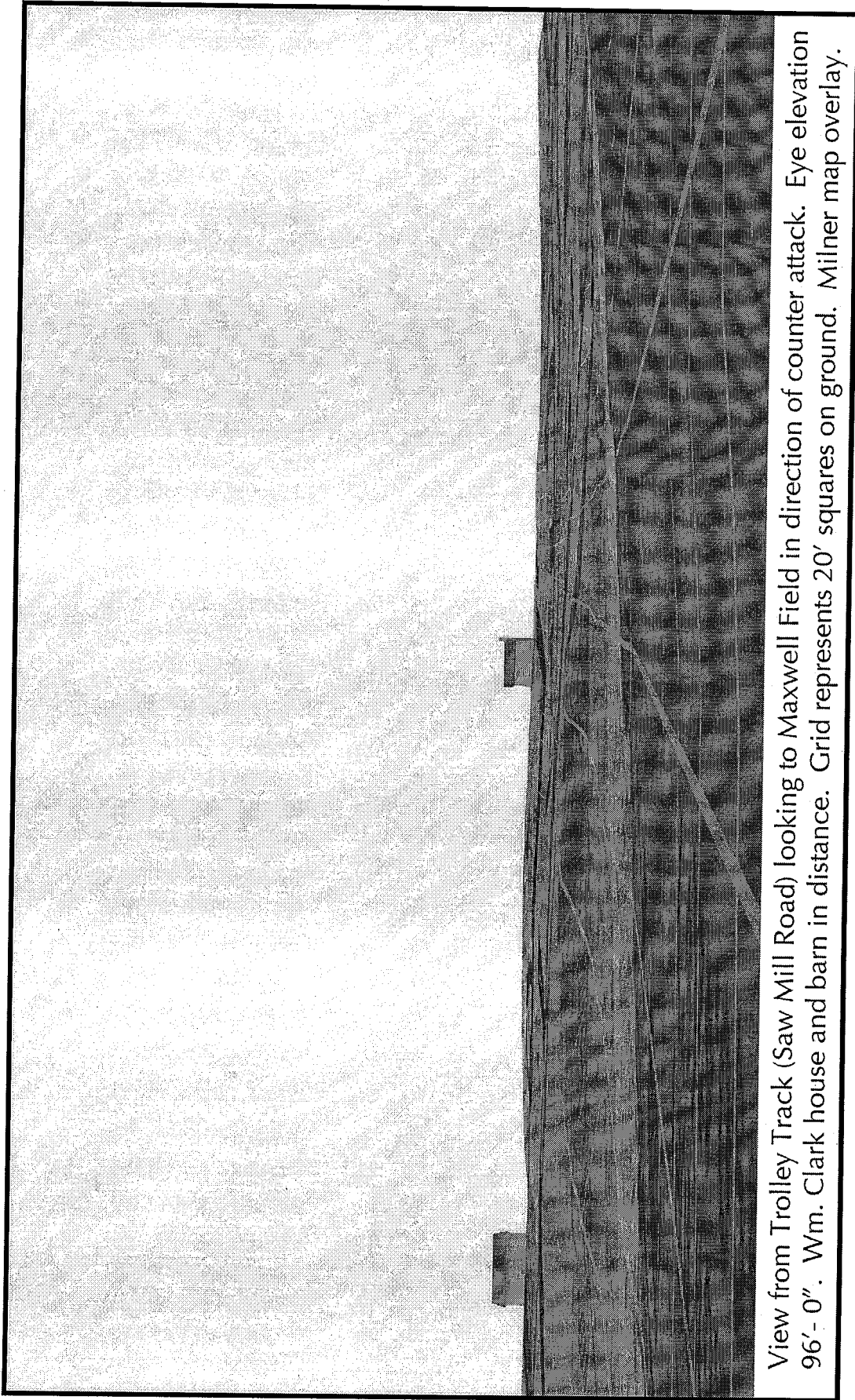
View looking north-northwest across Maxwell Field with William Clark house and Moulder's Battery shown for scale. 20' squares on ground for scale. Path of Trolley Track (Saw Mill Road) immediate foreground.

220x



Potential development of Maxwell Field. View from Trolley Track (Saw Mill Road) looking to Maxwell Field in direction of counter attack. Eye elevation 96' - 0". Wm. Clark house and barn in distance shown for scale.

2014



222x