

ROBERT LAGA
Chairman

ANTHONY DUSOVIC
Vice-Chair

ROSE TROMBETTA
Secretary

TOWN OF CARMEL
ENVIRONMENTAL CONSERVATION BOARD



60 McAlpin Avenue
Mahopac, New York 10541
Tel. (845) 628-1500 - Ext. 190
www.ci.carmel.ny.us

BOARD MEMBERS

Edward Barnett
Vincent Turano
Nicholas Fannin
John Starace

ENVIRONMENTAL CONSERVATION BOARD AGENDA

SEPTEMBER 1, 2016 – 7:30 P.M.

ELIGIBLE FOR A PERMIT

<u>APPLICANT</u>	<u>ADDRESS</u>	<u>TAX MAP #</u>	<u>COMMENTS</u>
1. Matsoukas, Ulysses & Gina	837 South Lake Blvd	75.43-1-27	Construct Stone Retaining Wall

SUBMISSION OF AN APPLICATION OR LETTER OF PERMISSION

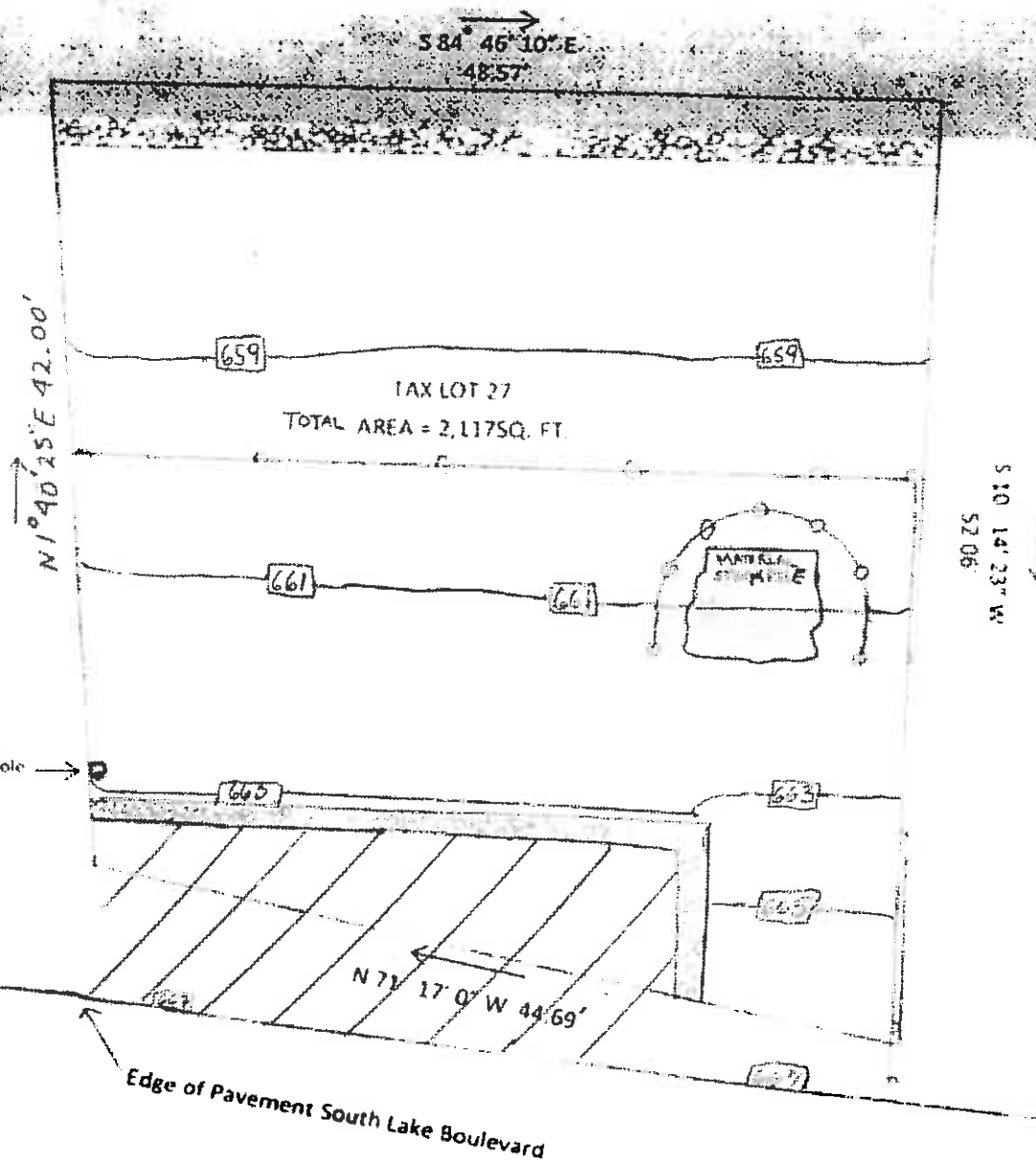
2. Smajlaj, Zef	803 South Lake Blvd	75.42-1-39	Planning Board Referral (Construct Bathhouse)
3. Topal, Ronald	751 South Lake Blvd	75.42-1-19	Construct Addition
4. New York City DEP (Barrett Pond Forest Project)	Lockwood Lane & Dixon Road	42.-1-65.1	Tree Cutting Permit (11 Trees)
5. Pulte Homes – Lot 5	Terrace Drive	55.14-1-11.3	Achieve Grading for Approved Site Plan

MISCELLANEOUS

6. Minutes – 06/16/16, 08/04/16 & 08/18/16

Matsoukas TM-75.43-1-27

Lake Mahopac



Legend

- Stone Retaining Wall
- Silt Fence (wire backed)
- Property Line
- 3/4" Stone Gravel (Removable)

NOTES

1. Location of distribution system is approximate and not to be used for construction. All work is to be performed by the contractor. The contractor is to be responsible for the construction of the distribution system.

PROJECT: Matsoukas
Project Address:
437 South Lake Boulevard
Mahopac, NY 10541
Tax Map No: 75.43-1-27

SITE PLAN
(Proposed)

Scale
1" = 10 Ft.

Wire or Zip Ties to
Secure Fabric to Post
And Stapled Between Ties

4" X 4" Wire Mesh (Push
Stakes 2x2 (Nominal Hardwood)
Actual 1.5" x 1.5" x 65"
FINISHED SPACE

Wire Backed Silt Fence Detail
Silt fence shall be placed as close to the contour as possible so that
water will not concentrate at low points in the fence and so that
small waves or depressions that may carry small concentrated
flows to the silt fence are dissipated along its length.
Sediment deposit shall be removed when the deposit reaches
approximately one-half of the height of the silt fence.
All work is to be done by hand.

ROBERT LAGA
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Vice Chair

ROSE TROMBETTA
Secretary

DAVID KLOTZLE
Wetland Inspector

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John Starace

APPLICATION FOR WETLAND PERMIT OR LETTER OF PERMISSION

Name of Applicant: ZEF SMAJLAJ

Address of Applicant: 510 PARK AVENUE, NY, NY
10022 Email: _____

Telephone# _____ Name and Address of Owner if different from Applicant: _____

Property Address: 803 SOUTH LAKE BLVD. Tax Map # 75.42-1-39

Agency Submitting Application if Applicable: _____

Location of Wetland: LAKE MAHOPAC

Size of Work Section & Specific Location: _____

Will Project Utilize State Owned Lands? If Yes, Specify: 8 FT. X 14 FT. BATH HOUSE

Type and extent of work (feet of new channel, yards of material to be removed, draining, dredging, filling, etc). A brief description of the regulated activity (attach supporting details).

CONSTRUCT 8 FT. X 14 FT. BATH HOUSE

Proposed Start Date: 8/1/16 Anticipated Completion Date: 11/1/16 Fee Paid \$ 225.00

CERTIFICATION

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief, false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. As a condition to the issuance of a permit, the applicant accepts full legal responsibility for all damage, direct or indirect, or whatever nature, and by whomever suffered, arising out of the project described here-in and agrees to indemnify and save harmless the Town of Carmel from suits, actions, damages and costs of every name and description resulting from the said project.

[Signature]
SIGNATURE

6/13/16
DATE

617.20
Appendix B
Short Environmental Assessment Form

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information							
ZEF SMAJLAJ							
Name of Action or Project: BATH HOUSE FOR ZEF SMAJLAJ							
Project Location (describe, and attach a location map): 803 SOUTH LAKE BLVD.							
Brief Description of Proposed Action: CONSTRUCT 8 FT. X 14 FT. BATH HOUSE							
Name of Applicant or Sponsor: ZEF SMAJLAJ		Telephone: E-Mail:					
Address: 510 PARK AVENUE							
City/PO: NEW YORK		State: NY	Zip Code: 10022				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">NO</td> <td style="width: 50%; text-align: center;">YES</td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> </table>	NO	YES	X	
NO	YES						
X							
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: CARMEL PLANNING BOARD AND BUILDING DEPARTMENT			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">NO</td> <td style="width: 50%; text-align: center;">YES</td> </tr> <tr> <td></td> <td style="text-align: center;">X</td> </tr> </table>	NO	YES		X
NO	YES						
	X						
3.a. Total acreage of the site of the proposed action? <u>0.026</u> acres							
b. Total acreage to be physically disturbed? <u>0.003</u> acres							
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? <u>0.026</u> acres							
4. Check all land uses that occur on, adjoining and near the proposed action. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban) <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Parkland							

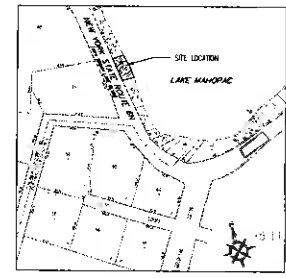
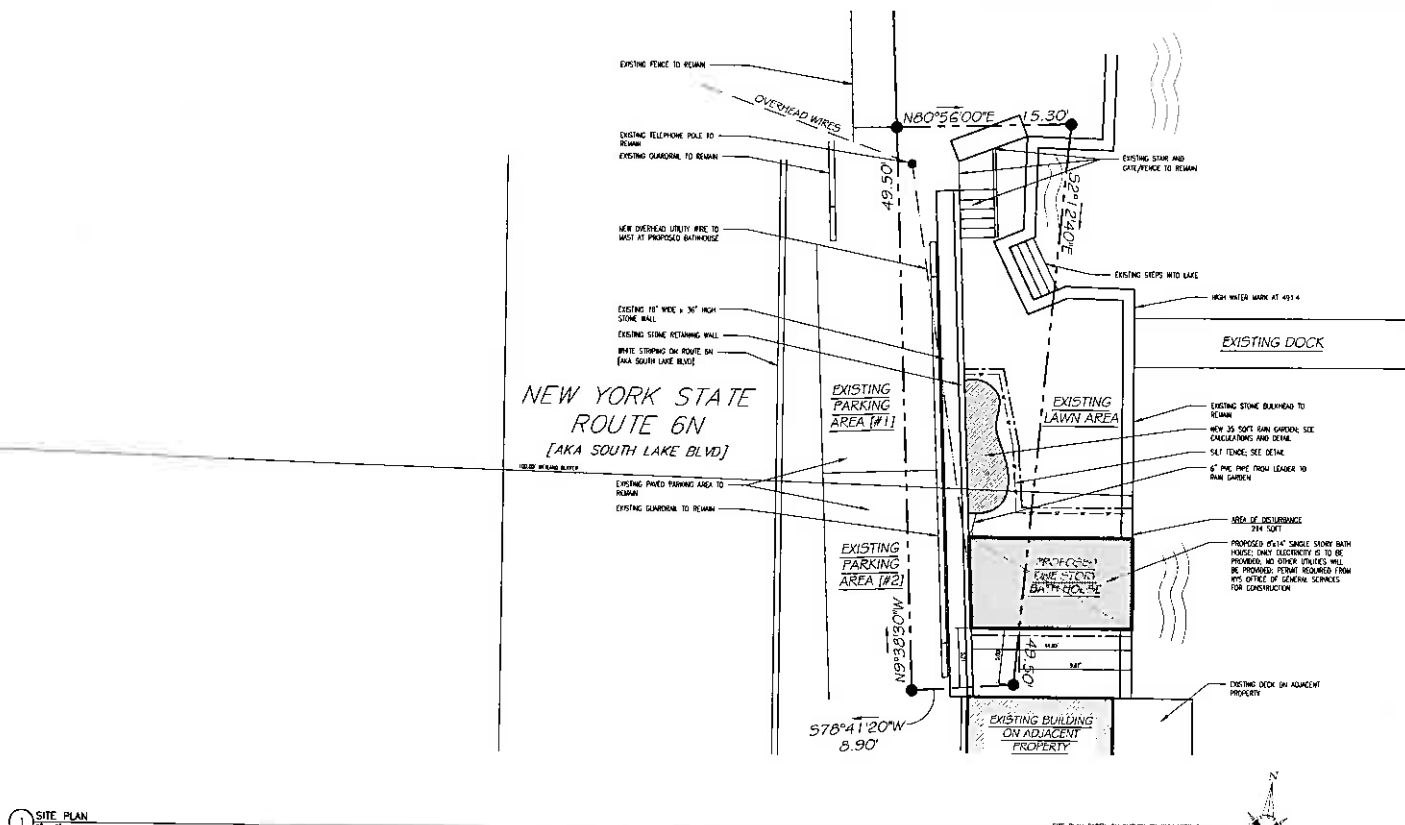
5. Is the proposed action, a. A permitted use under the zoning regulations?	NO	YES	N/A
b. Consistent with the adopted comprehensive plan?		X	
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?		X	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO	YES	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
b. Are public transportation service(s) available at or near the site of the proposed action?	X		
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	X		
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ N/A	NO	YES	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ NONE	NO	YES	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ NONE	NO	YES	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
b. Is the proposed action located in an archeological sensitive area?	X		
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____		X	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES	
16. Is the project site located in the 100 year flood plain?	X		
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? <input type="checkbox"/> NO <input type="checkbox"/> YES b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: _____ <input type="checkbox"/> NO <input type="checkbox"/> YES	NO	YES	
	X		

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____	NO	YES
	X	
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	NO	YES
	X	
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	NO	YES
	X	
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE		
Applicant/sponsor name: ZER SMAJLAJ Date: 6/13/16		
Signature: <i>[Signature]</i> Project Architect		

Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2. Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?		
2. Will the proposed action result in a change in the use or intensity of use of land?		
3. Will the proposed action impair the character or quality of the existing community?		
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?		
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?		
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?		
7. Will the proposed action impact existing: a. public / private water supplies? b. public / private wastewater treatment utilities?		
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?		
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?		

100'00" WETLAND BUFFER
100'00" WETLAND BUFFER



2 AREA MAP
1" = 40'
*ALL PROPERTIES ARE B-1-25 ZONE

1 SITE PLAN
1" = 40'

SITE PLAN BASED ON SURVEY BY ELLMAN & PLANNING SURVEYORS, P.C. DATED 10-31-2005



RAIN GARDEN CALCULATIONS

- DRAINAGE AREA: 120 SQFT
- DISTANCE TO GARDEN: LESS THAN 30 FT
- SOIL TYPE: FAULTON COMPLEX PnD
- GARDEN DEPTH: 6 IN.
- CALCULATION:

$R_v = 3.1 \text{ in (RAINFALL @ 0.90\%)}$
 $R_v = 0.05 + 0.008(100) = 0.95$
 $A = 120 \text{ SQFT (AREA OF DRAINAGE)}$
 $WQV = \text{WATER QUALITY VOLUME}$

$WQV = \frac{(R_v)(A)}{12} = \frac{(3.1 \text{ in})(120)}{12} = 30.45 \text{ FT}^3$

$ARG = 35 \text{ SQFT (RAIN GARDEN AREA)}$
 $DSM = 1 \text{ FT (SOIL MEDIA DEPTH)}$
 $PSM = 0.25 \text{ (SOIL MEDIA POROSITY)}$
 $VSM = \text{SOIL MEDIA VOLUME}$

$VSM = \frac{(ARG)(DSM)(PSM)}{12} = \frac{(35 \text{ SQFT})(1 \text{ FT})(0.25)}{12} = 0.77 \text{ FT}^3$

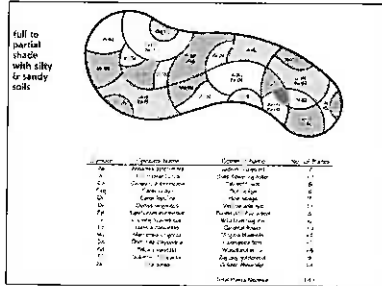
$DDL = 0.5 \text{ FT (DRAINAGE LAYER DEPTH)}$
 $PDL = 0.40 \text{ (DRAINAGE LAYER POROSITY)}$
 $VLL = \text{DRAINAGE LAYER VOLUME}$

$VLL = \frac{(ARG)(DDL)(PDL)}{12} = \frac{(35 \text{ SQFT})(0.5 \text{ FT})(0.40)}{12} = 0.58 \text{ FT}^3$

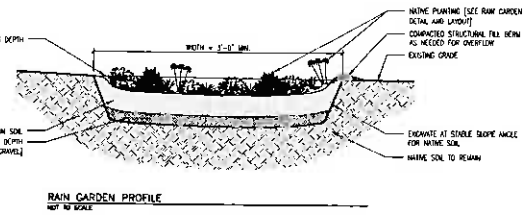
$PDL = 0.5 \text{ FT (POWING DEPTH)}$

$WQV \leq VSM + VLL + (PDL)(ARG) = 0.77 \text{ FT}^3 + 0.58 \text{ FT}^3 + (0.5 \text{ FT})(35 \text{ SQFT})$
 $29.45 \text{ FT}^3 \leq 30.5 \text{ FT}^3$

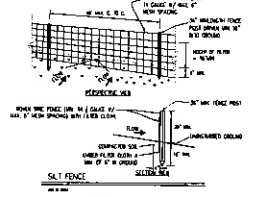
THEFORE, THE RAIN GARDEN AREA OF 35.00 SQFT IS SUFFICIENT.
 ALL UNDERGROUND PIPING WILL BE 6" PVC.



RAIN GARDEN DETAIL AND LAYOUT
NOT TO SCALE



RAIN GARDEN PROFILE
NOT TO SCALE



PERSPECTIVE VIEW
NOT TO SCALE

- ### SEQUENCE OF CONSTRUCTION
- 1) INSTALL SILT FENCING AND STAKE OUT SITE PLAN. NOTIFY WETLAND INSPECTOR BEFORE INSTALLATION COMPLETION.
 - 2) CLEAR AREA WHERE CONSTRUCTION IS PROPOSED.
 - 3) CONSTRUCT RAIN GARDEN AND DRAIN.
 - 4) CONSTRUCT BATHHOUSE.
 - 5) INSTALL RAIN GARDEN PLANTINGS.
 - 6) CONNECT ROOF DRAIN TO RAIN GARDEN.
 - 7) CLEAN USE OF ALL MATERIALS AND SEED LAIN IS NECESSARY.

NOTES:
1. WETLAND INSPECTOR TO BE NOTIFIED UPON COMPLETION OF RAIN GARDEN AND SILT FENCE INSTALLATION, IN ORDER TO PERFORM INSPECTION.
2. THE MAINTENANCE OF THE CONSTRUCTION FEATURES WILL CONFORM TO THE DEP SIGNED MAINTENANCE AGREEMENT.

ARCHITECTURAL VISIONS

2 WILDCOAST ROAD NORTH
MANHATTAN, NY 10541
TEL: 845-338-2627
WWW.AVARCHITECT.COM

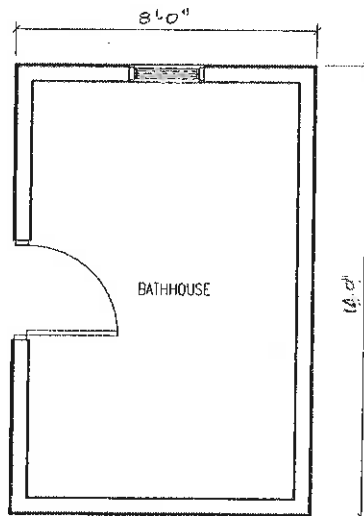
PROJECT:
ZEF SMAJLAJ

PROJECT ADDRESS:
100 SOUTH LAKE BLVD
MANHATTAN, NY 10541
TEL: 845-338-2627

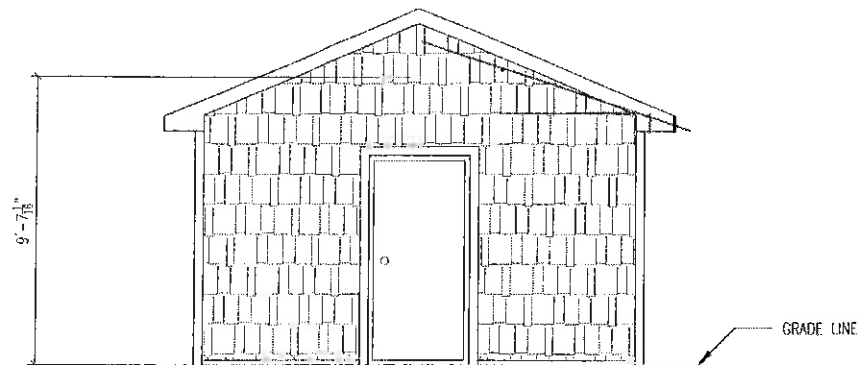
SITE PLAN

SCALE:
AS SHOWN
DRAWN BY: ZEF SMAJLAJ
DATE: 10/10/2005

AS-101

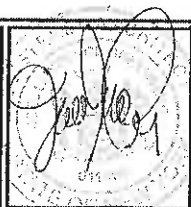


1 FLOOR PLAN
1/4" = 1'-0"



2 ELEVATION
1/4" = 1'-0"

DO NOT SCALE DRAWINGS. ALL DIMENSIONS TO BE VERIFIED IN FIELD. IT IS A VIOLATION OF STATE LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, TO ALTER AN ITEM ON THESE PLANS AND DOCUMENTS IN ANY WAY. PER STATE LAW, IF AN ITEM BEARING THE SEAL OF AN ARCHITECT IS ALTERED, THE ALTERING ARCHITECT SHALL AFFIX TO HIS/HER ITEM THE SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS/HER SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION. THIS ARCHITECT DENIES ANY AND ALL RESPONSIBILITY FOR ALTERATIONS OF THESE PLANS AND DOCUMENTS BY OTHERS AND EXPRESSLY DENIES PERMISSION TO OTHERS TO ALTER THESE PLANS AND DOCUMENTS.



**ARCHITECTURAL
VISIONS LLC**

2 MUSCOOT ROAD NORTH
MAHOPAC NY, 10541
JOEL.GREENBERG@ARCHVISIONS.COM

P: 845-628-6613
F: 845-628-2807

PROJECT:
ZEF SMAJLAJ

PROJECT ADDRESS
003 SOUTH LAKE BLVD.
MAHOPAC, NY 10541

MAILING ADDRESS
510 PARK AVENUE,
NY, NY
10022

TAX MAP # 75.42-1-39

BATHHOUSE PLANS

ISSUANCE	
ISSUANCE	DATE
FOR REVIEW	0-30-16

SCALE
AS NOTED

DRAWN BY
JM /JLG

PROJECT NO.
03-16-039

A-101

SITE DATA NOTES

1. PROPERTY OWNER: ZEF SMAJLAJ
2. PROPERTY LOCATION: 803 SOUTH LAKE BLVD.
MAHOPAC, NEW YORK
3. ZONE: R-120
4. PROPOSED USE: BATH HOUSE, NO COOKING, SLEEPING,
SANITARY FACILITIES OR OTHER FUNCTIONS GENERALLY
OCCURRING IN A SWELLING FOR PRIVATE USE BY
OWNER, LESSEE THEIR FAMILIES OR GUESTS. ONLY
ELECTRIC TO BE INSTALLED
5. TAX MAP NO: 75.42-1-39
6. WATER/SEWER: NONE
7. DESIGN LOADS: FLOOR LIVE LOAD 40 PSF
8. SNOW LOADING: GROUND SNOW LD. 50 PSF
9. WIND LOADING:
BASIC WIND SPEED 110 MPH
WIND EXPOSURE CATEGORY C
10. SEISMIC DESIGN:
SEISMIC DESIGN CATEGORY DI
SITE CLASS D
SEISMIC USE GROUP I

ZONING COMPLIANCE

<u>ZONING PROVISION</u>	<u>REQUIRED</u>	<u>EXISTING</u>	<u>PROPOSED</u>	<u>VARIANCE</u>
LOT AREA	3000 SF	1133 SF	1133 SF	1867 SF
LOT WIDTH	50 FT.	49.5 FT.	49.5 FT.	0.5 FT.
LOT DEPTH	30 FT.	12 FT.	12 FT.	18 FT.
FRONT YARD	15 FT.	N/A	5 FT.	10 FT.
SIDE YARD	15 FT.	N/A	5 FT.	10 FT.
REAR YARD	15 FT.	N/A	0 FT.	15 FT.
HEIGHT	10 FT.	N/A	10 FT.	
OFF-STREET PARKING	2	2	0	2

APPROVED
BY 2018/07/20/18

75.11	
ARCHITECTURAL VISIONS	
2 METER 2007 ROAD NORTH MAHOPAC, NY, 10641 ARCHITECTURAL VISIONS	
PROJECT: ZEF SMAJLAJ	
PROJECT ADDRESS 803 SOUTH LAKE BLVD. MAHOPAC, NY 10641 TAX MAP NO. 75.42-1-39	OWNER ADDRESS 803 SOUTH LAKE BLVD. MAHOPAC, NY 10641 TAX MAP NO. 75.42-1-39
SITE PLANNED ARCHITECTURAL NOTES	
REVISIONS REV 7/8/18	
SCALE AS NOTED	
DRAWN BY J.A.S.M.	
PROJECT NO. 18-11-001	
S-2	

ROBERT LAGA
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ANTHONY DUSOVIC
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TOWN OF CARMEL
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Marc Pekowsky
Vincent Turano
Nicholas Fannin
John Starace

APPLICATION FOR WETLAND PERMIT OR LETTER OF PERMISSION

Name of Applicant: Ronald Topol
140 Riverside Dr. Apt 11A
Address of Applicant: New York, NY10024 Email: _____

Telephone# _____ Name and Address of Owner if different from Applicant: _____

Property Address: 751 South Lake Blvd Tax Map # 75.42-1-19
Agency Submitting Application if Applicable: _____
Location of Wetland: Lake Mahopac
Size of Work Section & Specific Location: Addition Cantilivered over lake
Will Project Utilize State Owned Lands? If Yes, Specify: Yes Lake Mahopac

Type and extent of work (feet of new channel, yards of material to be removed, draining, dredging, filling, etc). A brief description of the regulated activity (attach supporting details).
None

Proposed Start Date: 10/15/16 Anticipated Completion Date: 12/31/16 Fee Paid \$ 225.00

CERTIFICATION

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief, false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. As a condition to the issuance of a permit, the applicant accepts full legal responsibility for all damage, direct or indirect, or whatever nature, and by whomever suffered, arising out of the project described here-in and agrees to indemnify and save harmless the Town of Carmel from suits, actions, damages and costs of every name and description resulting from the said project.

Ronald Topol
SIGNATURE

8/29/16
DATE

Short Environmental Assessment Form

Part 1 - Project Information

Instructions for Completing

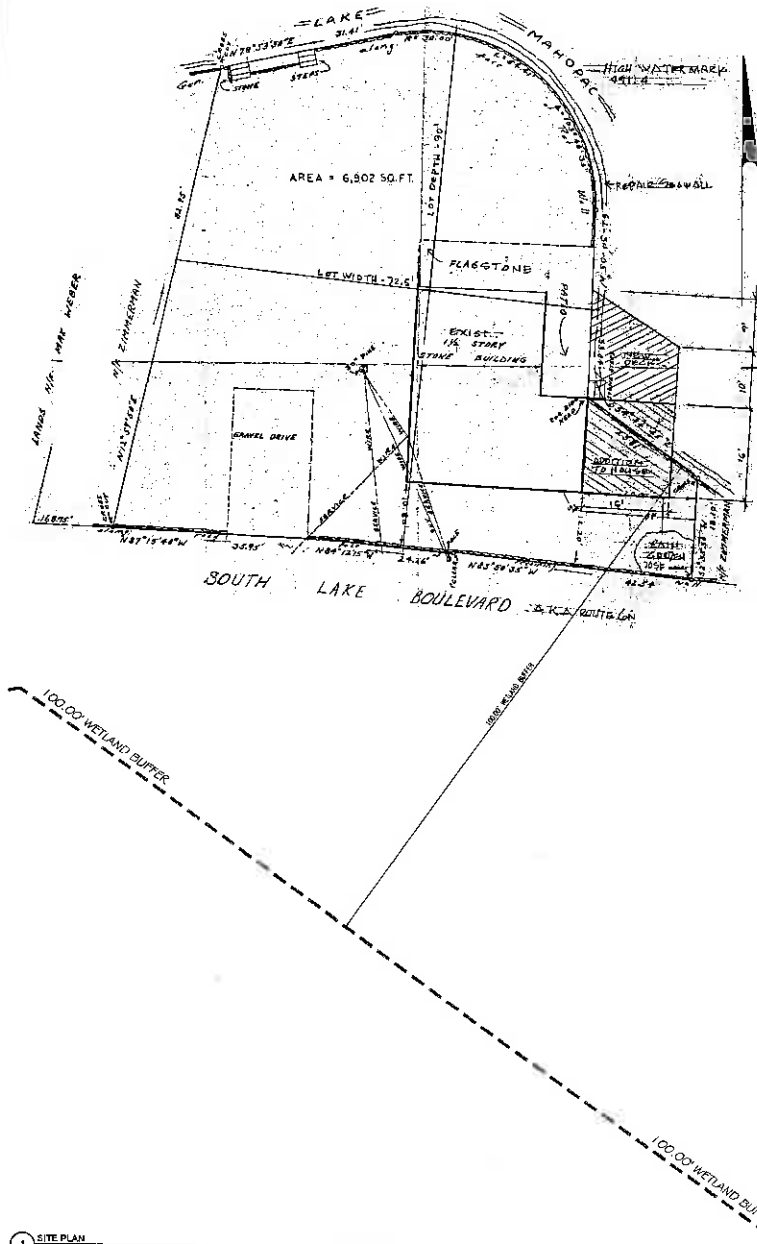
Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information							
Name of Action or Project: Ronald Topol							
Project Location (describe, and attach a location map): 751 South Lake B'vd							
Brief Description of Proposed Action: Addition to existing House							
Name of Applicant or Sponsor: Ronald Topol		Telephone: E-Mail: 					
Address: 140 Riverside Drive							
City/PO: New York		State: NY	Zip Code: 10024				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center; padding: 2px;">NO</th> <th style="text-align: center; padding: 2px;">YES</th> </tr> <tr> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </table>	NO	YES	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NO	YES						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Carmel ZBA & Bldg. Dept.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center; padding: 2px;">NO</th> <th style="text-align: center; padding: 2px;">YES</th> </tr> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> </tr> </table>	NO	YES	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NO	YES						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
3. a. Total acreage of the site of the proposed action? _____ acres b. Total acreage to be physically disturbed? _____ acres c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres							
4. Check all land uses that occur on, adjoining and near the proposed action. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban) <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Parkland							

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
b. Are public transportation service(s) available at or near the site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
b. Is the proposed action located in an archeological sensitive area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
16. Is the project site located in the 100 year flood plain?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: _____	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____	NO	YES
_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	NO	YES
_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	NO	YES
_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor name: Ronald Topol Date: 8/29/16 Signature: <i>Joe Greener Project Architect</i>		



ZONING COMPLIANCE				
ZONING PROVISION	REQUIRED	EXISTING	PROPOSED	VARIANCE
LOT AREA	120,000 SF	6,902 SF	6,902 SF	113,089 SF
LOT WIDTH	200 FT.	72.5 FT.	72.5 FT.	127.5 FT.
LOT DEPTH	200 FT.	80 FT.	90 FT.	110 FT.
FRONT YARD	35 FT.	10.8 FT.	10.8 FT.	14.2 FT.
SIDE YARD	10 FT.	20 FT.	5 FT.	5 FT.
REAR YARD	15 FT.	17 FT.	17 FT.	NONE
HEIGHT	35 FT.	18 FT.	18 FT.	NONE

SITE DATA NOTES

1. PROPERTY OWNER: DR. RONALD TOPAL
2. PROPERTY LOCATION: 751 SOUTH LAKE BLVD., MANHATTAN, NY 10541
3. ZONE: R-100
4. PROPOSED USE: ADDITION TO EXIST. HOUSE INCLUDING A NEW DECK
5. TAX MAP NO.: 75.42-1-19
6. WATER/SEWER: ON SITE WELL/SEWER
7. OWNER'S ADDRESS: 140 RIVERSIDE DRIVE APT. 11A
NEW YORK, NY 10024

RAIN GARDEN CALCULATIONS

- DRAINAGE AREA: 240 SQFT
- DISTANCE TO GARDEN: LESS THAN 30 FT
- SOIL TYPE: PASTON COMPLEX PHB
- GARDEN DEPTH: 6 IN
- CALCULATION:

$$P = 3.14 \times (\text{RAINFALL} \times \text{DRAINAGE AREA})$$

$$P = 0.03 \times 0.008(100) = 0.03$$

$$A = 240 \text{ SQFT (AREA OF DRAINAGE)}$$

$$WQV = \text{WATER QUALITY VOLUME}$$

$$WQV = (P \times A) / 12 = (0.03 \times 240) / 12 = 0.6 \text{ FT}^3$$

$$A_{RG} = 70 \text{ SQFT (RAIN GARDEN AREA)}$$

$$D_{GM} = 1 \text{ FT (SOIL MEDIA DEPTH)}$$

$$P_{GM} = 0.30 \text{ (SOIL MEDIA POROSITY)}$$

$$V_{GM} = \text{SOIL MEDIA VOLUME}$$

$$V_{GM} = (A_{RG} \times D_{GM} \times P_{GM}) = (70 \text{ SQFT} \times 1 \text{ FT} \times 0.30) = 21.0 \text{ FT}^3$$

$$D_{OL} = 0.5 \text{ FT (DRAINAGE LAYER DEPTH)}$$

$$P_{OL} = 0.40 \text{ (DRAINAGE LAYER POROSITY)}$$

$$V_{OL} = \text{DRAINAGE LAYER VOLUME}$$

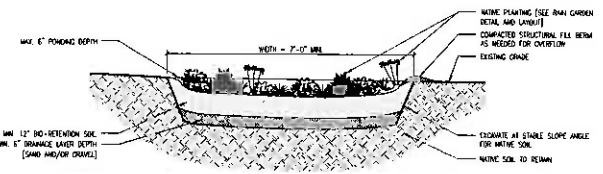
$$V_{OL} = (A_{RG} \times D_{OL} \times P_{OL}) = (70 \text{ SQFT} \times 0.5 \text{ FT} \times 0.40) = 14.0 \text{ FT}^3$$

$$P_{OL} = 0.5 \text{ FT (POWING DEPTH)}$$

$$WQV \leq V_{GM} + V_{OL} + (P_{OL} \times A_{RG}) = 21.0 \text{ FT}^3 + 14.0 \text{ FT}^3 + (0.5 \text{ FT} \times 70 \text{ SQFT}) = 58.5 \text{ FT}^3$$

$$58.5 \text{ FT}^3 \leq 58.5 \text{ FT}^3$$

THEREFORE, THE RAIN GARDEN AREA OF 70.0 SQFT IS SUFFICIENT.
ALL UNDERGROUND PIPING WILL BE 6" PVC

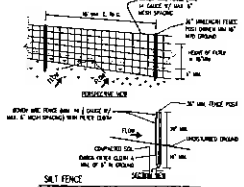


RAIN GARDEN PROFILE
NOT TO SCALE

full to partial shade with silty to sandy soils



RAIN GARDEN DETAIL AND LAYOUT
NOT TO SCALE



CONSTRUCTION NOTES:

1. SILT FENCE SHALL BE INSTALLED ACCORDING TO THE FOLLOWING:
 - a. SILT FENCE SHALL BE INSTALLED UPSTREAM OF THE GARDEN.
 - b. SILT FENCE SHALL BE INSTALLED DOWNSTREAM OF THE GARDEN.
 - c. SILT FENCE SHALL BE INSTALLED UPSTREAM OF THE GARDEN.
 - d. SILT FENCE SHALL BE INSTALLED DOWNSTREAM OF THE GARDEN.
2. SILT FENCE SHALL BE INSTALLED ACCORDING TO THE FOLLOWING:
 - a. SILT FENCE SHALL BE INSTALLED UPSTREAM OF THE GARDEN.
 - b. SILT FENCE SHALL BE INSTALLED DOWNSTREAM OF THE GARDEN.
 - c. SILT FENCE SHALL BE INSTALLED UPSTREAM OF THE GARDEN.
 - d. SILT FENCE SHALL BE INSTALLED DOWNSTREAM OF THE GARDEN.

SEQUENCE OF CONSTRUCTION

1. INSTALL SILT FENCING AS SHOWN ON SITE PLAN.
2. NOTIFY RETAILER INSPECTION UPON INSTALLATION COMPLETION.
3. CLEAR AREA WHERE CONSTRUCTION IS PROPOSED.
4. CONSTRUCT RAIN GARDEN AND DECK.
5. CONSTRUCT GARDEN AND DECK.
6. INSTALL RAIN GARDEN PLANTING.
7. COMPLETION SHALL BE TO THE GARDEN.
8. CLEAR SITE OF ALL MATERIALS AND DEBRIS AS NECESSARY.

NOTES

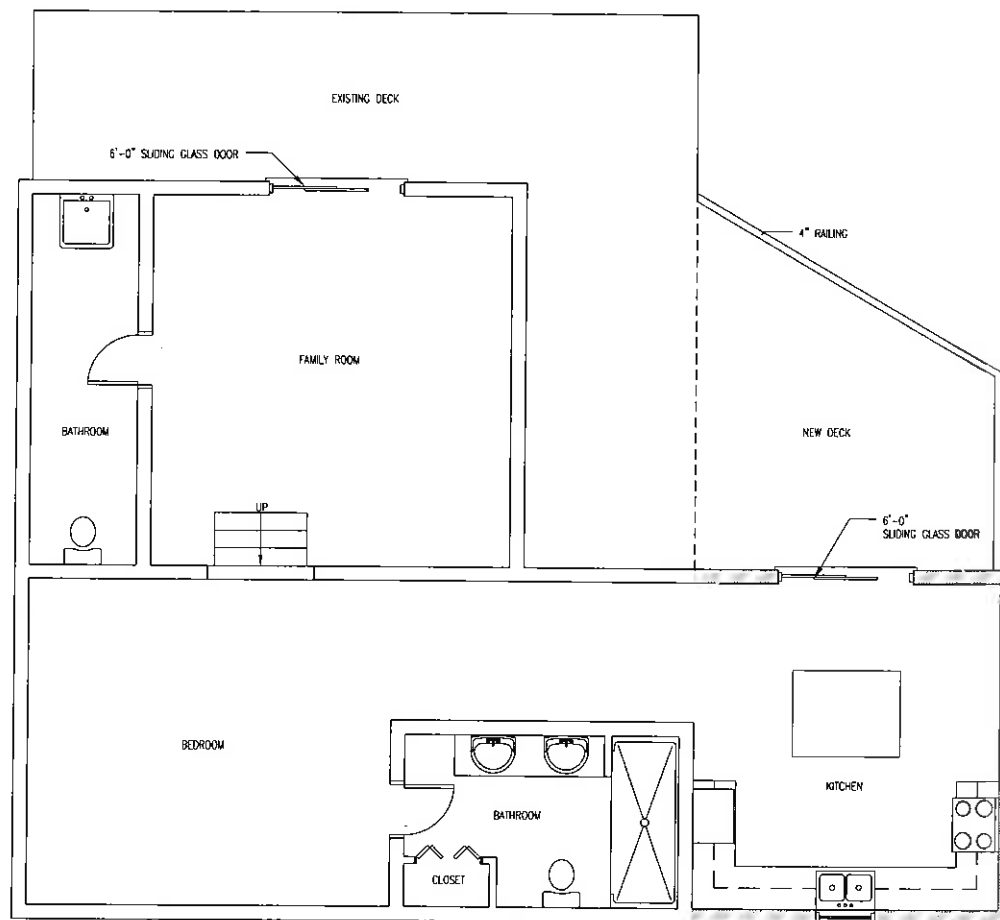
1. WETLAND INSPECTION TO BE NOTIFIED UPON COMPLETION OF RAIN GARDEN AND SILT FENCE INSTALLATION, IN ORDER TO PREVENT DAMAGE.
2. THE MAINTENANCE OF THE STORMWATER FEATURES WILL CONFORM TO THE DEPT. OF ENVIRONMENTAL CONSERVATION'S MAINTENANCE AGREEMENT.

ARCHITECTURAL VISIONS
2000 SOUTH ROAD NORTH
MANHATTAN, NY 10541
P: 845-456-1113
F: 845-456-1117
www.architecturalvisions.com

PROJECT:
RONALD TOPAL
140 RIVERSIDE DRIVE APT. 11A
MANHATTAN, NY 10024
P: 845-456-1113
F: 845-456-1117
www.architecturalvisions.com

SITE PLAN AND DETAILS

DATE	DESCRIPTION
AS NOTED	
SCALE	
DESIGNED BY	
DRAWN BY	
CHECKED BY	
PROJECT NO.	AS-100



1 FIRST AND SECOND FLOOR PLAN
1/4" = 1'-0"

**ARCHITECTURAL
VISIONS, P.L.L.C.**
2 MUSCOOT ROAD NORTH
MAHOPAC, NY 10541
JOE.LORTENBERG@ARCHVISIONS.COM

P: 845-628-6613
F: 845-626-2807

**PROJECT:
RONALD TOPOL**

PROJECT ADDRESS:
751 SOUTH LAKE BLVD.
MAHOPAC, NY 10541
TAX MAP NO. 75.42-1-15

MAILING ADDRESS:
140 RIVERSIDE DR., #11A, NYC,
NY 10024

**FIRST AND SECOND
FLOOR PLAN**

ISSUANCE DATE
FOR REVIEW 8/9/16

SCALE
AS NOTED
DRAWN BY: CHKD BY
GLD/- JLG

PROJECT NO.
03-164036

A-101



August 4, 2016

Vincent Sapienza, P.E.
Acting Commissioner

Town of Carmel Environmental Conservation Board
60 McAlpin Avenue
Mahopac, NY 10541

Paul V. Rush, P.E.
Deputy Commissioner
Bureau of Water Supply
prush@dep.nyc.gov

**Re: Application for Tree Cutting Permit for the Barrett Pond Forest
Management Project #5041**

1286 Route 6
Carmel, NY 10512
T: (845) 808-1761
F: (845) 808-1742

Dear ECB:

The New York City Department of Environmental Protection (DEP) is planning the Barrett Pond Forest Management Project, a timber harvest on approximately 45 acres of City-owned watershed forest land located in the Town of Kent. Access to the project site and the log landing for the harvest will be located in the Town of Carmel on City-owned property adjacent to Dixon Road (tax map number 42.-1-65.1). Though the haul road will be located on an existing abandoned dirt road owned by DEP, Lockwood Lane, and therefore will not require any tree removal prior to use, in order to use the area identified for the log landing and main skid trail to the project area, DEP must remove 11 trees from the property. Therefore, DEP is requesting a tree removal permit from the Town.

Attached please find a completed application for a tree cutting permit, a map and photo log showing each tree to be removed, and the complete project plan for the timber harvest.

Each tree to be removed has been designated with blue paint at two locations, one point low enough to be visible on the stump after the tree is removed.

I will be the Project Manager for this timber harvest. If you require any additional information or have any questions please contact me at (845) 808-1761 or alocke@dep.nyc.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Amanda Locke".

Amanda Locke
DEP Watershed Forester

Attachments

Permit application
Project plan
Map of trees to be removed
Photos of trees to be removed
Survey map of parcel

ROBERT LAGA
Chairman

ANTHONY DUSOVIC
Vice-Chair

ROSE TROMBETTA
Secretary

DAVID KLOTZLE
Wetland Inspector

TOWN OF CARMEL
ENVIRONMENTAL CONSERVATION BOARD



60 McAlpin Avenue
Mahopac, New York 10541
Tel. (845) 628-1500 - Ext. 190
www.ci.carmel.ny.us

BOARD MEMBERS

Edward Barnett
Marc Pekowsky
Vincent Turano
Nicholas Fannin
John Starace

APPLICATION FOR A TREE CUTTING PERMIT

Name of Applicant: Amanda Locke, Watershed Forester for NYCDEP
Address: 1286 Route 6, Carmel, NY 10512 Tel. No. (845) 808-1761
Owner of Property: City of New York
Address: 465 Columbus Ave., Valhalla, NY 10595 Tel. No. (845) 808-1761
Tax Map Number: 42.-1-65.1 Total Land Area Involved: Less than 1 acre
Number of trees of each species to be cut: See atts. Range, in inches, of diameter, measured 4 & ½ feet
above the ground of the trees to be cut: See attachments
Total Board Foot Volume for each species to be cut: Not applicable

A Sketch Map drawn to scale must be attached showing:

1. Boundaries of Property.
2. Access Roads into property and proposed roads and skid trails in the property.
3. Area within the property where cutting will occur.
4. Location and size of product loading areas.
5. Any area of the property defined as a wetland by the Town of Carmel Wetland Law.
6. If tree cutting operation is to be conducted in stages, each stage shall be shown on the sketch map.
7. Scale of map.

A written statement must be attached stating that each tree to be removed has been designated with paint or other distinctive means at two points so as to be readily visible. One point shall be low enough on the tree so as to be visible on the stump after the tree is removed.

Permit Fee is: - Up to 25 acres - \$300.00 -Over 25 acres - \$400.00 + \$50.00 an acre.

Amanda Locke for NYCDEP
SIGNATURE OF OWNER

Amanda Locke NYCDEP
SIGNATURE OF APPLICANT Forester

All property owners within 500 feet of the subject property must be notified by U.S. Mail prior to commencement of the operation.

Short Environmental Assessment Form

Part 1 - Project Information

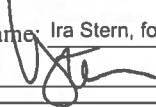
Instructions for Completing

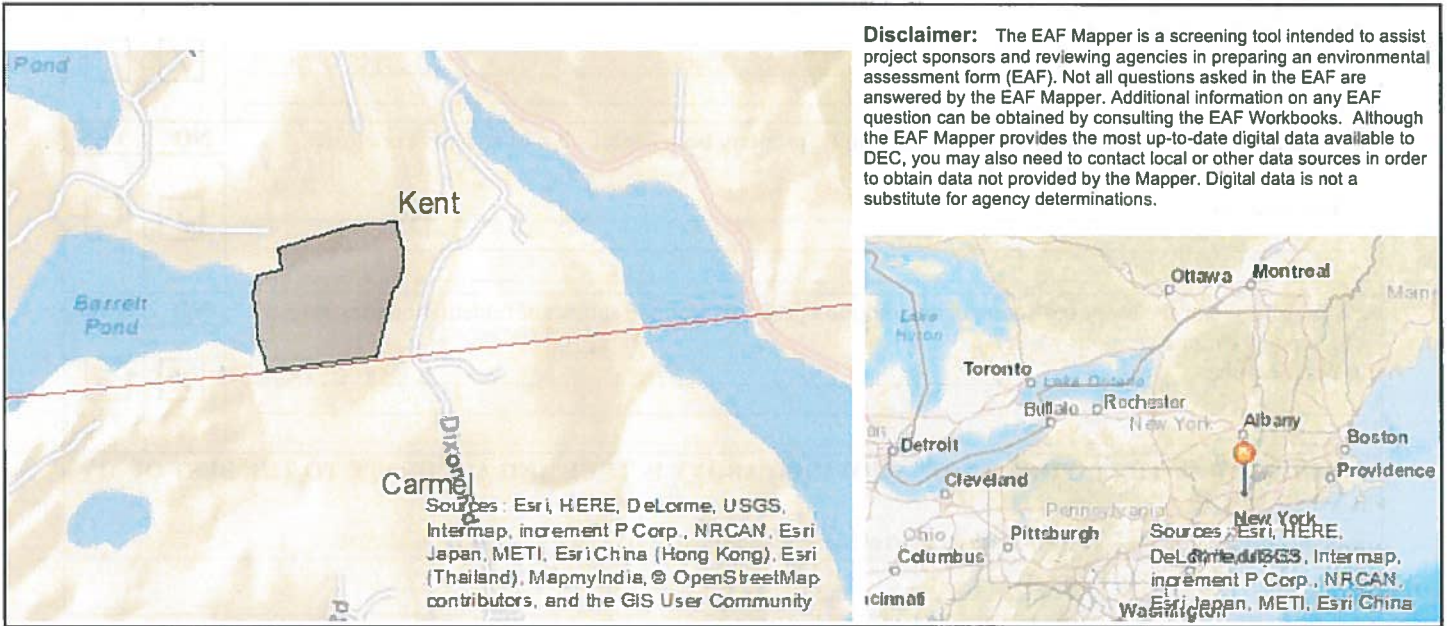
Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information							
Name of Action or Project: Barrett Pond Forest Management Project							
Project Location (describe, and attach a location map): NYC-owned property off of Dixon Road in the Town of Kent, Putnam County							
Brief Description of Proposed Action: Timber harvest designed and conducted by NYC Department of Environmental Protection on NYC-owned property. Please see attached Project Plan for detailed information.							
Name of Applicant or Sponsor: Ira Stern, on behalf NYC Dep't of Environmental Protection		Telephone: (845) 340-7207 E-Mail: istern@dep.nyc.gov					
Address: 71 Smith Ave							
City/PO: Kingston		State: NY	Zip Code: 12401				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">NO</td> <td style="padding: 2px;">YES</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> </tr> </table>	NO	YES	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NO	YES						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Wetlands permit from Town of Kent; tree removal permit from Town of Carmel; funding from NYCDEP			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">NO</td> <td style="padding: 2px;">YES</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> </tr> </table>	NO	YES	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NO	YES						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
3.a. Total acreage of the site of the proposed action? Approx. 75 acres b. Total acreage to be physically disturbed? Approx. 2.6 acres c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? >1,000 acres							
4. Check all land uses that occur on, adjoining and near the proposed action. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban) <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input checked="" type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Parkland							

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
b. Are public transportation service(s) available at or near the site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: Not applicable	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ Not applicable	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ Not applicable	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places? b. Is the proposed action located in an archeological sensitive area?	NO <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	YES <input type="checkbox"/> <input type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	NO <input type="checkbox"/> <input checked="" type="checkbox"/>	YES <input checked="" type="checkbox"/> <input type="checkbox"/>	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input checked="" type="checkbox"/> Shoreline <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Urban <input type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
16. Is the project site located in the 100 year flood plain?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? <input type="checkbox"/> NO <input type="checkbox"/> YES b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: <input type="checkbox"/> NO <input type="checkbox"/> YES	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____ _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor name: <u>Ira Stern, for NYC Dep't of Environmental Protection</u> Date: <u>6/10/2016</u> Signature: <u></u>		



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National Register of Historic Places]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	Yes
Part 1 / Question 20 [Remediation Site]	No



Forest Management Project Plan Summary

Project Name: Barrett Pond Forest Management Project
Project Number: 5041
Project Manager: Amanda Locke
Plan Date: May 2016

Reservoir Basin: West Branch
PID(s): 77; 81; 93; 4617; 8289
Tax Map ID(s): 43.-2-1, -2, -5, -6, -7, -81
Street Location: Dixon Road
Town(s): Kent & Carmel
County: Putnam

Project Area (acres): 50
Treatment Area (acres): 45
Treatment Type: Crown thinning

Harvest Start (month/year): October 2016
Seasonal Restrictions: Winter only: October 1 – March 31
Equipment Restrictions: Forwarder only

Recreation Closure(s): ☒ yes ☐ no
if yes, describe: Fishing/hunting/hiking closure while harvest is active
Stream Crossing(s): ☒ yes ☐ no
if yes, describe: One existing culvert; one intermittent stream pole ford
CP Variance(s): ☒ yes ☐ no
if yes, describe: One skid trail located in overlapping SMZs for wetland and stream
State or Local Permit(s): ☒ yes ☐ no
if yes, describe: Kent wetland permit; Carmel tree removal permit



Barrett Pond Forest Management Project #5041

Project Plan and Environmental Assessment

Introduction

The Barrett Pond Forest Management Project is a light- to moderate-intensity silvicultural crown thinning of approximately 45 acres of New York City-owned forest land in the West Branch Reservoir basin. The harvest will reduce competition between residual trees, improving growth and vigor of the residual stand. Improvements in growth and vigor increase resistance and resilience to disturbance, helping to ensure long-term forest cover on the site. The project area, located in the Towns of Kent and Carmel, Putnam County, New York, is bounded on the west by Barrett Pond and on the south by the Kent/Carmel town line. The northern and eastern project boundaries follow internal parcel lines and topography, respectively. Access to the project site is from Lockwood Lane, an abandoned town road owned by the City, and Dixon Road. More detail about the project can be found in the attached Barrett Pond Forest Management Project Map. The project consists of implementation of science-based silvicultural principles, and will be overseen by a DEP watershed forester.

Current Forest Conditions

The project will treat portions of two forest stands. The stands are not being treated in their entirety due to location in multiple municipalities, proximity to neighboring residential areas and steep slopes. The forest type across the project area is Appalachian hardwoods dominated by tulip poplar (*Liriodendron tulipifera*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*) and black birch (*Betula lenta*).

Though the two stands are the same forest type, they are significantly different in average diameter and condition as a result of different land use histories. Stand 12510, which comprises approximately 40% of the treatment area, was taken by the City under eminent domain during reservoir construction in the 1890s. Unassisted forest development and succession occurred on the site while in City ownership until the property was sold off in the 1970s and then repurchased by the City under the land acquisition program in 2007. The property remained unmanaged while under private ownership and has not been actively managed by the City since repurchase. As a result, the stand is significantly overstocked with an average basal area of 160 sq. ft. per acre, with 93 sq. ft. per acre in tulip poplar. Average board foot volume is more than 19 thousand board feet (Mbf) per acre, and quadratic mean diameter across the stand is 15.1 inches (20.4 inches for tulip poplar).

Stand 3449, which comprises the remaining 60% of the treatment area, was in private ownership until City acquisition in 1998. The previous owners removed much of the high-quality timber from the site prior to the City purchase. As a result, the stand is stocked with a mix of lower-quality, less-vigorous trees that were part of the overstory prior to harvest, and rapidly-growing, well-formed younger trees that have grown into the overstory since acquisition. Even with the prior management, the stand is still overstocked with an average basal area of 123 sq. ft. per acre, 64 sq. ft. in young, vigorous tulip poplar and black birch, and 30 sq. ft. in lower-quality, residual

red maple. Average board foot volume is 7 Mbf per acre, and the quadratic mean diameter is 12.7 inches.

Forest Stand Data (from field inventory)

Stand #	12510	3449
Stand Acres	27 (16 treated)	61 (32 treated)
Basal Area	160	123
Trees/Acre	130	140
Species of >Basal Area	tulip poplar	tulip poplar
Quad. Mean Diameter	15.1	12.7
Relative Density	80%	69%

Silvicultural Prescription & Desired Forest Conditions

The condition of stand 12510, with very large, dense, over-mature trees, is such that it should be regenerated. However, due to intense deer browse pressure and invasive species on the site, regeneration treatment will be delayed and a maintenance thinning will be applied instead. The goal of a maintenance thinning is to reduce inter-tree competition thereby slowing stand senescence until such time as adequate funding and political will exist to address biological and social impediments to regeneration. A regeneration prescription in this stand would involve a heavy shelterwood cut with low residual basal area to ensure adequate sunlight to regenerate tulip poplar.

The desired conditions for this stand include increased overall stand vigor and species diversity. To achieve these goals, approximately 30% of the existing basal area will be removed. Trees selected for removal will be those with smaller, less-vigorous crowns, subordinate canopy position, and/or poor form. Trees that will remain after harvest will be those with the largest and most vigorous crowns that should be the most able to respond to the increased light and nutrient availability on the site. Given the advanced effective age of the stand, 108 years, low-vigor, sub-canopy trees have likely been suppressed too long to be able to respond effectively to increases in available growing space. Tree removal will also release individuals of species other than tulip poplar to encourage the development of species diversity on the site.

Due to the large size of the trees in this stand, special consideration will be given during marking to the direction in which trees will be felled and to the size of the canopy gaps created to minimize residual stand damage and to discourage, to the extent possible, further establishment of invasive plants.

In stand 3449, a crown thinning to remove residual, low-vigor red maple and other poorly-formed individuals will be applied. The treatment is a modified thinning-from-above in that much of the older cohort of trees will be removed. Gaps created by forest management prior to City purchase allowed individuals from the younger cohort to move into the main canopy, so tree selection will favor the best of the younger cohort already present in the main canopy, reducing competition from less-desirable individuals to allow for continued vigorous growth while maintaining species diversity.

The desired conditions for this stand include maintaining vigor and diversity while improving overall quality of the growing stock. To achieve these goals, approximately 30% of the existing basal area will be removed. Trees selected for removal are large, poorly-formed, low-vigor residuals from previous management and lower-quality, younger trees in direct competition with trees that will be retained.

In both stands, due to the impending arrival of the invasive emerald ash borer (EAB) insect, all living ash trees will be marked for removal to salvage commercial value and to slow the build-up of EAB populations in the area. This action is consistent with the statewide strategy to Slow Ash Mortality (SLAM).

Harvest Plan

Harvesting work will be managed under a DEP timber sale contract. Harvesting will take 6-8 weeks, and may occur intermittently over a period of 6 months or more depending on weather conditions. Harvesting will only occur when soils are dry or frozen to minimize the likelihood of erosion or significant rutting. Due to presence of potential habitat for the endangered Indiana bat, harvesting will only occur between October 1 and March 31. Because of this restriction, harvesting may occur over two harvesting windows. If more than one harvesting window is required, the project area will be fully stabilized while suspended for the intervening spring and summer.

Access to the project area is from Dixon Road and Lockwood Lane in Carmel, NY. Lockwood Lane is a historic, dirt town road that was purchased by the City as part of the land acquisition process. It is currently blocked at both ends where it meets maintained town roads, and is impassible by on-road vehicles in multiple locations along its length.

The landing for the harvest will be located adjacent to Lockwood Lane approximately 300 feet west of its intersection with Dixon Road. The haul road, skid trails and landing cover approximately 2.6 acres of the 75 acre project area, or approximately 3.5%. Because the landing, haul road and a major portion of the skid trail system are located outside the harvest area, total project area was used for this calculation. Within the 45 acre harvest area, approximately 1.5 acres are covered by the skid trail system, approximately 3.3%.

	Haul roads	Skid trails	Landings
Average Width (ft)	12	10	50
Total Length (ft)	300	10,250	190
Surface Area (sq. ft)	3,600	102,500	9,500

Equipment used for transporting cut trees from the stump to the landing would be restricted to a cut-to-length system (i.e. forwarder only) due to the height of the trees to be harvested. At over 100 feet tall, tree-length skidding would result in an unacceptable amount of soil disturbance and significant potential for residual stand damage.

Felled trees will be topped and delimbed where they are felled to assist with maintaining soil productivity. Limbs and tops will be used to stabilize skid trails as necessary.

All trees cut on the site will be selected and marked by a DEP Forester. To ensure that only marked trees are cut, trees will be marked with paint in two places: 4.5 feet up the stem and where the stem meets the ground. When trees are cut, the latter mark will remain on the stump, and the DEP Forester will check for those marks during inspections. The contract will establish penalties for any theft of or damage to unmarked trees.

No phasing is necessary for this harvest.

Resource Protection Plan

Resource protections implemented during this project will comply with the requirements of the *Conservation Practices and Process for DEP Forest Management Projects (CPs)*.

Waterbodies, Wetlands and Watercourses

The project was designed to minimize impacts to waterbodies, wetlands and watercourses. The harvest area is immediately adjacent to Barrett Pond, which is classified as a permanently-flooded, limnetic lacustrine wetland with an unconsolidated bottom (L1UBH) in the National Wetlands Inventory, and includes three onsite and three offsite wetlands, and one perennial and one intermittent stream. One of the offsite wetlands is identified and mapped by the New York State Department of Environmental Conservation (DEC) as freshwater wetland (FWW) LC-41.

Waterbodies, wetlands and stream channels, encompassing all area of the bed and banks, are exclusion zones (EZs) that will not be disturbed during the project. No equipment will be allowed to enter these areas at any time except at planned stream crossings. No wetland crossings will occur.

One hundred foot-wide special management zones (SMZs) that restrict forest management activities will be implemented around all of the identified water features. Restrictions in the SMZs vary based on the feature being protected as follows:

1. Wetlands and Waterbodies (other than reservoirs): Basal area removal limited to 25%; machine entry into SMZ only during dry or frozen soil conditions; trees will be winched out where necessary; trees will not be felled into wetlands or waterbodies; compaction and disturbance will be minimized.
2. Streams: Basal area removal limited to 50%; no work will occur within the bed or banks except to install planned crossings; no tops or slash will be left in streams.

Of the three onsite wetlands, two are small inclusions associated with the perennial stream and occupy only 0.06 acres. They will be protected as part of the stream bed and banks and are not separated out for the purposes of determining SMZs. The third onsite wetland, a sparsely forested red maple swamp, is approximately one acre in size with approximately half of the wetland falling inside the project area, and will be protected with the SMZ described above.

No disturbance will occur within the SMZs for two of the three offsite wetlands. Harvesting will occur on less than one acre of the SMZ for the third offsite wetland, FWW LC-41, and will be limited as described above. FWW LC-41, and its 100-foot adjacent area are regulated by DEC,

but partial tree removal in a wetland adjacent area (WAA) does not require a DEC permit. The majority of this 30-acre wetland and its WAA are outside the harvest area.

A perennial stream, the outflow from Barrett Pond, runs from west to east across the project area. The stream is classified as Class A (TS) by DEC. The TS standard denotes a trout-spawning stream. The Waters Index number for the stream is H-31-P44-23-P67-5. The stream enters the West Branch Reservoir approximately 1,600 feet east of the project area boundary. In addition to the EZ and SMZ protections described above, to protect trout habitat, tree retention will be increased on the south side of the stream to minimize water temperature increases.

The stream will be crossed in only one location at the western end of the project area. The crossing is on an existing, historic dirt road with an established culvert crossing. Because the culvert is severely degraded, a prefabricated, portable skidder bridge spanning the entire crossing, approximately 30 feet, will be laid across the existing culvert during use. The portable bridge will be removed at the completion of the harvest. Disturbance to the bed and banks of a stream with the T or TS standard is prohibited by DEC from October 1 to April 30. Since the stream will be crossed on an existing crossing only, no disturbance to the bed or banks is anticipated.

A small, intermittent stream, the outfall from the forested red maple wetland, flows north of and parallel to the perennial stream across the project area, and joins the perennial stream approximately 300 feet before it enters the West Branch Reservoir. The intermittent stream is not mapped by DEC and has no associated Waters Index number. A small pole ford will be installed on this stream to access the 1.5 acres of the harvest area north of the stream. The ford will be installed during low flow, dry or frozen conditions. The stream channel at the ford location is approximately 6 feet wide and the banks are between 6 and 12 inches in height. Approaches are gently sloped, and the stream bottom is a hard mixture of rock, gravel and soil. The pole ford will be installed just prior to and removed immediately after harvesting on the north side of the stream. Both approaches will be seeded and mulched as necessary after use to prevent sedimentation of the intermittent stream.

In general, skid trails are not permitted in SMZs. However, due to site limitations, the overlapping SMZs for the perennial stream and the forested red maple wetland is the only possible location for a skid trail to access the harvest area north of the perennial stream, an area of approximately 7 acres. Installation of a new skid trail in an SMZ is a variance from the CPs. In order to protect the wetland and the stream, silt fence will be installed and properly toed-in on both sides of the trail where it travels between the wetland and the stream to minimize trail width and prevent sedimentation. Logging slash will be used to armor the trail's surface. When use of the trail is complete, slash will be removed to the extent practicable and the surface will be smoothed to remove any ruts if necessary. The trail will be seeded with a native seed mix and mulched. Silt fence will be removed after the trail stabilizes with vegetation or organic matter.

With the implementation of the proposed protection measures, no significant adverse impacts to waterbodies, wetlands, or watercourses are anticipated as a result of the project.

Sediment & Erosion Control

The harvest area is generally moderately sloping with elevations ranging from 680 to 820 feet. Soil types in the harvest area consist primarily of Paxton fine sandy loams (61%) and Charlton loams (25%). Other soil types present include Sutton loams (8%) and Leicester loams (6%). In general, these are very stony, moderately deep, moderately well-drained sandy loam soils. All soils except for Charlton are identified as seasonally wet. Erosion hazard is classified as slight to moderate depending on slope. Areas with slopes greater than 15% are classified as severe erosion hazards. Sixty-five percent of the harvest area has slopes less than 8%, 29% has slopes between 8% and 15%, and 6%, or 2.5 acres, has slopes greater than 15%. A 300-foot section of one skid trail is located in the area with slopes greater than 15%. However, the orientation of the trail is such that its slope is significantly less than 15%, and waterbars will be installed to divert flow off the trail surface along this section.

Best Management Practices (BMPs) to prevent erosion and sedimentation will be implemented according to the CPs and the *New York State Forestry Best Management Practices for Water Quality BMP Field Guide* wherever necessary to prevent erosion and sedimentation. Locations of specific practices that will be used in the project can be found on the attached project map. The practices that will be implemented include the following:

1. Preplanning and flagging the landing area and skid trail network to limit the total land area occupied to the minimum necessary to access the site, to minimize trail slope, and to avoid poorly-suited soils.
2. Armoring skid trails with slash where necessary and suspending use during saturated, unfrozen soil conditions to minimize rutting.
3. Closing skid trails as areas of the harvest are completed rather than closing them all at the end of the harvest. Skid trail closure will include smoothing rutted portions of trails to prevent channelization of runoff, installing permanent waterbars to divert flow from trail surfaces, and seeding with a native seed mix and mulching as required.
4. Installing temporary waterbars as necessary prior to significant storm events.
5. Installing properly toed-in silt fence along portions of two skid trails as indicated on the project map. Silt fence will be inspected and maintained on a regular basis and after rainfall events to ensure proper function. Installation will be corrected and damaged fabric or posts will be replaced as soon as practicable.
6. Smoothing, seeding with a native seed mix and mulching the landing area at harvest completion to ensure adequate drainage and to rapidly stabilize exposed soil.
7. Seeding with a native seed mix and mulching the approaches to the intermittent stream crossing to avoid sedimentation.
8. Stabilizing approximately 300 feet of Lockwood Lane from Dixon Road to the landing by grading, installing geocell confinement or geotextile fabric, and covering/filling with at least 6 inches of screened 4"+ stone to prevent erosion and tracking of dirt onto Dixon Road.

Additional BMPs will be installed if necessary during the harvest to prevent erosion.

With the implementation of the proposed protection measures, no significant adverse impacts to soils are anticipated as a result of the project.

Closure Plan

To close the project area, any rutted sections of skid trails or the landing will be smoothed. BMPs will be implemented as per the attached map and description above, including waterbars, seeding with a native seed mix and mulching on steep sections of the skid trail system, and seeding with as native seed mix and mulching of the landing and stream crossing approaches. Silt fence installed as part of the harvest will be removed after disturbed soils stabilize with vegetation and/or organic material (e.g. fallen leaves).

The access road would be permanently blocked with large boulders after completion of the harvest to prevent unauthorized vehicle entry.

Threatened and Endangered Species

The U.S. Fish and Wildlife Service (USFWS) and DEC were both consulted regarding potential impacts to listed species that could result from the project work. Both agencies determined that the project as proposed will not result in “take” of any listed species. The species requiring consideration, and the measures that will be implemented to protect them are as follows:

1. Bald Eagle (*Haliaeetus leucocephalus*) Bald and Golden Eagle Protection Act: Suitable habitat for Bald Eagle does not occur within the project area, but does occur in the general vicinity. The closest known nest (Bog Brook Reservoir; nest NY114) is more than 7.5 miles from the project site. Conservation measures that will be implemented include timing the harvest for winter months and leaving undisturbed all white pine trees and trees immediately adjacent to waters open year-round. Therefore, the project is not anticipated to affect Bald Eagle.
2. Indiana bat (*Myotis sodalis*) Federal Endangered: Suitable habitat for Indiana bat occurs within the project area, though no individuals have been observed. The project site is more than 30 miles from the closest hibernaculum known to DEP. Conservation measures that will be implemented include conducting all work between October 1 and March 31 when bats are close to their hibernacula or hibernating and leaving standing dead trees whenever possible, especially those with exfoliating bark. Therefore, the project is not anticipated to affect Indiana bat.
3. Northern long-eared bat (*Myotis septentrionalis*) Federal Threatened: Suitable habitat for northern long-eared bat occurs within the project area, though no individuals have been observed. Incidental take of Northern long-eared bat associated with forest management activities is exempted by USFWS under a 4(d) rule for non-Federal activities as long as the following criteria are met:

- a. The project will not remove any known, occupied maternity roost trees, or any tree within 150 feet of a known, occupied maternity roost tree from June 1 – July 31; and
- b. The project will not remove any trees within ¼ mile of a northern long-eared bat hibernaculum at any time of year.

Additionally, the project area does not contain any known, occupied roost trees, does not involve clear-cutting or similar harvest methods; and will employ habitat conservation measures such as time-of-year harvest restrictions and leaving standing dead trees whenever possible, especially those with exfoliating bark.

DEC further restricts forest management activities within 5 miles of a known hibernaculum and 150 feet of known roost trees. There are no known roost trees within the project site and the closest hibernaculum is more than 6 miles away. Therefore, no cutting restrictions will be required by DEC for northern long-eared bat.

The project will achieve compliance with the Endangered Species Act for northern long-eared bat by meeting the criteria for exemption under the 4(d) rule.

4. New England cottontail (*Sylvilagus transitionalis*) Federal Candidate for Listing (at time of USFWS project review): Suitable habitat for New England cottontail does not occur within or immediately adjacent to the project area. The project area consists of mature forest with an open understory that does not provide the thicket-type vegetation utilized by the habitat-specialist New England cottontail. Therefore, the project will have no effect on New England cottontail.
5. Bog turtle (*Clemmys* [= *Glypsemys muhlenbergii*]) Federal Threatened: Suitable habitat for bog turtle occurs within the project area, though no individuals have been observed. The project area includes 3 onsite and 3 adjacent, offsite wetlands. Conservation measures that will be implemented include avoiding disturbance within wetland boundaries, establishing a 100-foot special management zone around all wetlands in which tree removal will be reduced and equipment access will be minimized, and minimizing new ground disturbance within 300 feet of wetlands. Therefore, the project is not anticipated to affect bog turtle.

For additional information regarding assessment of impacts to threatened and endangered fauna species, please see the *Biological Assessment of Listed Endangered and Threatened Species in Putnam County for the Barrett Pond Forest Management Project* dated October 2012.

With the implementation of the proposed protection measures, no significant adverse impacts to threatened or endangered fauna species are anticipated as a result of the project.

Protected Plants

No protected plants are known to exist within the project area or were identified by the DEC Natural Resources Mapper or through consultation with the state. If protected plants are

encountered during harvesting, DEP's Ecological Research and Assessment Group will be contacted and protection measures implemented.

Since no protected plants are known to exist within or near the harvest area, no significant adverse impacts to protected plant species are anticipated as a result of the project.

Invasive Species

Invasive species populations in the harvest area are as expected in the East-of-Hudson watershed. Japanese barberry (*Berberis thunbergii*) was present in medium to high density, so two highly-successful herbicide treatments have been undertaken to decrease the populations ahead of harvest to reduce the risk of spread. Japanese stiltgrass (*Microstegium vimineum*) is also common in the project area and is expected to spread to some extent as a result of the harvest, though efforts will be taken to minimize transport, including timing harvest for winter months when plants are dormant and harvesting non-infested areas before infested areas to the extent practicable. Other invasive species present on the site include garlic mustard (*Alliaria petiolata*), multiflora rose (*Rosa multiflora*), and tree-of-heaven (*Ailanthus altissima*).

To minimize the spread of invasive species to or from the project area, the contractor will clean logging equipment by sweeping or scraping visible soil, woody debris, vegetation, and seeds from exterior surfaces prior to transporting equipment to or from the site.

The project area will be periodically monitored after the harvest to assess invasive species populations. Increasing populations that interfere with forest management objectives will be identified and treated as necessary.

Recreation and Open Space

The harvest area is not currently open for recreational use, so no change to public access is anticipated. The portion of the project area that contains the landing and haul road where no harvesting will occur is open for fishing, hunting and hiking. This area will be posted closed to public access until harvesting is complete and all equipment is removed. It is expected that the area will be closed for one big game hunting season. No development is planned for the project area; it will remain as forest land. Due to the short duration of the harvest activity and no change to land use, no significant adverse impacts to recreation or open space are anticipated as a result of the project.

Historic and Archaeological Resources

The New York State Office of Parks, Recreation and Historic Preservation was consulted and determined the project would have no impact on historic/cultural resources.

The project area is abandoned farm land crisscrossed by numerous intersecting stone walls. The walls were located using GPS and recorded on the project map for general awareness. In order to preserve the still-intact portions of walls, skid trail crossings have been located at existing breaks to the maximum extent possible. The contractor will be instructed to minimize damage to

stone walls during work, and to cross them with motorized equipment only at identified crossing locations.

With the implementation of the proposed protection measures, no significant adverse impacts to historic and archaeological resources are anticipated as a result of the project.

Notification Contacts

Notification contacts will be according to the Notification Plan Appendix in the most recent version of the CPs.

Permitting

No federal permits are required for this project. A Town of Kent wetlands permit will be required for work adjacent to the intermittent stream at the far northeastern end of the project area. A Town of Carmel tree removal permit will be required for removal of 11 trees in the landing area and along the main skid trail.

Conservation Practices Variances

The location of a new skid trail in overlapping SMZs for a wetland and a watercourse is a variance from the CPs. The variance and the associated mitigation measures are discussed in the Resource Protection Plan, *Waterbodies, Wetlands, and Watercourses* section above.

Additional Relevant Project Information

Additional information related to environmental review of this project under the State and City Environmental Quality Review programs (SEQRA/CEQR) is as follows:

Traffic and Noise

The project will generate a minor and temporary increase in traffic and noise in the area during operation. An estimated maximum of 4 truck trips per day, including 1 pick-up truck to transport workers and 3 tri-axle or tractor trailer trucks to transport logs and equipment, may be generated on Dixon Road while the project is active. Truck trips will be limited to normal business days/hours. Traffic will return to pre-project levels upon completion of the work. Therefore, no significant adverse impacts to traffic are anticipated as a result of the project.

Noise will increase in the project area due to the intermittent use of chainsaws, logging equipment, and trucks. However, all noise increases will be temporary and of short duration. The nearest sensitive receptors are two residences, one approximately 375 feet from the closest point of the harvest area and one approximately 375 feet from the landing. The house closest to the landing is located directly across the street from the entrance to Lockwood Lane, the haul road for the project.

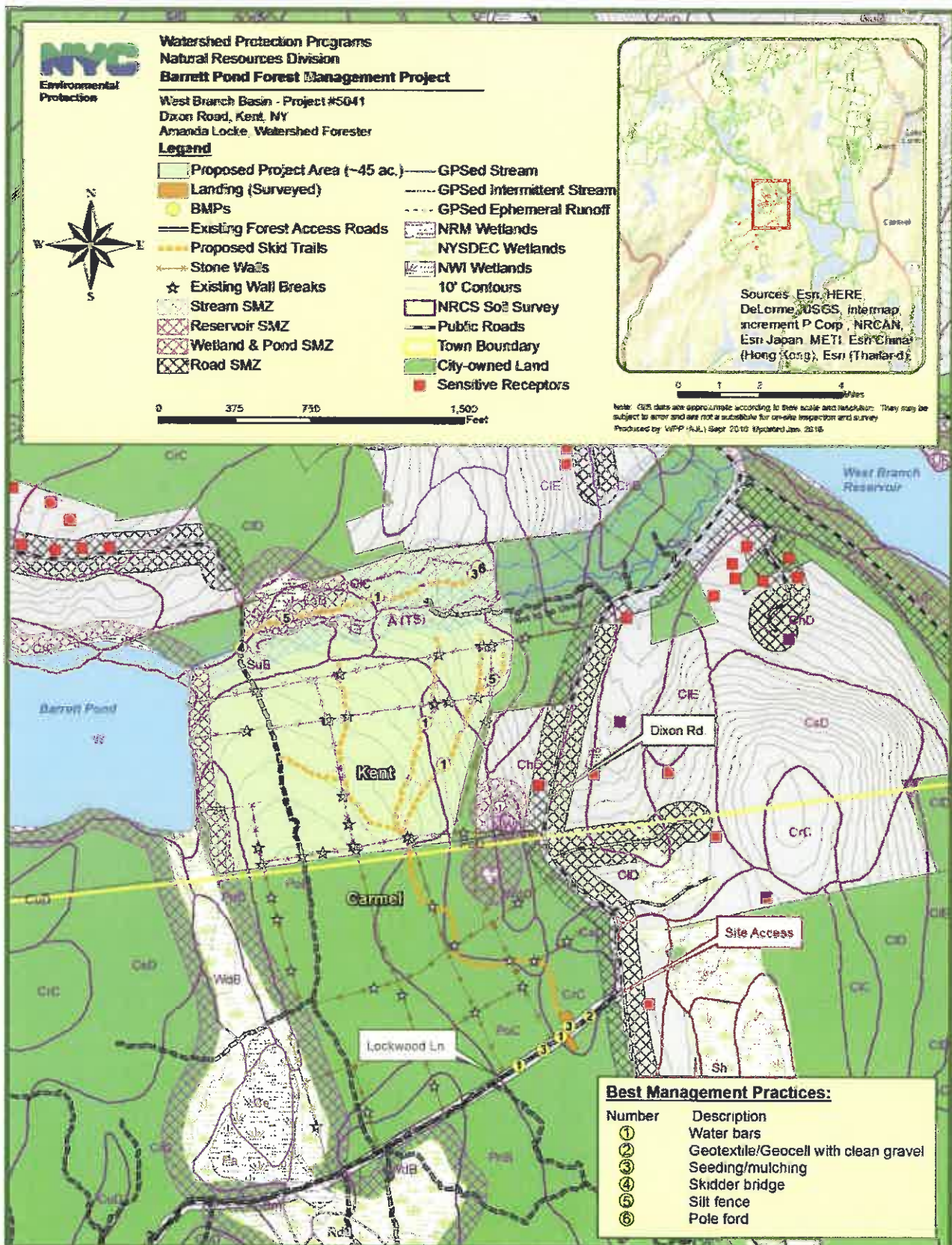
To minimize potential impacts from noise, harvest activities will be limited to the hours of 7AM to 6PM on weekdays, and 7AM to 5PM on Saturdays. Work outside these hours will be authorized by DEP only in emergency situations, such as for installing temporary soil stabilization measures in anticipation of a storm event. Short-term impacts to some neighbors may occur, but will be partially alleviated by the short duration and temporary and intermittent nature of the noise. No permanent adverse impacts to noise levels in the area are anticipated as a result of the project.

Visual Character

The project area is isolated from view by significant forested buffers from nearby public roads and an SMZ around Barrett Pond that will limit tree removal to a maximum of 25% of the existing basal area. The thinning work will increase light filtering into the forest and woody debris on the forest floor, but will not significantly alter the visual character of the area because complete forest cover will remain on site, and existing trees will grow to occupy the area freed up by tree removals. Since the harvest area is not open for public recreation, observation of the site by the public is only from afar, and the changes resulting from thinning are unlikely to be immediately obvious from a distance. As a result, no significant adverse impacts to visual character are anticipated as a result of the project.

Conclusion

Based on the foregoing discussion, the project will not result in significant environmental impacts, and no further analysis is necessary.





Watershed Protection Programs
Natural Resources Division
Barrett Pond Forest Management Project

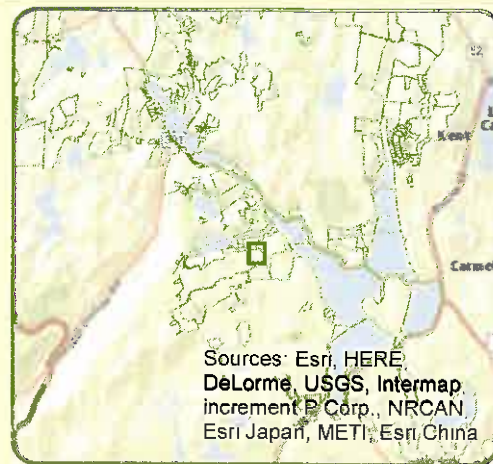
West Branch Basin - Project #5041
Dixon Road, Kent, NY
Amanda Locke, Watershed Forester

Legend

- | | |
|---------------------------------|----------------------|
| Trees to be Removed | Existing Wall Breaks |
| Landing (Surveyed) | 10' Contours |
| Proposed Project Area (~45 ac.) | Public Roads |
| Existing Forest Access Roads | Town Boundary |
| Proposed Skid Trails | City-owned Land |
| Stone Walls | |



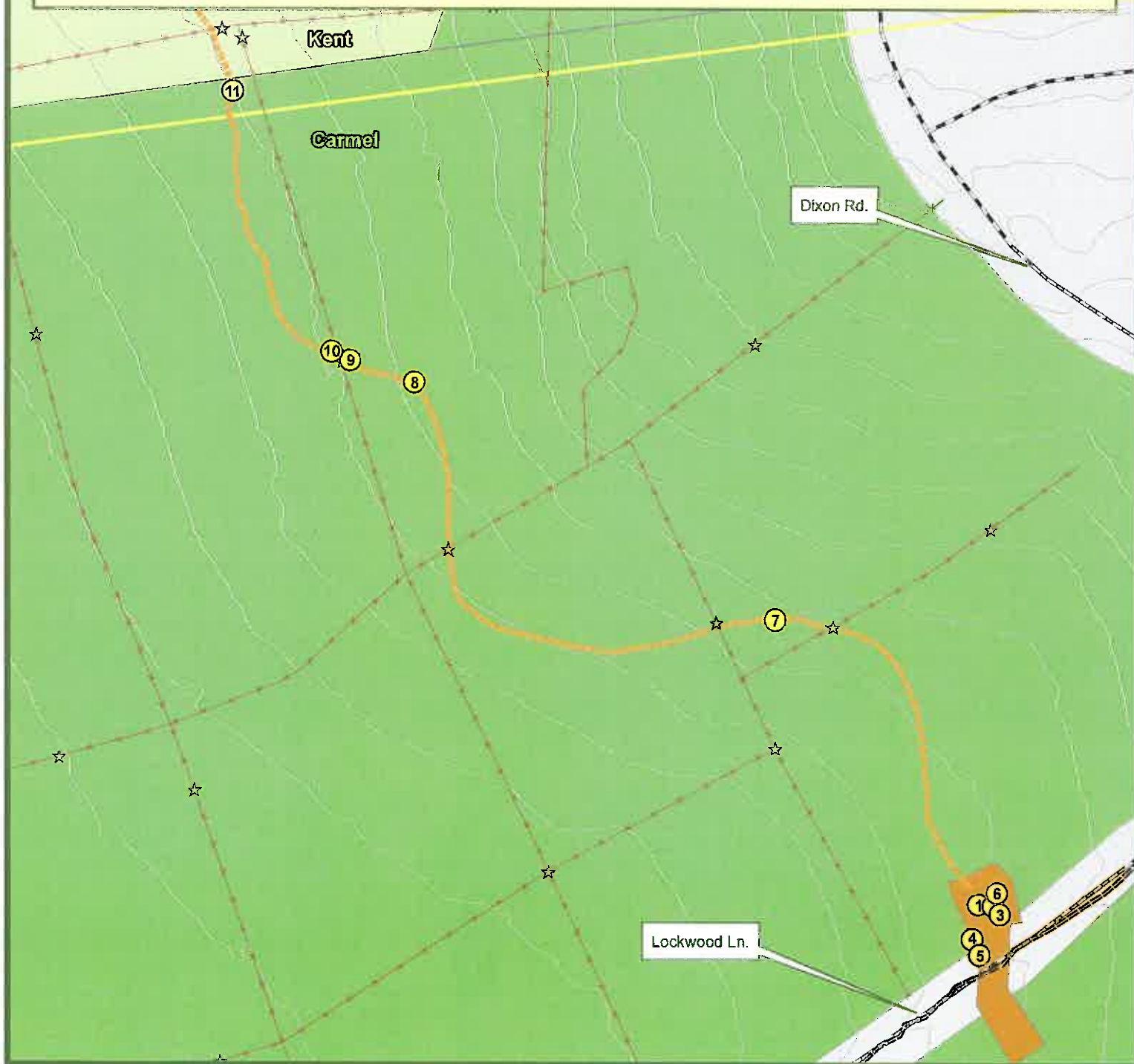
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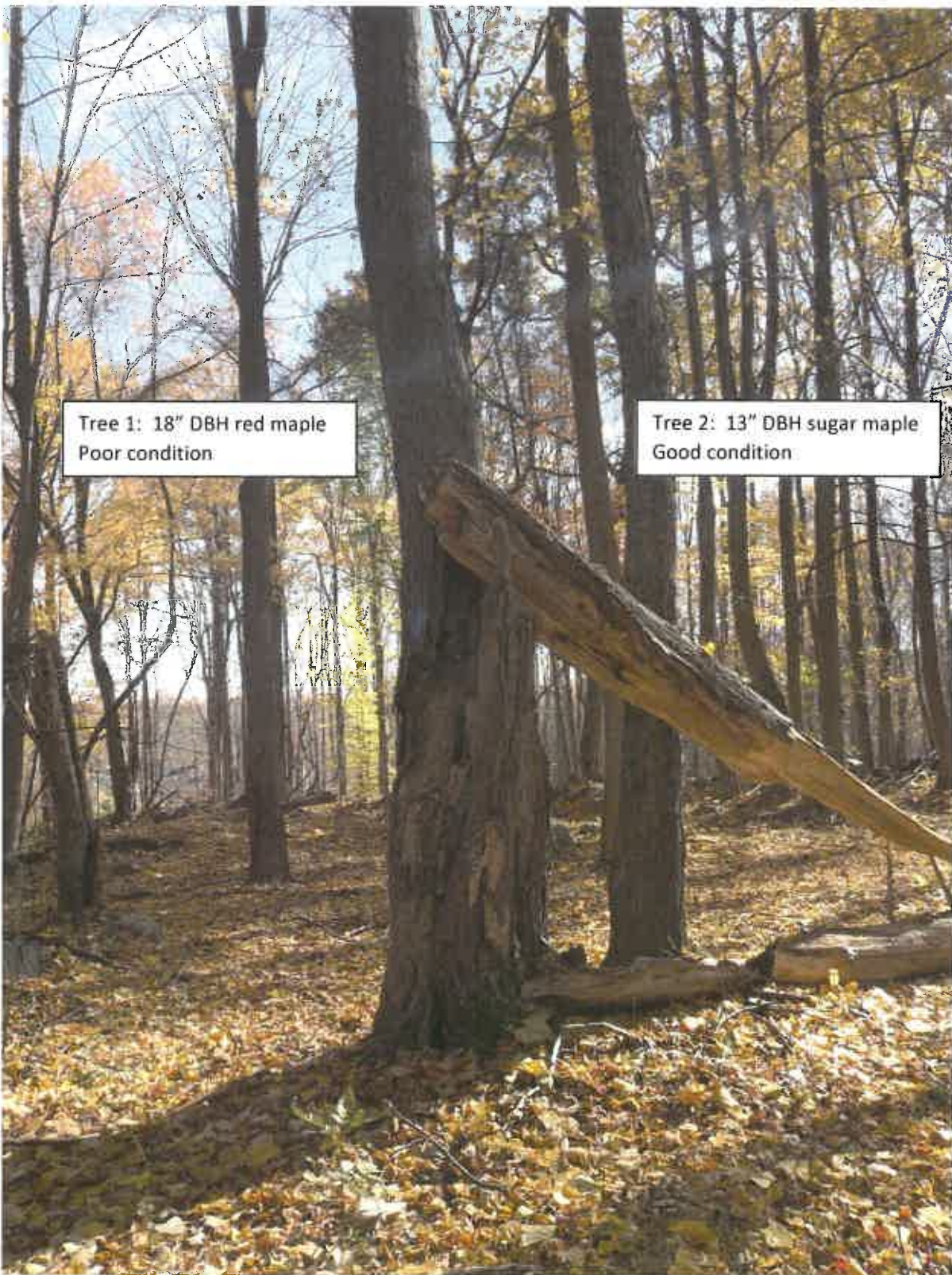
Sources: Esri, HERE,
DeLorme, USGS, Intermap,
increment P Corp., NRCAN,
Esri Japan, METI, Esri China

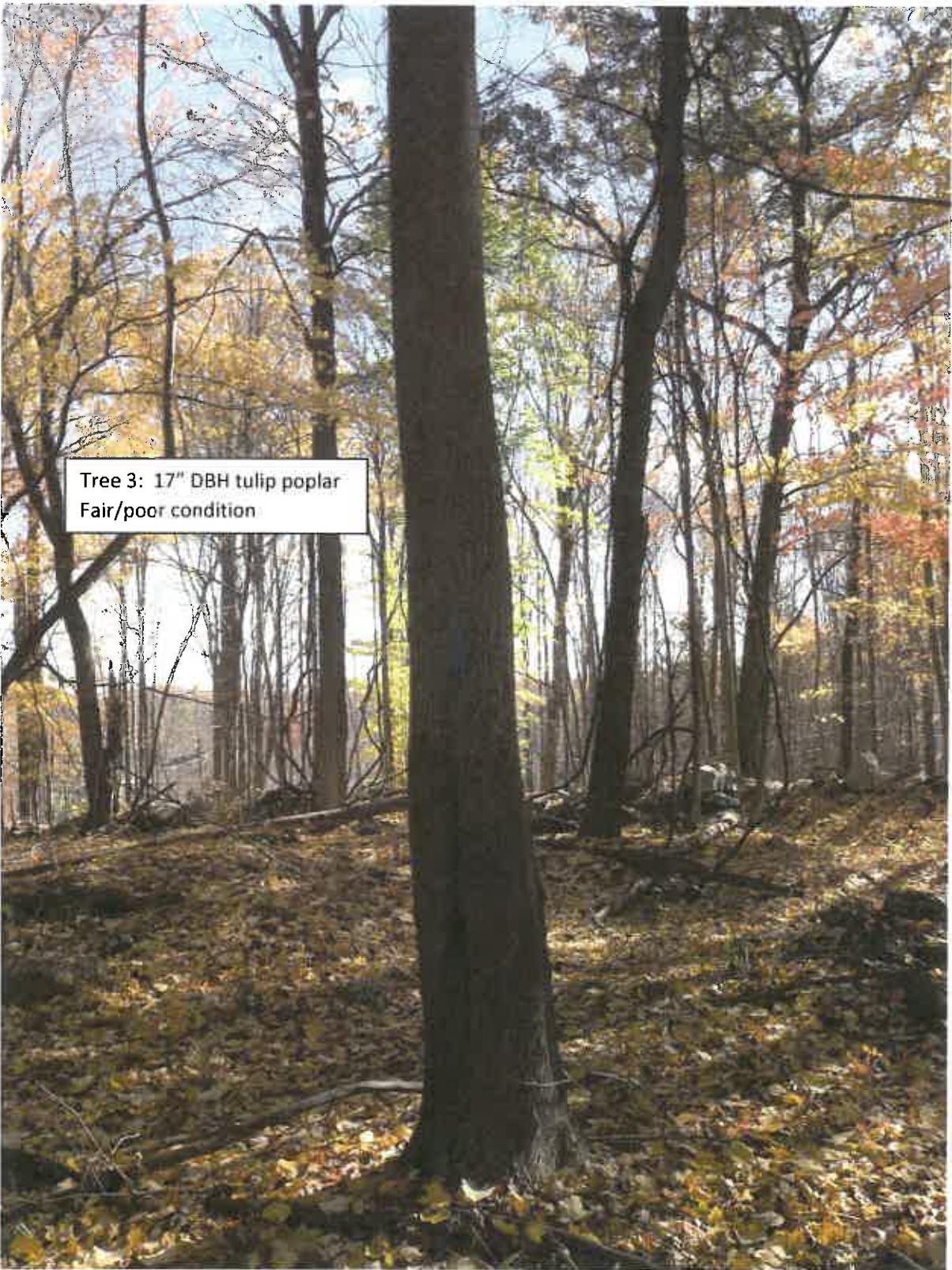
0 1 2 4 Miles

Note: GIS data are approximate according to their scale and resolution. They may be subject to error and are not a substitute for on-site inspection and survey.
Produced by: WPP (A/L) Sept. 2010; Updated Nov. 2015



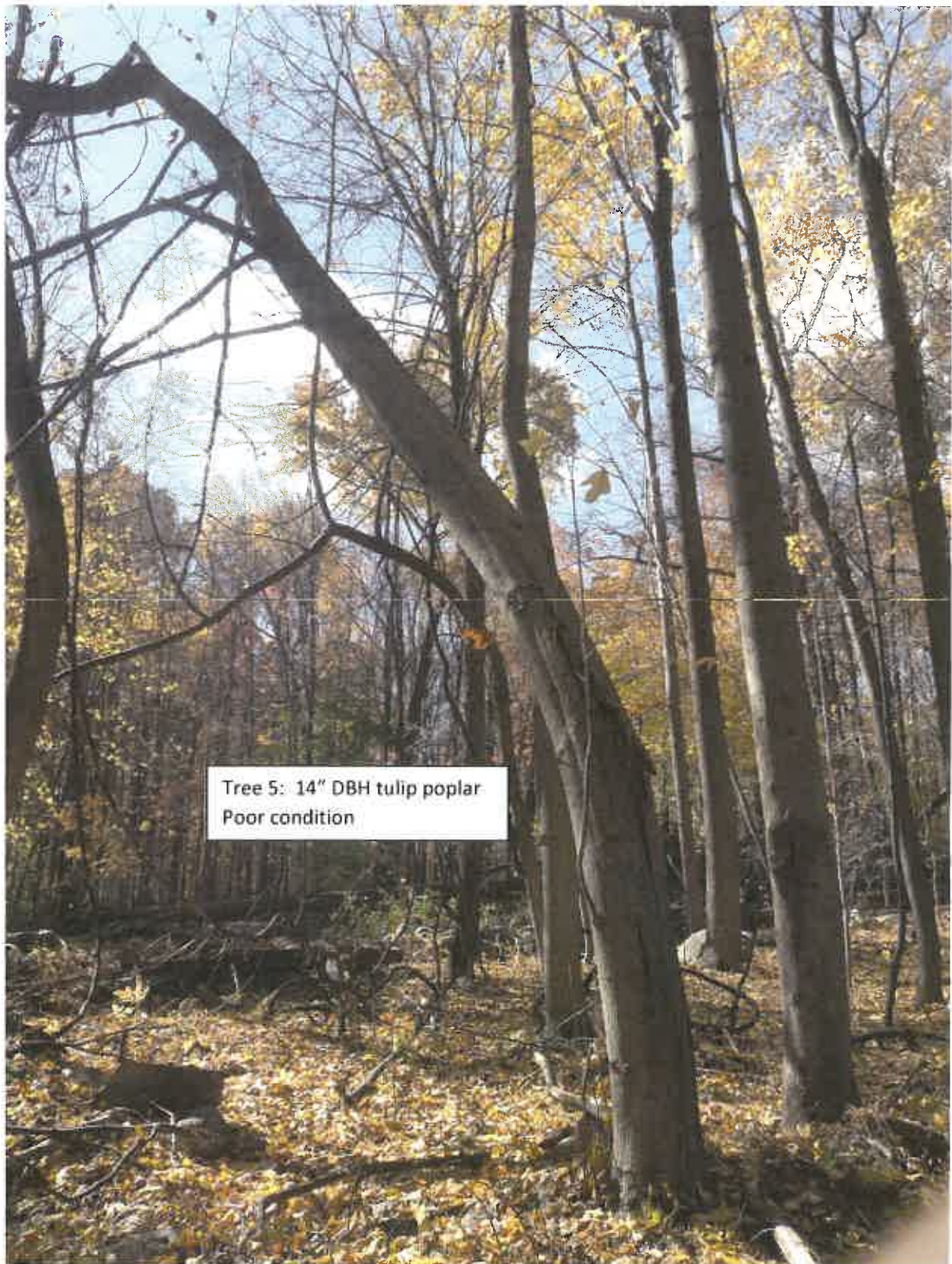
TREES TO BE REMOVED IN THE TOWN OF CARMEL
NYCDEP Barrett Pond Forest Management Project #5041



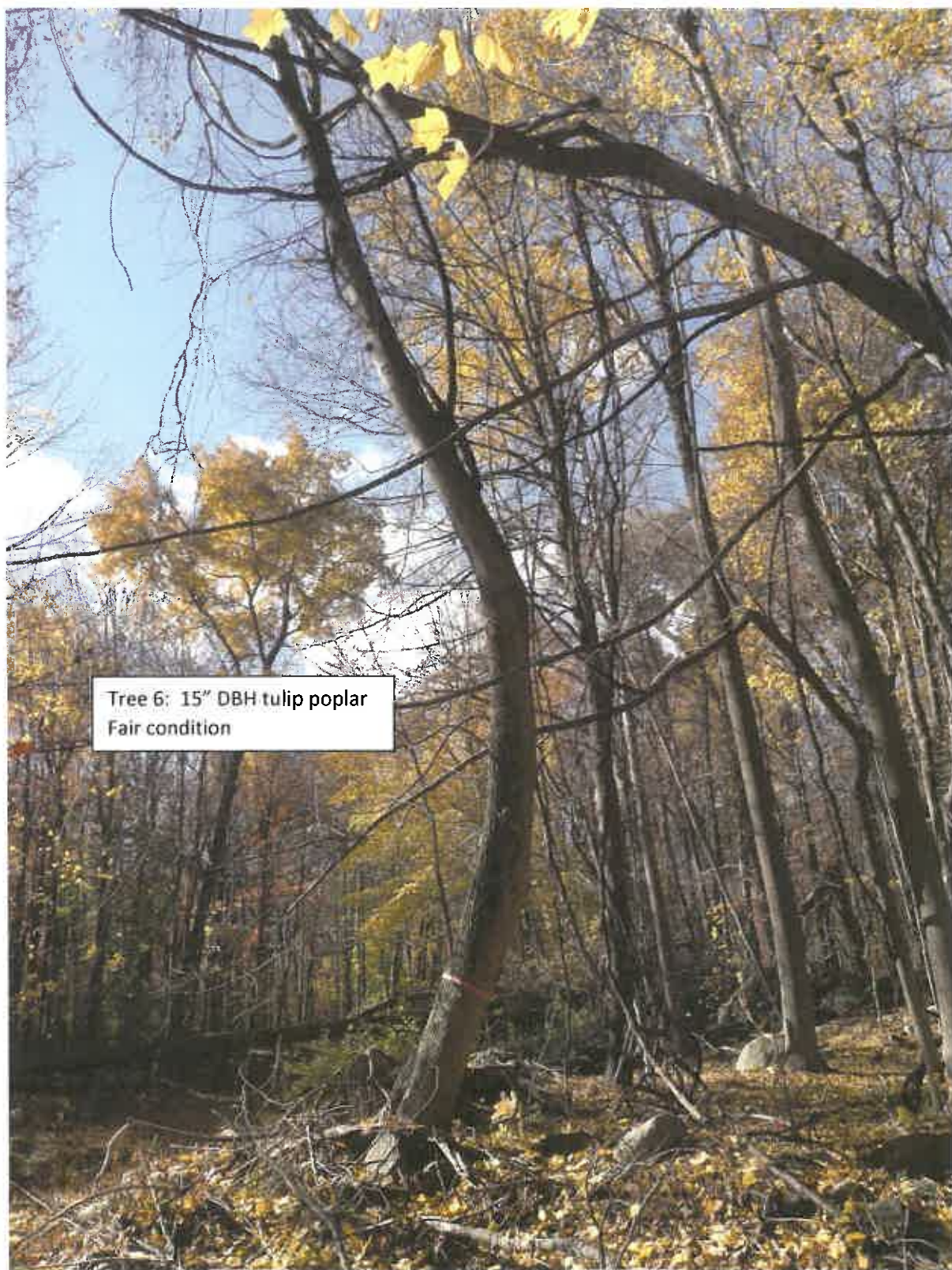




Tree 4: 15" DBH tulip poplar
Fair condition



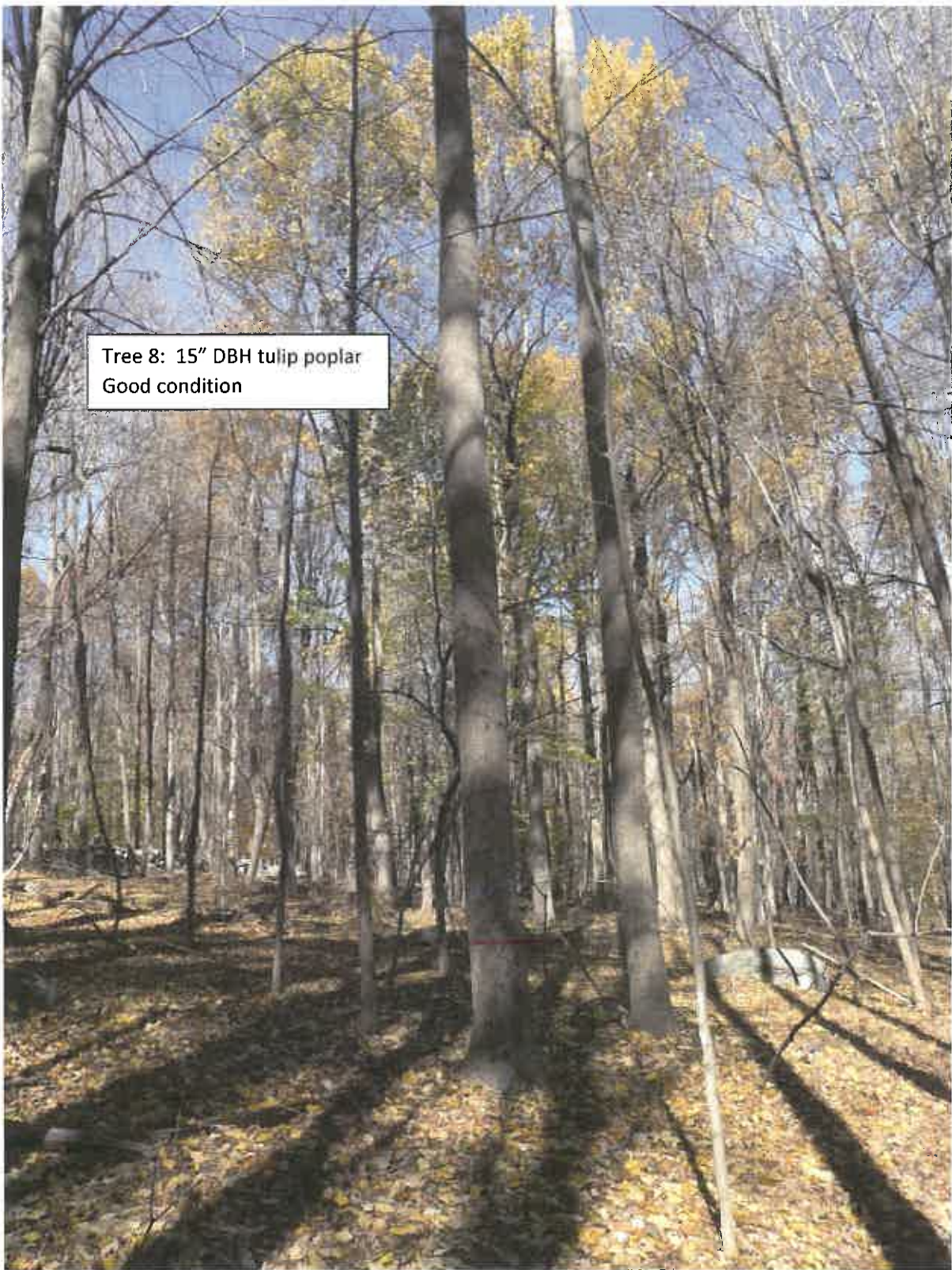
Tree 5: 14" DBH tulip poplar
Poor condition



Tree 6: 15" DBH tulip poplar
Fair condition



Tree 7: 18" DBH black birch
Good condition



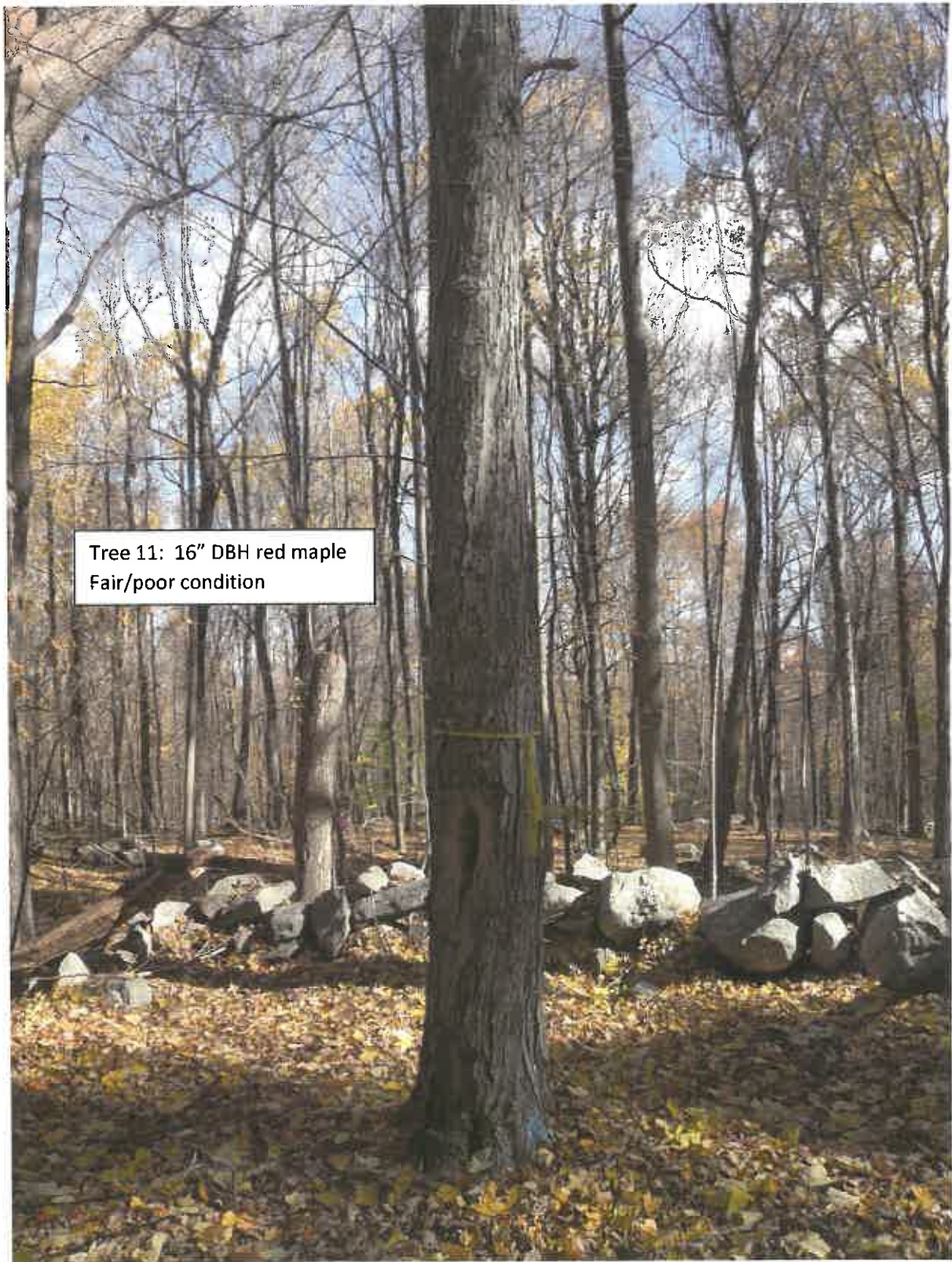
Tree 8: 15" DBH tulip poplar
Good condition



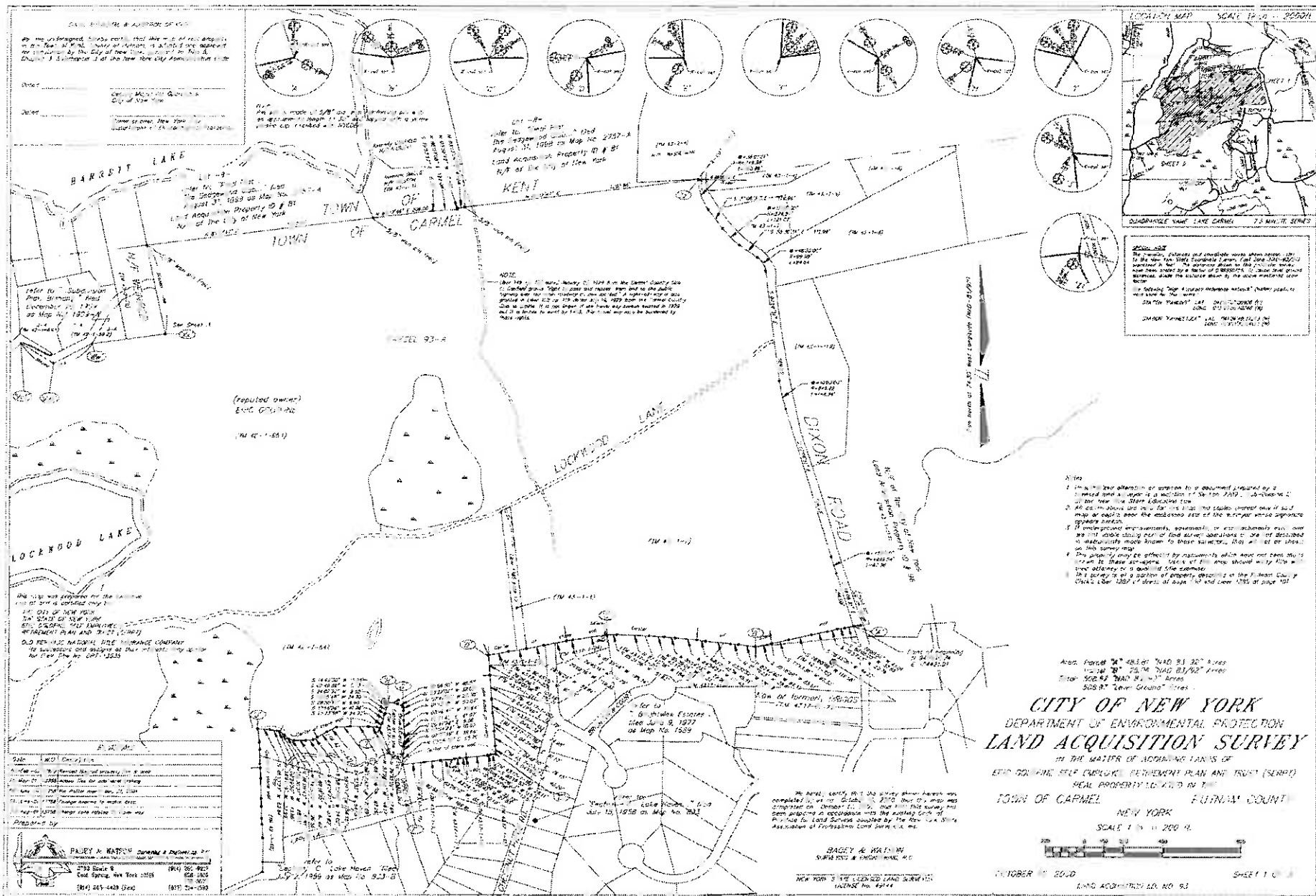
Tree 9: 14" DBH sugar maple
Good condition



Tree 10: 13" DBH tulip poplar
Good condition



Tree 11: 16" DBH red maple
Fair/poor condition





August 25, 2016

Mr. Robert Laga, Chairman
Town of Carmel Environmental Conservation Board
60 McAlphin Avenue
Mahopac, NY

Re: Pulte Homes
Carmel Centre Senior Housing
Lot #5, Terrace Drive
TM #55.14-1-11.3

Dear Chairman Laga and Members of the Board:

Pulte Homes is anticipating to start construction on Lot #5 development. The Planning Board approved Lot #5 amended site plan on September 25, 2013. A copy of the resolution is attached. The Planning Board as lead agency also reconfirmed the SEQR approval.

Putnam Engineering, PLLC is submitting the ECB application since the prior ECB approval has expired.

Enclosed please find an application, narrative, deed, \$1,000.00 and drawings:

C-120, C-130, C-150, C-151, C-153, C-160, C-210, C-330 dated
August 19, 2014.

Please do not hesitate to contact our office if you have any questions or concerns.

Sincerely,

Putnam Engineering, PLLC

A handwritten signature in black ink, appearing to read 'RJC', is written over a horizontal line.

Robert J. Cameron, Jr., R.A.

RJC/tal

Enclosures

cc: Mr. Jim Mullen, Esq.

(L01668)

ECB NARRATIVE
Pulte Homes of NY LLC, Lot #5

Pulte Homes, Lot #5 Senior Housing received an amended site plan approval on September 25, 2013 from the Planning Board for 20 single family cottage units on the north of Lot #5. The three (3) manor homes on the south were already constructed. The site plan grading, at the north of the site, is within 100 feet of a drainage channel.

There is grading necessary within the 100 foot buffer in order to grade for the building site, site utilities, road and pocket park. The area of disturbance is approximately 20,000 sq. ft. and approximately 2,000 cu yds of fill. The area will be landscaped, graded and have a walking path. There is no building or paved areas within the buffer zone.

(FM1633)

ROBERT LAGA
Chairman

ANTHONY DUSOVIC
Vice Chair

ROSE TROMBETTA
Secretary

DAVID KLOTZLE
Wetland Inspector

TOWN OF CARMEL
ENVIRONMENTAL CONSERVATION BOARD



60 McAlpin Avenue
Mahopac, New York 10541
Tel. (845) 628-1500 - Ext. 190
www.ci.carmel.ny.us

BOARD MEMBERS

Edward Barnett
Marc Pekowsky
Vincent Turano
Nicholas Fannin
John Starace

APPLICATION FOR WETLAND PERMIT OR LETTER OF PERMISSION

Name of Applicant: Pulte Homes of New York, LLC
150 Allen Road, Suite 303
Address of Applicant: Basking Ridge, NJ 07920 Email: jim.mullen@pultegroup.com

Telephone# 908-848-2032 Name and Address of Owner if different from Applicant:

Property Address: Terrace Drive, Lot 5 Tax Map # 55.14-1-11.3
Agency Submitting Application if Applicable: _____
Location of Wetland: CROSSES NORTHWEST PORTION OF LOT
Size of Work Section & Specific Location: +/- 20,000 SF WITHIN 50' - 100' OF CHANNEL
Will Project Utilize State Owned Lands? If Yes, Specify: No

Type and extent of work (feet of new channel, yards of material to be removed, draining, dredging, filling, etc). A brief description of the regulated activity (attach supporting details).

APPROX 20,000 SF OF DISTURBANCE AND APPROX 2000 CU.YDS OF FILL TO
ACHIEVE GRADING FOR APPROVED SITE PLAN.

Proposed Start Date: AUG. 2016 Anticipated Completion Date: AUG 2017 Fee Paid \$ 1000.00

CERTIFICATION

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief, false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. As a condition to the issuance of a permit, the applicant accepts full legal responsibility for all damage, direct or indirect, or whatever nature, and by whomever suffered, arising out of the project described here-in and agrees to indemnify and save harmless the Town of Carmel from suits, actions, damages and costs of every name and description resulting from the said project.

PULTE HOMES OF NEW YORK, LLC

James P. Mullen
SIGNATURE
James P. Mullen
Director of Land Entitlements

8/16/16
DATE

**RESOLUTION OF THE
PLANNING BOARD OF THE TOWN OF CARMEL
#13-17 September 25, 2013**

Tax Map #55.14-1-11.3

**CARMEL CENTRE SENIOR HOUSING LOT 5
PULTE HOMES
FINAL SITE PLAN APPROVAL**

WHEREAS, an application for amended final site plan approval has been submitted by Pulte Homes of New York, Bernardsville, NJ (hereinafter referred to as the "Applicant"); and

WHEREAS, the site is located at Terrace Drive, Carmel and is within C-BP – Commercial Business Park Zoning District and is more specifically known and designated as Tax Map #55.14-1-11.3 (hereinafter referred to as the "Site"); and

WHEREAS, The proposal (hereinafter referred to as the "Project") involves amending the original site plan approved on September 24, 2008 to eliminate both of the three-story multi-family buildings. As a result of this, the number of flats that were formally available in this building type will be reduced from 53 to 0. This proposal also involves the introduction of 20 cottage units. The number of previously approved manor homes remains unchanged at 3. In total 23 dwelling units are proposed. Associated modifications are also proposed to the site roadways, parking areas and recreational amenities; and

WHEREAS, the amended final site plan consists of the following drawings prepared by Putnam Engineering, PLLC, Brewster, dated June 13, 2012, last revised September 17, 2013 consisting of the following drawings (hereinafter referred to as the "Amended Final Site Plan"):

G-100	Cover Sheet
C-110	Existing Conditions and Removals Plan
C-120	Amended Site Layout Plan
C-130	Amended Grading & Drainage Plan
C-140	Amended Utilities Plan
C-150	Landscape Mitigation Plan
C-151	Amended Landscape Plan
C-152	Typical Cottage Unit Planting Plans
C-153	Enlarged Pond Plans
C-154	Irrigation Shop Drawing
C-155	Lighting Plan
C-160	Erosion & Sediment Control Plans
C-210	Driveway & Utility Profiles
C-211	Utility & Retaining Wall Profiles
C-310	Details
C-320	Details

C-330	Retaining Wall & Miscellaneous Details
A-110	Typical Building Plans & Elevations
SP-1	Section Plan of Site Plan

WHEREAS, on May 29, 2008, the Zoning Board of Appeals granted the necessary variance to allow for the development of the Site as proposed; and

WHEREAS, a public hearing was held pursuant to Section 276 of the Town Law on the proposed site plan at Town Hall, Mahopac. All persons wishing to speak on the application were provided an opportunity to be heard; and

WHEREAS, the Planning Board has considered the Amended Final Site Plan in accordance with the provisions of Town Law 274-a(6) and has reviewed the Senior Recreation and Recreation Fee Study prepared for the Town of Carmel dated December 2005, revised March 2006; further, the Planning Board has made an exhaustive review of the recreational amenities provided on site and the potential impact that the proposed site plan development will have on the existing recreational amenities within the Town as well as the anticipated future impact that the proposed residential development will have on the Town; and

WHEREAS, the Planning Board has determined that the proposed Amended Final Site Plan, will contribute to the existing unmet need for additional park and recreational facilities in the Town, which cannot be met on the subject property in accordance with the provisions of the Code of the Town of Carmel, given its size and characteristics, and on that basis, has determined that the best interests of the Town and future residents of the proposed subdivision will be better served by requiring a cash payment to be earmarked for park, playground and / or other recreational purposes.

WHEREAS, the Planning Board finds that the recreational amenities contained within the proposed Site, while adequate to meet the special exception use statutory zoning requirements of section 156-39 B. (11), are inadequate to fully provide for the current and future recreational demands for the proposed development and hereby imposes a recreational fee of \$3,500 per unit or eighty thousand five hundred dollars (\$80,500), as prescribed in the current Town of Carmel Fee Schedule in lieu of land sufficient for the park and recreational needs of the proposed development consistent with the statutory provisions of Town Law 274-a(6); in imposing the foregoing recreational fees, the planning Board has taken into account:

1. The demographic characteristics of the proposed residential development, based upon the type of housing planned;
2. The recreation needs of the anticipated residents as vetted by the Planning Board at the Public Hearings held in connection with this application;
3. The recreation opportunities to be provided as part of the development; and
4. The overall recreation resources available within the Town of Carmel.

WHEREAS, the Planning Board finds that, based upon its analysis of the foregoing, there exists a substantial nexus between the proposed residential development and its potential impact on the Town's existing and future recreational amenities and that based upon the Town's projected

Carmel Centre Senior Housing (Pulte Homes)

Lot 5

Final Site Plan Approval

Resolution # 13-17

September 25, 2013

growth in its senior population, together with other demographic groups, it is anticipated that recreational needs will continue to increase, especially as they relate to the senior population.

WHEREAS, the Planning Board has considered the Amended Final Site Plan, and all other materials submitted by the Applicant in support of this proposal, the comments of Town staff and consultants made via memoranda to the Planning Board (which memoranda are incorporated herein by reference) the verbal commentary made during the entire course of the Planning Board's meetings pertaining to the review for Amended Final Site Plan approval and evaluation of the proposed action, and the comments of the public; and

WHEREAS, the requirements for final site plan approval contained in the Town of Carmel Zoning Ordinance have been met by said application for Amended Final Site Plan approval, with the exception of those items waived per §156-61 of the Town of Carmel Zoning Code; and

NOW THEREFORE BE IT RESOLVED, that the Project involves modifications to the originally approved Site Plan that fall within the thresholds established in the SEQR Findings Statement adopted by the Planning Board serving as Lead Agency on September 1, 2004. Therefore, the Planning Board hereby finds that the Amended Final Site Plan will not result in any new, additional or unforeseen adverse environmental impacts, and that the original SEQR Findings adopted for this project remain in full force and effect.

BE IT FURTHER RESOLVED, that the application of approval of the Amended Final Site Plan submitted by Pulte Homes of New York, Bernardsville, NJ, as depicted on the plans identified above is hereby granted subject to the following conditions:

1. This Amended Final Site Plan approval authorizes the Applicant to undertake only the activities specifically set forth herein, in accordance with this resolution of approval and as delineated on the Amended Final Site Plan as endorsed by the Planning Board Chairman. *Any change in use, alteration or modification to the Amended Final Site Plan, or to the existing or approved facilities and site shall require the review and approval by the Planning Board of the Town of Carmel.*
2. The Applicant shall furnish the Planning Board with the required number of sets of the Amended Final Site Plan as described above, for endorsement by the Planning Board Chairman, subject to the satisfaction of all approval conditions, which shall then be recorded as the approved Amended Final Site Plan.
3. No changes, additions, erasures, modifications or revisions shall be made to the Amended Final Site Plan following endorsement by the Planning Board Chairman. Any changes detected after endorsement of the Amended Final Site Plan as final, shall result in the immediate termination and revocation of this resolution of approval, thereby making it null and void.
4. Authorized issuance of a Building Permit by the Building Inspector shall be fully based on, and in accordance with this resolution of approval and the signed and filed Amended

Final Site Plan. The Building Inspector shall include reference to the Amended Final Site Plan and this resolution of approval on any Building Permit.

5. The Engineering Department has determined that the existing performance bond posted for this project is adequate, and no amendment to that bond is required.
6. The Engineering Department has determined that the existing engineering fee originally posted for this project is adequate, and no amendment is required.
7. All easements and maintenance agreements shall be reviewed and approved by the Planning Board Attorney and recorded in the Office of the Putnam County Clerk.
8. This approval authorizes the construction of 20 cottage units and 3 manor homes at the Site.
9. No Certificate of Occupancy shall be issued for any dwelling unit on this Site until all roadways, site infrastructure, recreation areas, including the Community Building, and common area landscaping has be completed. No sectional development shall be permitted on this Site.
10. All units shall be occupied exclusively by persons age fifty-five (55) and above and the spouse of any such person or the adult dependent handicapped or disabled child of any such person. This shall be recorded as a deed restriction.
11. Sewer service shall be provided by a connection to the Carmel Sewer District #2 facilities located in Terrace Drive. Water service shall be provided by a connection to the Carmel Water District #2 facilities located in Terrace Drive.
12. All buildings shall contain a fire suppression system.
13. A minimum of 16,146 square feet of recreational space shall be provided and maintained, including the Community Building.
14. The pocket park shall include a gazebo, benches and picnic tables, as depicted on drawing C-120.
15. The Community Building shall be provided with full utility services, heating and air conditioning, and shall be constructed in accordance with the Amended Final Site Plan.
16. All sidewalks shall meet the applicable ADA requirements.
17. Pedestrian crosswalks, designed in conformance with NYSDOT standards shall be provided.

18. The walking trail shall be constructed as a cinder surface over subbase (NYSDOT item 304.02) and shall not exceed 5% in grade for portions included within the Site's required open space.
19. The Applicant shall prepare, cause to be executed and file with the Putnam County Clerk's office a "Stormwater Control Maintenance Agreement" as specified in §156-85.
20. All comments of the Town Engineer shall be satisfactorily addressed.
21. A Homeowners Association (HOA) shall be responsible for the management of all common facilities associated with the Project.
22. The building shall be designed in accordance with all New York State Building and Fire Code requirements.
23. All comments of the Carmel Fire Department shall be satisfactorily addressed.
24. The hours of construction activity shall take place in conformance with the applicable Town Regulations.
25. Prior to the commencement of any site work or construction activity, erosion and sedimentation controls shall be installed in accordance with the Amended Final Site Plan and the Erosion and Sediment Control Plan (drawings C- 120 and C-160) and shall be subject to continual inspection and maintenance and additional controls as may be required by the Town Engineer and/or Building Inspector. Stormwater runoff shall be controlled at all times during construction to prevent erosion of the site area under construction and to prevent sedimentation and dust dispersal upon areas not under construction, particularly off-site locations. Silt fencing, hay bales, anti-tracking aprons and all other required erosion and sedimentation control measures shall be regularly inspected and maintained in an orderly and functioning manner. Additional supplies of silt fencing and hay bales shall be kept on the site during construction for immediate use if needed.
26. All stormwater management improvements shall be installed and certified as adequate to the satisfaction of the Engineering Department. The approved final Stormwater Pollution Prevention Plan (SWPPP) and a NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit are hereby made part of this approval, as required.
27. All site utilities shall be installed underground.
28. All improvements to the on-site water distribution system shall obtain the review and approval of the PCDOH and shall be designed in accordance with PCDOH standards.
29. Where found to be practicable, the Applicant shall employ the use of low flow fixtures in strict accordance with all local building codes to help reduce the amount of water

required and sewage collected, with a goal of achieving at least a 20% reduction over baseline conditions.

29. The Applicant shall implement, where found to be practicable, appropriate measures to reduce carbon footprint of the Site, including measures such as:
- ☐ All buildings shall be designed to comply with the New York State Energy Conservation Code and the New York State Building Code.
 - ☐ Exterior walls and the roofs of the proposed buildings shall contain thermal insulation to reduce heat loss during the winter and heat gain in the summer.
 - ☐ Energy efficient devices, including but not limited to double-paned windows and water conservation plumbing fixtures should be provided in the buildings.
 - ☐ High efficiency Energy Star rated consumer appliances, lighting fixtures and building mechanical systems should be utilized.
 - ☐ The development should be designed to incorporate system controls such as building mechanical system sensors and operating strategies designed to collect and analyze data for the purpose of maintaining the building systems operating at peak efficiencies, which would minimize the consumption of energy.
30. All exterior lighting shall be downward directed and shall not result in light spill-off from the Site. Pole mounted lighting shall be installed with cut-off luminaries.
31. No outdoor recreation areas shall be lighted.
32. All landscaping shall be installed in accordance with the Amended Final Site Plan, including Drawings C-150 – Landscape Mitigation Plan, C-151 – Landscape Plan, C-152 – Typical Cottage Unit Planting Plan, the referenced detailed specifications, as well as generally accepted industry best practices. Any substitutions to listed plant materials shall be submitted to the Building Inspector prior to installation of same. Should the Building Inspector determine that the substitutions constitute a substantive change to the Amended Final Site Plan, the Applicant shall file an Amendment to the Site Plan Approval, which shall be reviewed and approved by the Planning Board, prior to the installation of the landscaping materials.
33. All site landscaping shall be maintained in a healthy state; should any plantings become damaged or die, said plantings shall be immediately replaced in-kind.
34. Horse Chestnut trees shall not be planted on this Site.
35. The use of fertilizers containing phosphorous on the Site shall be limited in accordance with NYSDEC restrictions and limitations.
36. Prior to initiation of any construction at the Site, the Applicant or his representative will meet with the design engineer, Town Engineer, Highway Superintendent, Building Inspector, Site Contractor and/or any additional individuals or agencies that may have

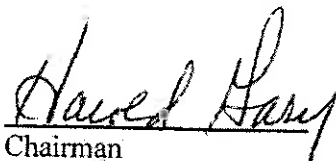
jurisdiction over aspects of the Project, for a preconstruction conference to review all facets of construction and required inspections.

37. In addition to the preconstruction conference identified in #37 above, a similar conference shall be held prior to the installation of any Site landscaping.
38. A clean and legible copy of this Resolution (as signed by the Planning Board Chairman) and a copy of the signed Amended Final Site Plan shall be maintained at the subject property at all times.
39. Prior to the issuance of a Certificate of Occupancy by the Building Inspector, an "As-Built" Plan showing the installed and completed improvements, certified by a New York State licensed Land Surveyor shall be prepared at the sole expense of the Applicant. Said As-Built Plan shall be provided to the Building Inspector, documenting satisfactory completion of all approved and authorized construction activities and zoning compliance.
40. Failure to comply with any of the conditions set forth herein shall be deemed a violation of this approval, which may lead to the revocation of the Approval and/or Certificate of Occupancy, in accordance with the applicable provisions of the Town of Carmel.
41. The applicant shall obtain all other applicable permits and approvals and shall pay all other fees as a part of the execution of the final site plan.

BE IT FURTHER RESOLVED, That this Amended Final Site Plan Approval shall remain valid for a period of one (1) year from the date of its approval. This Amended Final Site Plan Approval shall become null and void on September 25, 2014 unless construction is commenced pursuant to an authorized Building Permit.

BE IT FINALLY RESOLVED that this Amended Final Site Plan approval resolution shall have an effective date of September 25, 2013.

**PLANNING BOARD
TOWN OF CARMEL**

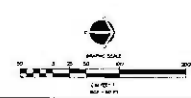

Chairman





9/27/13
Dated:

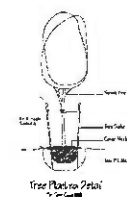
This Resolution Was Thereupon Duly Adopted

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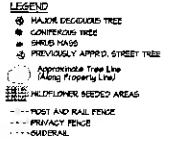
1. PRIOR TO THE INTRODUCTION OF PLANTING, THE IMPORTANCE OF THE INTRODUCTION AND THE
 2. FACTS OF THE DESIGN CHANGES, THE CHANGES AND THE IMPORTANCE FOR A COMPANY
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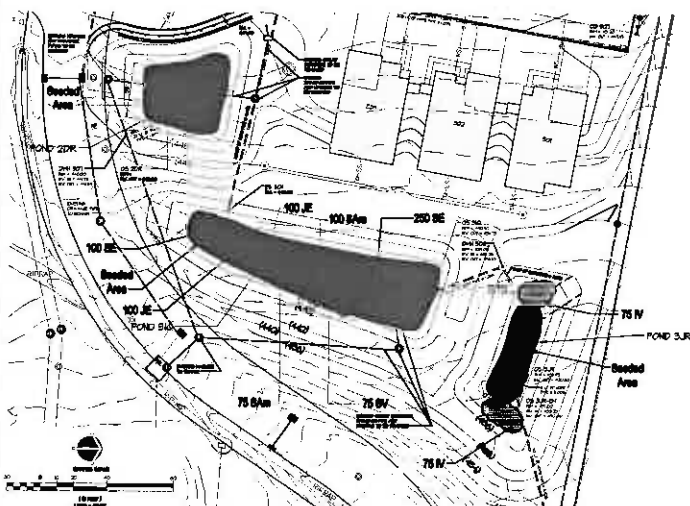
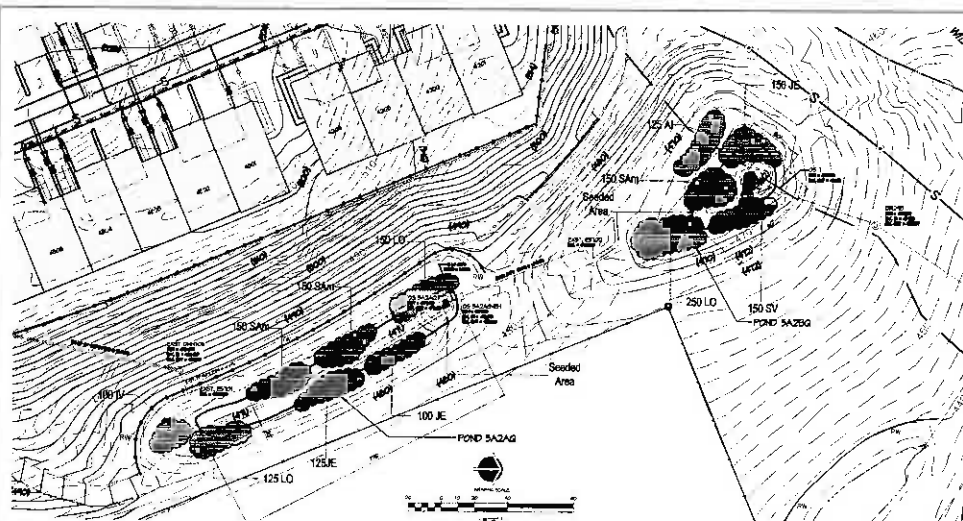


- LEGEND**
-  MAJOR DECIDUOUS TREE
 -  CONIFEROUS TREE
 -  SHRUB HAZZ
 -  Approximate Tree Line (Along Property Line)
 - POST AND RAIL FENCE
 - PRIVACY FENCE
 - GULLERAIL

[illegible]

1. PURPOSE: TO INVESTIGATE THE FACTORS THAT INFLUENCE THE RATE OF PROTEIN DEGRADATION AND TO RELATE THIS TO THE CATABOLIC PHASE OF THE FASTING RESPONSE AND THE CONSEQUENCES FOR A PERSON'S HEALTH.
2. METHODS: A GROUP OF 10 HEALTHY SUBJECTS WERE STUDIED OVER A PERIOD OF 10 DAYS. THE RATE OF PROTEIN DEGRADATION WAS MEASURED BY THE URINARY EXCRETION OF NITROGEN. THE EFFECTS OF FASTING ON THE RATE OF PROTEIN DEGRADATION WERE STUDIED BY MEASURING THE URINARY EXCRETION OF NITROGEN BEFORE AND AFTER A 10-DAY FAST.
3. RESULTS: THE RATE OF PROTEIN DEGRADATION WAS SIGNIFICANTLY HIGHER DURING THE FASTING PERIOD THAN DURING THE POST-FASTING PERIOD. THE RATE OF PROTEIN DEGRADATION WAS ALSO HIGHER IN SUBJECTS WHO WERE FASTING FOR A LONGER PERIOD OF TIME.
4. CONCLUSIONS: THE RATE OF PROTEIN DEGRADATION IS INFLUENCED BY THE FASTING RESPONSE. THE FASTING RESPONSE IS A PHYSIOLOGICAL ADAPTATION TO THE FASTING STATE. THE FASTING RESPONSE IS A PHYSIOLOGICAL ADAPTATION TO THE FASTING STATE.

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PLEASE TO THE BUREAU, ADDRESS OF PLANTING THE APPLICATION ON THE REPRESENTATIVE WILL BE THE SAME AS THE COMPANY. THE COMPANY AND THE COMPANY WILL BE A COMPANY TO BE THE BUREAU. THE COMPANY WILL BE THE BUREAU OF THE COMPANY.

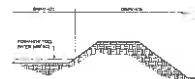
1. Shells are to be kept moist to within 4 inches of final elevation, and when required will be placed to make final grade.
2. Shells known to be suitable for the purposes of this contract, as so noted, are shown on plan with FAC/70 Wetland Marker (dot) (H20-642-1.22) as equivalent. Shells indicated in this note are final finish. Final note will be applied at 25 lbs per acre.

Virginia's wild eye	Many-lashed look-alike	Thin, slender
For: Sings	Country singer (No. 104)	Sharon, Alamo
Country look-alike	Whisper	Smiles
For: Southern	Little things	Unnoticed
Blue-eyeballs	Who? (Singer)	Long (Singer)
Reverend	Jesus (Singer)	Word (Singer)
Country-Love (Singer)	Joe (Singer)	Money (Singer)
And: Sings	New: Tunes, (Singer)	Chorus (Singer)
My: Sings	Pop: Tunes (Singer)	Yellow (Singer)
Spotted: Joe (Singer)	Range (Singer)	

3. Band will be laminated by hand or with a lamination tank; if the former method is used, band will be laminated with *one or more* or light dry following: (overlaminating, if laminating using a small amount of tank) and neither may be used if available. *Some samples of that extend the band to the maximum year available will be treated with HCl/H₂O or equivalent. Band will be treated with one or two or staining water.*

BE	<i>Isurus paucus</i>	Red shark
BY	<i>Isurus paucus</i>	Redfin shark
LAO	<i>Isurus paucus</i>	Common blue-shark
EN	<i>Isurus paucus</i>	Blue shark
IL	<i>Isurus paucus</i>	Blue shark
AF	<i>Isurus paucus</i>	Blue shark
AP	<i>Isurus paucus</i>	Blue shark
IT	<i>Isurus paucus</i>	Blue shark
AI	<i>Isurus paucus</i>	Blue shark

* Instead of uniform grid of 2 m across area for entire planting area shown on the plot, the researcher very plant the plugs on 1 m centers, but plant them in respect to pattern that is: about 30 apart. Spacing the cypripeds about 10 apart every the planting area.



5 POND SEEDING SCHEMATIC

PHASE 1
DISTURBANCE AREA 4 ABO ACRES

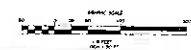
PHASE 2

FINISHED PORTION OF LOT 5

A-A

E-E
SCALE: 1"=20' HORIZ. 1"=40' VERT.

EROSION & SEDIMENT CONTROL PLAN



GENERAL NOTES:

[illegible][illegible][illegible][illegible]

Basics of Chemical Equilibria

1. Consider the reaction $2\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g) + \text{H}_2\text{O}(l)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.
2. Consider the reaction $\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.
3. Consider the reaction $\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.
4. Consider the reaction $\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.
5. Consider the reaction $\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.
6. Consider the reaction $\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.
7. Consider the reaction $\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.
8. Consider the reaction $\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.
9. Consider the reaction $\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.
10. Consider the reaction $\text{H}_2\text{O}(l) \rightleftharpoons \text{H}_2\text{O}(g)$ at 25°C. The equilibrium constant K_c for this reaction is 1. The reaction is spontaneous at 25°C. The reaction is spontaneous at 25°C.

PAGE |

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Abstract

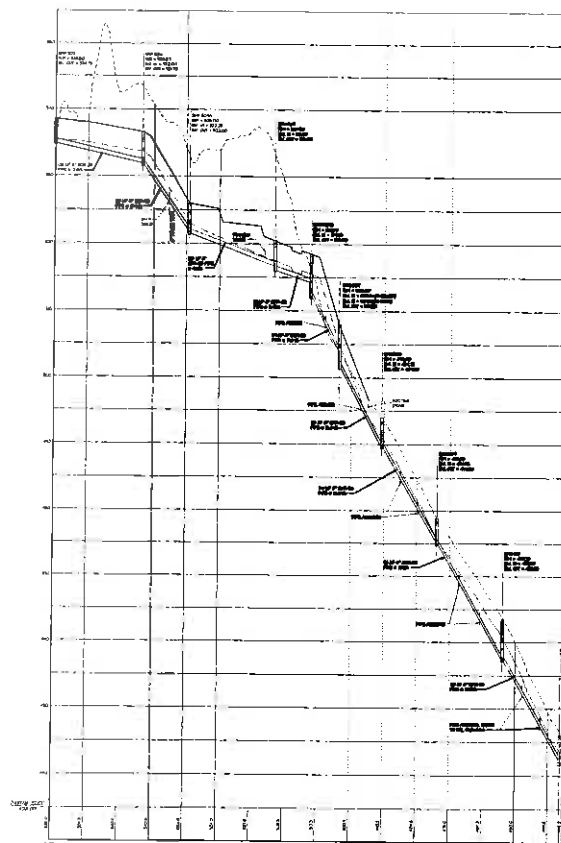
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STABILIZATION NOTES:

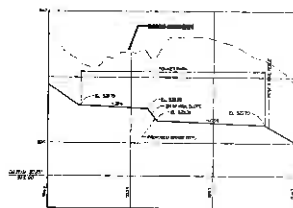
1. DIFFERENTIAL MODELS based on the results of INITIAL STRESS MEASUREMENT
2. NEED TO CALIBRATE
 - PROBABILISTIC ANALYSIS: MODEL, INPUTS, DISTRIBUTION OF INPUTS, CORRELATION OF INPUTS
 - COMPARISON OF DIFFERENT ANALYTICAL METHODS
 - DIFFERENTIAL MODELS AS THE REFERENCE METHOD
3. THE FOLLOWING FACTORS AFFECT THE INITIAL STRESS, AND THEREFORE THE ANALYSIS
 - INITIAL STRESS NEEDS TO BE MEASURED AND REPORTED AS PART OF THE ANALYSIS
4. DESIGN INPUTS COME FROM THE RESULTS OF THE INITIAL STRESS MEASUREMENTS. THEREFORE, THE INITIAL STRESS MEASUREMENTS SHOULD BE REPORTED AS PART OF THE ANALYSIS. THE CORRELATION OF INPUTS SHOULD BE REPORTED AS PART OF THE ANALYSIS.
5. DESIGN INPUTS SHOULD BE REPORTED AS PART OF THE ANALYSIS. THE CORRELATION OF INPUTS SHOULD BE REPORTED AS PART OF THE ANALYSIS.

EROSION CONTROL LEGEND

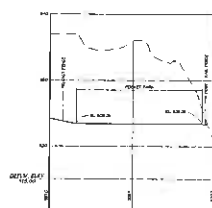




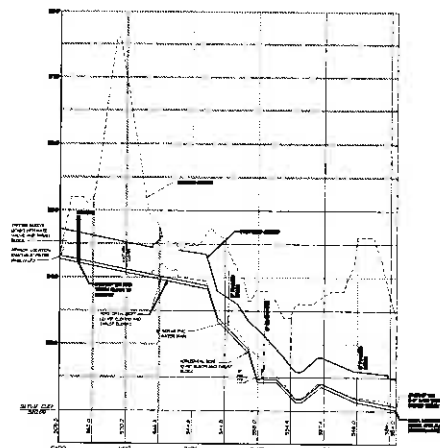
SEWER PROFILE, SMH 503 TO EXISTING SR17



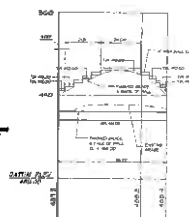
POCKET PARK SECTION



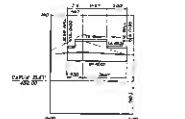
POCKET PARK SECTION



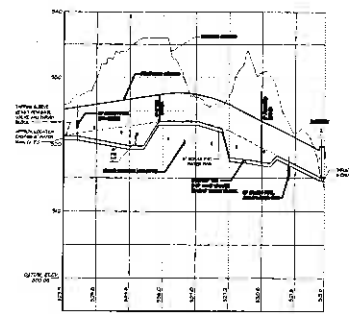
WATER MAIN PROFILE, UNITS 4001 TO 4004 AND REG. MTG. ROOM



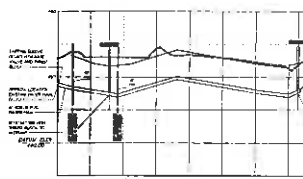
RETAINING WALL 58



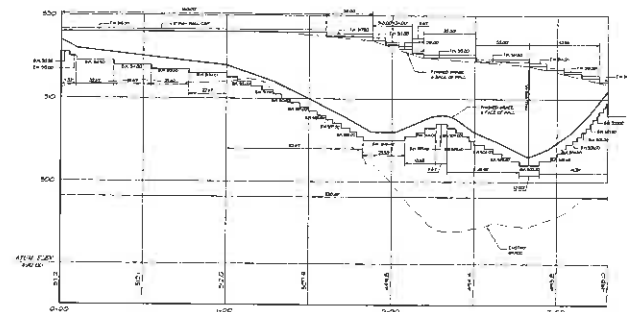
RETAINING WALL 59



WATER MAIN PROFILE ALONG WHEELER COURT



WATER MAIN PROFILE, UNITS 301 TO 303



RETAINING WALL 5A

<p>PROJECT INFORMATION</p> <p>PROJECT NAME: GARDEN CENTRE SENIOR HOUSING</p> <p>PROJECT LOCATION: GARDEN CENTRE SENIOR HOUSING</p> <p>PROJECT NUMBER: 10000000000000000000</p> <p>PROJECT DATE: 10/10/2020</p> <p>PROJECT STATUS: 100%</p>	<p>DESIGNER INFORMATION</p> <p>DESIGNER NAME: P. J. JONES</p> <p>DESIGNER ADDRESS: 10000000000000000000</p> <p>DESIGNER PHONE: 10000000000000000000</p> <p>DESIGNER FAX: 10000000000000000000</p> <p>DESIGNER EMAIL: 10000000000000000000</p>	<p>CLIENT INFORMATION</p> <p>CLIENT NAME: GARDEN CENTRE SENIOR HOUSING</p> <p>CLIENT ADDRESS: 10000000000000000000</p> <p>CLIENT PHONE: 10000000000000000000</p> <p>CLIENT FAX: 10000000000000000000</p> <p>CLIENT EMAIL: 10000000000000000000</p>
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