Appendix A

Town of Guilford Inland Wetlands Commission Application

CGS Sec. 16-50x (d)
Location Review

GUILFORD INLAND WETLANDS COMMISSION
APPLICATION FOR
INLAND WETLANDS AND WATER COURSES ACT – PUBLIC ACT 155

APPLICATION MUST BE FILLED OUT COMPLETELY IN ORDER TO BE "RECEIVED"
Submit FOUR copies of application and accompanying documents

1. Location of property: Stepstone Hill Road and Route 77

Assessor's Map # 91 Lot # 46/46A Zone: Residential

The Connecticut Light & Power Co.	The Connecticut Light & Power Co.
Print Applicant's Name	Print Owner's Name
P.O. Box 270, Hartford, CT 06141	P.O. Box 270, Hartford, CT 06141
107 Selden St., Berlin, CT 06037	107 Selden Street, Berlin, CT 06037
Attn: Robert E. Carberry	Attn: Robert E. Carberry
Applicant's Address	Owner's Address
860-665-6774	860-665-6774
Applicant's Phone Number	Owner's Phone Number
860-665-2820	860-665-2820
Applicant's Fax Number	Owner's Fax Number

2. THIS APPLICATION IS FOR:

_____	Permit to conduct regulated activity	_____	Significant Activity
_____	Site Plan Referral	_____	No Regulated Activity
_____	Special Permits/Exceptions/Exemptions		
_____	Subdivision Referral	_____	No Regulated Activity
_____	Amend regulations	_____	Section to be amended
_____	Boundary clarification		
_____	Renewal/Modification/Extension of Permit	X	Location Approval
_____	Permitted Use As Of Right		
_____	Non Regulated Use		

3. Description of Project: See attached narrative.

4. Description of Regulated Activity: See attached narrative

5. General Information:
Total area of site: ± 38 acres Upland review area to be altered: ± 0.5 acres
Wetland area to be altered: 0 Watercourse area to be altered: 0
Vernal Pool Review Area to be altered: 0

6. Applicant's interest in the land: Owner

7. Additional Information: All of the following may require notification or application for permit to other municipal, state, and/or federal agencies. This is the sole responsibility of the applicant or agent.

Check those that apply:

_____ Any portion of the property on which the regulated activity is proposed is located within five hundred (500) feet of an adjoining municipality; or traffic, sewer, water runoff and/or water drainage will impact an adjoining municipality.

__X__ The property is within a water company watershed or aquifer protection zone

_____ The property is within a floodplain or floodway

_____ The property contains tidal wetlands regulated by the CT DEP

_____ The property contains rivers or watercourses regulated by the Army Corps of Engineers

8. This application shall also include:
   - A map showing: geographical location of the property; inland wetlands and watercourses boundaries marked with flag numbers; areas of wetlands and watercourses disturbances; soil types; and vegetation. (see attached checklist)
   - A site plan showing existing and proposed conditions in relation to wetlands and watercourses. (see attached checklist)
   - Alternatives considered and reasons why the proposed activity was chosen.
   - Names and addresses of adjacent property owners
   - Any other information the Commission deems necessary to the understanding of the proposed activity.

If the proposed activity involves a significant activity, additional information may be required. (See Section 7.5 of the regulations)

This application gives the Commission and its agents authority to inspect the property at reasonable times, both before and after a final decision has been issued.

The applicant warrants the truth of all statements contained herein and in all supporting documents according to the best of his/her knowledge and belief.

The applicant understands that this application is to be considered complete only when all information and documents required by the Guilford Inland Wetlands Commission have been submitted.

7/5/06
Applicant's Signature & Date

7/5/06
Owner's Signature & Date

Please attach a sheet listing any and all additional owners and letters of authorization from each.

☐ Sheet attached with additional owners

☐ Letter(s) of authorization from additional owners attached

Contact person/agent other than applicant: Michael Libertine

Vanasse Hangen Brustlin, Inc.
54 Tuttle Place
Middletown, CT 06457
Contact Person's Address

Phone Number: 860-632-1500 Fax Number: 860-632-7879

E-Mail: mlibertine@vhb.com

Date of Receipt
Fee Date Paid

Site Plan and Environmental Information

The applicant shall submit a map or maps and such information concerning the proposed regulated activity (ies) as the Guilford Inland Wetlands Commission indicates below:

1. Sheet Sizes

   ☐ A. 8.5" x 11" or multiples thereof
   ☐ B. 24" x 36" or multiples thereof

2. Graphic scale for site plan information

		Scale Suggested	Information required Outside regulated area (List)
☐ A.	Regulated area	1" = 40'	
☐ B.	Area directly involved in regulated activity	1" = 40'	
☐ C.	Property boundaries	1" = 200' min	
☐ D.	Additional Area _____' in diameter	1" = 200' min	

3. ☐ North Arrow

4. Title block in lower right corner of sheet showing:

   ☐ A. Name of Project
   ☐ B. Name of owner / applicant and / or developer
   ☐ C. Date and subsequent date of revisions
   ☐ D. Legible signature of person responsible for drawing plan. Professional's certification of the plan shall be appropriate to nature of activities proposed. Such site information about the proposed uses or effect of the regulated area must be certified by a licensed land surveyor, professional engineer, professional architect, or professional landscape architect; any of which must be registered in the State of Connecticut.
   ☐ E. Any proposed on-site sewage disposal system shall be certified by a registered sanitary engineer.

5. ☐ Inland wetland and watercourses boundaries marked with flag numbers, as defined in Section 2 of these regulations, and in Section 4 of Public Act 155.

6. ☐ Boundaries and symbol of soil mapping unit (s).

7. ☐ Site areas of permit and designation of each activity.

8. ☐ Existing and proposed buildings or other structures.
   ☐ A. Location
   ☐ B. Floor elevation

9. ☐ Location, size and composition of sidewalks, off-street parking and loading areas, including driveway entrances and exits, traffic islands and barriers.

   ☐ A. Percent of regulated area to be covered with impermeable surface.

10. ☐ Location of tree islands, shrubs and other significant vegetation, both existing and proposed.

11. ☐ Source of water supply.

12. ☐ Proposed method of sewage disposal. Proposed design and specifications of on-site sewage disposal system certified by a sanitary engineer.

13. ☐ Design of existing and proposed storm drainage system including elevations by contour at not less than five foot intervals. Additional details may be required.

14. ☐ Proposed grading by not less than five foot contours of any material to be moved. Additional details may be required.

15. ☐ Location of all percolation pits, test pits and observation holes and wells.

16. ☐ Physical Data

    ☐ A. Material to be deposited and / or excavated

    1. ☐ Area
    2. ☐ Volume
    3. ☐ Physical composition (texture, components) of material to be deposited
    4. ☐ Chemical composition of all toxic materials
    5. ☐ Potential chemical reactions of deposited materials yielding toxic products or concentrations of products
    6. ☐ Final height of filled area above seasonal high water table
    7. ☐ Texture and composition of soil left after excavation
    8. ☐ Slope of excavation
    9. ☐ Depth to water table or water level if inundated after excavation

17. Watercourse Data

    ☐ A. Open water characteristics

    I. ☐ Size of ponds or lakes

    II. ☐ Depth and, if possible, volume of water

    ☐ B. Stream characteristics

    I. ☐ intermittent or continual flow

    ☐ C. Vernal Pools

☐ D. Known flood levels to be indicated on map

☐ E. Discharges, if any.
- I. ☐ Type
- II. ☐ Frequency and volume
- III. ☐ Chemical composition

18. Biological Data

		% of Regulated Area	Dominant Species
☐	A. Trees		
☐	B. Shrubs		
☐	C. Grasses, weeds, etc.		
☐	D. Aquatic		
☐	E. Pasture		
☐	F. Cultivated Area		

19. Probable effects of changes on:
- ☐ A. Vegetation
- ☐ B. Wildlife

20. Measures to protect regulated area from:
- ☐ A. Erosion and sedimentation
- ☐ B. Leaching and pollutants
- ☐ C. Direct discharge of pollutants
- ☐ D. Increased flooding and surface runoff hazards

21. ☐ Other site information as the Guilford Inland Wetlands Commission determines necessary to meet the objectives of the Regulations and Public Act 155. (List)

22. ☐ Proposed Planting Plan
- ☐ A. Disturbed Wetlands / Buffer Area
- ☐ B. Grading Plan / Erosion Control Planting
- ☐ C. Type and number of plants proposed
  - ☐ 1. Time proposed to ensure survival of plantings

23. ☐ Location of erosion control measures / silt fencing / hay bales.

24. ☐ Proposed wetland(s) mitigation plans(s).

Appendix B
List of Property Abutters

Abutters List

MBL	Address	Owner	Land Use
091-045	943 Durham Road	Kimberly A Caldwell	Residential
091-045-A5	985 Durham Road	Timothy E & Jessica P Hansen	Residential
091-045-A4	987 Durham Road	Frederick W & Andrea C Herget	Residential
091-045-A3	989 Durham Road	James P & Christina R Leese	Residential
091-044	1073 Durham Road	Charles Monte Jr	Residential
091-037-16	155 Bunker Hill Road	Michael J & Jelly A Carafeno	Residential
091-037	Bunker Hill Road	Town of Guilford	Vacant Land
091-036-07	123 Meadow Ridge Lane	Michael I & Janet R Deangelo	Residential
091-036-06	91 Meadow Ridge Lane	Nicole E Nicoletti	Residential
091-036-05	77 Meadow Ridge Lane	Lucy Cerulli	Residential
091-036-04	53 Meadow Ridge Lane	Robert M & Deborah A Pantera	Residential
091-036-03	41 Meadow Ridge Lane	Kyle R & Jane M Kramer	Residential
091-035-A02	898 Little Meadow Road	Dennis & Annette Amato	Residential
091-034	888 Little Meadow Roadd	Molly F Free	Residential
091-033	866 Little Meadow Road	Lawrence & Dana Torre	Residential
091-032	838 Little Meadow Road	Raymond Palermo	Residential
091-030-C3	70 Stepstone Hill Road	Raymond & Rose Marie Iglesias	Residential
085-023-A	68 Stepstone Hill Road	Mark A Millett & Virginia M Smith	Residential
085-034-01A	33 Steptone Hill Road	James D & Maureen McCann	Residential
085-034-01	51 Stepstone Hill Road	Douglas F & Susan B Danaher	Residential
085-034-01B	59 Stepstone Hill Road	David W & Mary C Vitola	Residential
085-033	75 Stepstone Hill Road	Douglas E Tochy & Eileen M McNamara	Residential
085-034-02	11 Stepstone Hill Road	Harlan G Case	Residential
085-022	10 Stepstone Hill Road	Russi T & Ava R Suntoke	Residential
085-021-04	828 Durham Road	Christopher & Judith A Tsou	Residential
085-021-03	840 Durham Road	Laurel K Griso & Dennis Sandacata	Residential
091-052-B	Durham Road	Town of Guilford	Vacant Land
091-052-A	Durham Road	Town of Guilford	Vacant Land
091-030-04	130 Stepstone Hill Road	Four Stepstone Hill LLC	Residential
091-030-C4	72 Stepstone Hil Road	Robert A Solari	Residential

Appendix C
Soil Report

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

545 Highland Avenue • Route 10 • Cheshire • Connecticut • 06410 • (203) 272-7837 • Fax (203) 272-6698

SOIL REPORT

TO: Northeast Utilities
P.O. Box 270
Hartford, CT 06141

SSS Job No. 2005-220-CT-GUI-3
Client Job No. _____
Site Inspection Date May 10 & 11, 2005

PROJECT TITLE AND LOCATION CL & P Property, Stepstone Hill Road & Durham Road (CT Rte 77), Guilford, CT

PROJECT DESCRIPTION: *Inland wetland identification and classification of soils*

METHOD FOR IDENTIFICATION OF MAP UNITS

Wetlands

[X] *Field marking (flagging) for survey.*

[X] *Field plotting on* property map, *scale:* 1"=200', *contour:* none.

[ ] *Field plotting on aerial photography.*

Non Wetland Soils

[X] *High intensity field identification by Soil Scientist.*

[ ] *Medium intensity identification from USDA, Soil Conservation Service Soil Maps.*

METHOD OF SOIL IDENTIFICATION

[X] *Spade and Auger*

[ ] *Deep test pits (backhoe)*

[ ] *Other* _____

SOIL MOISTURE CONDITION

[ ] *Dry* [X] *Moist* [ ] *Wet*

Frost Depth _____ *in.*

Snow Depth _____ *in.*

The classification system of the National Cooperative Soil Survey, USDA, Soil Conservation Service and the County Identification Legend were used in this investigation. The investigation was conducted by the undersigned Certified Soil Scientist.

All wetland boundary lines established by the undersigned Soil Scientist are subject to change until officially adopted by local, state or federal regulatory agencies.

Respectively submitted by
SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

Thomas W. Pietras
Soil Scientist
Field Investigator
Thomas W. Pietras

Approved by

Kenneth C. Stevens, Jr.
Principal Soil Scientist

See attached page(s)

SOIL REPORT *continued*

PROJECT TITLE: CL&P Property, Stepstone Hill & Durham Rds, Guilford, CT

MAPS/PLANS TRANSMITTED TO CLIENT

- [x] Sketch location of Wetlands and other Soil Types.
- [ ] None

NUMBERING SEQUENCE OF WETLAND BOUNDARY LINE MARKERS

1 THRU 12 13 THRU 22 23 THRU 59 60 THRU 71 72 THRU 91

92 THRU 117 118 THRU 137 138 THRU 156

SUMMARY SOIL DESCRIPTIONS

WETLAND SOILS

Leicester fine sandy loam (Lc). This is a poorly drained, moderately coarse textured, friable glacial till soil.

Ridgebury, Leicester and Whitman extremely stony fine sandy loams (RN). These are poorly and very poorly drained, moderately coarse textured glacial till soils.

NONWETLAND SOILS

Charlton-Hollis fine sandy loams (Cr). These are deep, moderately deep, and shallow to bedrock, well drained, moderately coarse textured, friable glacial till soils.

Hollis-Charlton fine sandy loams (Hp). These are shallow, moderately deep and deep to bedrock, somewhat excessively drained, moderately coarse textured, friable glacial till soils. About 20 to 25 percent of the area is rock outcrop.

Hollis-Rock outcrop complex (Hr). These are steeply sloping, mostly shallow to bedrock, somewhat excessively drained, moderately coarse textured, friable glacial till soils. About 30 percent of the area is rock outcrop.

Sutton fine sandy loam (Sv). This is a deep, moderately well drained, moderately coarse textured, friable glacial till soil.

Udorthents, smoothed (UD "cut"). This is a well to moderately well drained disturbed soil that has had two (2) feet or more of its original soil surface excavated.

For further information about the soils, refer to Soil Survey of New Haven County, Connecticut.

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SOIL REPORT *continued*

PROJECT TITLE: CL&P Property, Stepstone Hill & Durham Rds, Guilford, CT

MAPS/PLANS TRANSMITTED TO CLIENT

- [xx] Sketch location of Wetlands and other Soil Types.
- [ ] None

NUMBERING SEQUENCE OF WETLAND BOUNDARY LINE MARKERS

1 THRU 12 13 THRU 22 23 THRU 59 60 THRU 71 72 THRU 91

92 THRU 117 118 THRU 137 138 THRU 156

SUMMARY SOIL DESCRIPTIONS

Soil Report (continued)

Note: The wetland identified as **Lc/Sv** (Wetland flags 118 thru 137) has to a large extent been artificially created. A large amount of fill material was placed to the south of the wetland which resulted in the blockage of surface flows and creation of seasonal, trapped water within the wetland. Much of the soil in the wetland was originally moderately well drained Sutton. Presently, the **Lc/Sv** soils are subject to periodic shallow inundation and prolonged seasonal saturation.

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Appendix D
Site Photographs

Vanasse Hangen Brustlin, Inc.

PHOTOLOG DOCUMENTATION

Proposed Stepstone Substation

Stepstone Hill Road

Guilford, Connecticut

Photo 1: Existing access road looking south toward Stepstone Hill Road.

Photo 2: Forested section of vernal pool 3 looking north (taken 3/28/06).

Vanasse Hangen Brustlin, Inc.
PHOTOLOG DOCUMENTATION
Proposed Stepstone Substation
Stepstone Hill Road
Guilford, Connecticut

Photo 3: Portion vernal pool 3 located under transmission line right of way looking east (taken 3/28/06).

Photo 4: Portion of vernal pool 3 located under transmission line right of way looking west (taken 5/14/05).

Vanasse Hangen Brustlin, Inc.
PHOTOLOG DOCUMENTATION
Proposed Stepstone Substation
Stepstone Hill Road
Guilford, Connecticut

Photo 5: Proposed substation location looking north.

Photo 6: Vernal Pool 1 looking southwest toward Stepstone Hill Road (taken 3/28/06).

Vanasse Hangen Brustlin, Inc.
PHOTOLOG DOCUMENTATION
Proposed Stepstone Substation
Stepstone Hill Road
Guilford, Connecticut

Photo 7: Vernal Pool 1 looking southwest toward Stepstone Hill Road (taken 5/14/05).

Photo 8: Vernal pool 2 as seen from top of ledge face looking west (taken 3/28/06).

Vanasse Hangen Brustlin, Inc.
PHOTOLOG DOCUMENTATION
Proposed Stepstone Substation
Stepstone Hill Road
Guilford, Connecticut

Photo 9: Vernal pool 2 looking northwest (taken 5/23/05).

Appendix E
Descriptions of Site Wetlands/Vernal Pools

TECHNICAL ADDENDUM

Vanasse Hangen Brustlin, Inc.

Wetland and Vernal Pool Descriptions
Stepstone Substation, Guilford, CT

Vanasse Hangen Brustlin, Inc. ("VHB") has performed several inspections of the Connecticut Light and Power Company (CL&P) property located north of Stepstone Hill Road in Guilford, Connecticut (the "Property"). These surveys have included a flora and fauna inventory of the Property and vernal pool monitoring. Wetlands identified by Soil Science and Environmental Services, Inc. were confirmed during field visits by Vanasse Hangen Brustlin, Inc. ("VHB"). Vernal pool inspections were conducted by VHB periodically during the months of May, June and July 2005. A vernal pool inspection was also conducted by a Soil Science and Environmental Services, Inc. biologist on May 11, 2005.

There are seven palustrine-forested wetland areas on the Property (identified herein as Wetlands 1 – 7). These wetlands are primarily groundwater-controlled and function to receive and store groundwater and surface runoff, recharge groundwater, provide food for living organisms and wildlife habitat. Each wetland provides vernal pool habitat. Wetlands 6 and 7 are part of a large wetland system that directs surface water from an area north of the Property westward to the West River and provides nutrient removal, retention and transformation. Most of the wetlands on the Property offer visual quality and aesthetic value especially during the growing season. Portions of the proposed gravel access drive occur within the 100-foot upland review areas of Wetlands 2 and 3.

Each wetland on the Property includes an area found to contain the necessary physical and biological characteristics to be identified as potential vernal pool habitat. The methods employed on the Property to attempt to conclusively identify potential vernal pool habitats included a variety of recognized field exploration techniques. Potential vernal pools located on the Property were identified based on both physical characteristics (i.e., occurs within a confined depression or basin that lacks a permanent outlet stream, standing water for approximately two months during the growing season, lacks any fish population, and dries out most years) and supports the life-cycle of one or more obligate vernal pool species (i.e., spotted, Jefferson, and marbled salamanders, wood frogs, and fairy shrimp). This methodology generally follows CTDEP-recognized guidelines, including those noted in the University of Connecticut Cooperative Extension System, A Guide to the Identification and Protection of Vernal Pool Wetlands of Connecticut. The identification of vernal pool species utilized methods described in the Guidelines for Certification of Vernal Pool Habitat (Massachusetts Division of Fisheries and Wildlife, 1998) along with various amphibian and vernal pool species field guides.

Potential vernal pools were inspected for any indirect (i.e., chorusing) or direct evidence of amphibian breeding (such as the presence of two or more egg masses or sightings of adults). In addition, cover searches were performed (i.e., downed tree limbs, logs, large rocks) in the immediate vicinity of the vernal pool, including the proposed development and access/utility easement areas, for adult salamanders and frogs.

Each vernal pool on the Property is identified herein by the name of the wetland area in which it occurs (i.e. Vernal Pool 1 occurs in Wetland 1, Vernal Pool 2 occurs in Wetland 2, etc.). No more

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than one vernal pool occurs in each wetland. Pools 1, 3, and 4 were observed to have dried out before obligate vernal pool species could develop to a point where they could survive outside of the pool or complete their life cycle. Pools 2, 5, 6 and 7 contained suitable hydroperiod for successful amphibian reproduction and metamorphs of juveniles into adults to sustain local characteristic specie populations. Precipitation and hydraulic conditions appeared to be within relatively normal ranges during the 2005 spring season. However, hydrologic conditions within vernal pools can change substantially from one year to the next. For example, vernal pools observed to dry out too early for successful completion of amphibian life cycle this year may sustain sufficient inundation during seasons of higher precipitation. Pools which do not sustain sufficient inundation to allow for the full development of juvenile amphibians into adults are generally considered to provide less significant vernal pool habitat than those that do not sustain proper inundation. None of the vernal pools on the Property will be directly impacted by the proposed Substation or access drive and the majority of their bordering uplands will also remain unaffected.

Wetland 1 (flags #1 through #12) is a small isolated wetland located near the western Property boundary adjacent to Route 77. The northern portion of the wetland extends into the transmission line ROW. The wetland contains an area of seasonal shallow inundation in a ±75-foot long by ±20-foot wide depression for a short period during the growing season. The interior of the pool is sparsely vegetated in the forest with few arching shrubs and downed limbs and has a dense herbaceous layer in the ROW. This small pool contained approximately 8 inches of water at the beginning of May. Water contained in the pool completely dried by the end of May before viable vernal pool species could complete the aquatic phase of their life cycle. This pool does not have a permanent inlet or outlet. No finfish were observed during any of the inspections. Fauna observed within the pool included wood-frog (Rana sylvatica) tadpoles, mosquito larvae and caddisfly larvae. The forested portion of the wetland is primarily vegetated with red oak, ironwood (Carpinus caroliniana), swamp azale (Rhododendron viscosum), pepperbush (clethra alnifolia), royal fern (Osmunda regalis), cinnamon fern (Osmunda cinnamomea) and sphagnum moss. The portion of the wetland in the disturbed ROW is primarily vegetated with gray dogwood (Cornus racemosa), steeplebush (spirea tomentosa), pepperbush, bristly dewberry (Rubus hispidus), deer-tongue grass (Dichanthelium clandestinum), spotted joe-pye weed (Eupatorium dubium), lurid sedge (Carex lurida), Canada rush (Juncus canadensis), soft rush (Juncus effuses), beggar-tick (Bidens frondosa), mad-dog skullcap (Scutellaria lateriflora), sensitive fern (Onoclea sensibilis), bladder sedge (Carex intumescense), sedge, royal fern, cinnamon fern and sphagnum moss. Trees within the forested area are generally between 7 and 11 inches diameter at breast height (DBH) with the majority of wetland vegetated with shrubs and herbaceous species.

Wetland 2 (flags #13 through #22) is a large groundwater-controlled depressional wetland located in the southwest corner of the Property. This wetland extends off the Property onto the adjacent residential property and drains south under Stepstone Hill Road. Shallow fragmented pools of water observed on the Property in early May dissipated by late May. Wood-frog tadpoles observed in these shallow pools (before they dried) were unable to complete the aquatic phase of their lifecycle. In addition to the small shallow pools associated with this wetland, a large ± 100-foot long by ± 60-foot wide seasonally inundated pond is located along the Property boundary. Large tree buttresses, tree throws, tree snags, arching shrubs and fallen tree limbs were observed within and around the perimeter of the pool. A large ledge wall and associated talus slope is located northeast of the pool. Egg masses observed within the pool were typically attached to fallen branches and arching shrubs. This pool maintained a sufficient amount of water through

the growing season to allow vernal pool species to complete the aquatic development phase of their lifecycle. This pool does not have a permanent inlet or outlet. No finfish were observed during any of the inspections. Fauna observed within the pool included wood-frog tadpoles, spotted salamander (Ambystoma maculatum) egg masses and larvae, marbled salamander larvae (Ambystoma opacum), spotted turtle (Clemmys guttata), mosquito larvae, predaceous diving beetle and caddisfly larvae. The forested wetland is dominantly vegetated with pin oak (Quercus palustris), tulip poplar, red maple, pepperbush, spicebush (Lindera benzoin), highbush blueberry (Vaccinium corymbosum) and sphagnum moss. The wetland contains a range of timber sizes from sapling/seedling (<7 inch DBH) to mature sawtimber (> 11 inch DHB) with a canopy closure greater than 60 percent.

Wetland 3 (flags #118 through #137) consists of a small wetland located in the southern portion of the Property. The wetland occurs within the transmission line ROW and within a wooded area north of the ROW. This wetland is groundwater controlled and experiences seasonally shallow inundation. The pool within the wetland is approximately 150 feet long and 40 feet wide and is characterized by a depression with water-stained leaves. The pool is sparsely vegetated in the forest with arching shrubs and downed limbs and has a dense herbaceous layer in the ROW. The pool contained shallow levels of inundation in early May. By mid May the pool had completely dried. Wood-frog tadpoles observed within this pool before it dried did not have time to complete the aquatic phase of their lifecycle. This pool does not have a permanent inlet or outlet. No finfish were observed during any of the inspections. Fauna observed within the pool include wood-frog tadpoles and one adult, adult green frogs, adult eastern American toad (Bufo americanus), spotted turtle and mosquito larvae. The forested portion of the wetland is dominantly vegetated with pin oak, red maple, highbush blueberry and mountain laurel. Within the ROW the wetland is dominantly vegetated with steeplebush, pepperbush, bristly dewberry, deer tongue grass (Dichanthelium clandestinum) and soft rush (Juncus effuses). Trees within the forested area are generally pole timber with the majority of wetland vegetated with shrubs and herbaceous species.

Wetland 4 (flags #138 through #156) is a large seasonally-inundated pond and surrounding palustrine-forested wetland. The groundwater-controlled depressional wetland is isolated in a central portion of the Property. The wetland is dominated by a sparsely vegetated pool with narrow wetland forest surrounding the pool vegetated with red maple, red oak, pepperbush and mountain laurel. The pool is approximately 200 feet long and 60 feet wide and is characterized by a large basin depression with water-stained leaves. It is sparsely vegetated with few arching shrubs along the perimeter and contains many downed limbs with little herbaceous vegetation within its interior. At the beginning of the spring season the majority of Wetland 4 was inundated with shallow water. However, the pool had completely dried by early June. Spotted salamander and wood-frog tadpoles observed within the pool did not have sufficient time to complete the aquatic phase of their lifecycle. This pool does not have a permanent inlet or outlet. No finfish were observed during any of the inspections. Fauna observed within the pool included wood-frog tadpoles, spotted salamander egg masses, green frog adults, backswimmers, predacious diving beetles and waterstriders. Timber in the surrounding forest ranges from sapling/seedling to mature sawtimber with an average canopy closure greater than 50 percent.

Wetland 5 (flags #92 through #117) is located along the eastern Property boundary. The majority of this groundwater-controlled depressional wetland is located off-site on the adjacent residential parcels east of the Property. At the beginning of the spring season the majority of Wetland 5 was inundated with shallow water. As the season progressed the large inundated area dissipated to

small isolated pools both on and off the Property. Small pools on the Property dried (dry by 5/20/05) before viable vernal pool species could complete the aquatic phase of their life cycle. Wood-frog tadpoles were observed in a shallow pool on the Property before it dried. A remaining small pool on the adjacent residential parcel to the east maintained a sufficient amount of water through the growing season to allow vernal pool species to complete the aquatic development phase. The remaining small pool off of the Property is 400 ± square feet with many arching shrubs and broken limbs and a thick layer of organic material on the bottom. This pool does not have a permanent inlet or outlet. No finfish were observed during any of the inspections. Fauna observed within the remaining pool to the east of the Property included spotted salamander egg masses, marbled salamander larvae, wood-frog tadpoles and fingernail claims. Dominant vegetation within the wetland forest includes red maple, red oak, American elm, pin oak, highbush blueberry, ironwood, pepperbush and winterberry (Ilex Verticillata). Tree sizes range from sapling/seedling to mature sawtimber with an average canopy closure greater than 65 percent.

Wetland 6 (flags #60 through #91) is a palustrine-forested wetland located in the northern portion of the Property. It is a small portion of a large wetland system that meanders on and off of the Property where the area identified as Wetland 7 is part of the overall wetland system. The wetland originates from a pond north of the Property and eventually discharges to the West River to the west of Route 77. Wetland 6 includes an intermittent watercourse, palustrine-forested wetland and a seasonally inundated pool. The intermittent watercourse conveys flow from the pond north of the Property and discharges it to the palustrine-forested wetland. The pool within the wetland is characterized by a shallow ±125-foot by ±45-foot basin-shaped depression with numerous fallen branches, arching shrubs and a thick layer of organic material. Egg masses observed within the pool were moderate to large in size and typically attached to submerged branches and arching shrubs. This pool maintained a sufficient amount of water through the growing season to allow vernal pool species to complete the aquatic development phase of their lifecycle. The forest canopy parts over the center of the pool allowing patches of broken sunlight to reach the surface. This pool does not have a permanent inlet or outlet. No finfish were observed during any of the inspections. Fauna observed within the pool included spotted salamander egg masses, wood-frog tadpoles, adult green frogs, mosquito larvae and water scavenger beetle. This wetland area contains many fallen tree limbs, tree throws and tree snags. Featherfoil, a State Special Concern Species, was identified in the seasonally inundated pool where the tree canopy parts. Dominant species within the wetland forest include pin oak (Quercus palustris), red maple, sycamore (Platanus occidentalis), tulip poplar, pepperbush, spicebush, sensitive fern, Virginia chain fern (Woodwardia virginica), cinnamon fern and sphagnum moss. Trees within the forested wetland are generally composed of mature sawtimber with a canopy closure greater than 65 percent.

Wetland 7 (flags #23 through #59) is a palustrine forested wetland area adjacent to Route 77 in the northwest corner of the Property. It is a small portion of a large wetland system that meanders on and off of the Property where the area identified as Wetland 6 is part of the overall wetland system. The wetland originates from a pond north of the Property and eventually discharges to the West River to the west of Route 77. The area identified as Wetland 7 is seasonally saturated and includes several braided intermittent watercourses and a shallow seasonally-inundated ± 25-foot by ± 160-foot pool. The pool is sparsely vegetated with few arching shrubs and herbaceous aquatic plants. Egg masses observed within the pool were small to moderate in size, typically not attached to vegetation and resting on the bottom of the pool. This pool had not dried by the end of June and maintained a sufficient amount of water through the growing season to allow vernal

pool species to complete the aquatic development phase of their lifecycle. This pool does not have a permanent inlet or outlet. No finfish were observed during any of the inspections. Species observed within the pool included spotted salamander egg masses, spring peeper (Pseudarcris crucifer) egg masses and tadpoles and adult green frogs (Rana clamitans). The forested portions of the wetland are dominantly vegetated with tulip poplar, red oak, red maple, American elm (Ulmus americana), shagbark hickory, black birch, ironwood, pepperbush, spicebush skunk cabbage (Symplocarpus feotidus), false hellebore (Veratrum viride), water horehound (Lycopus virginicus), meadow-rue (Thalictrum pubescens), fowl mana grass (Glyceria striata), rice cutgrass (Leersia oryzoides), fringed sedge (Carex crinita), marsh blue violet (Viola cucullata), sensitive fern, cinnamon fern, marsh fern (Thelypteris thelypteroides), New York fern (Thelypteris noveboracensis) and sphagnum moss. Many tree snags, fallen branches and tree throws occur in this area. Trees range from sapling/seedling to mature sawtimber with an average canopy closure greater than 65 percent.

This report was prepared by:

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VHB