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February 25, 2005

Regulatory Branch
Department of the Army
New York District, Corps of Engineers
26 Federal Plaza
New York, NY 10278

Dear Sir/Madam:

Re: Legacy Ridge at Highland Mills
Located off Trout Brook Road and Smith Clove Road
Town of Woodbury, NY - County of Orange
Legacy Ridge at Highland Mills, LLC, Applicant

We are requesting a jurisdictional determination for this Town of Woodbury property. We have identified wetlands on the site. In connection with this request, the following items are enclosed:

1. CENAP Form 1891, revised Aug. 95, executed by applicant
2. Site delineation report with street map, USGS, NWI, NY State Freshwater Wetlands, and Soil Survey maps
3. C&H wetland delineation (Figure 5)
4. Color photographs
5. Data Form sheets

Please feel free to contact our office if you have any questions regarding this delineation.

Yours truly,

Brian Lavigne

Brian Lavigne, Environmental Scientist

Enclosures (as noted)

SITE SUMMARY

Site Name:	Legacy Ridge at Highland Mills
Location:	Town of Woodbury, Orange County, New York Parcel Identification Numbers: Block 1 Lots 11 & 12.5
Applicant:	Legacy Ridge at Highland Mills LLC
Quadrangle:	Cornwall-on-Hudson, NY and Popolopen Lake, NY
Total Site Area:	708 acres
Nearest Waterway:	Mineral Springs Brook

OVERVIEW

The site in question is located in the Town of Woodbury, Orange County, New York. The property is generally bounded by Route 87 to the west, wooded forest to the north, Smith Clove Road and Mineral Springs Road to the east and residential properties to the south. The property consists of 708 acres of mostly forested areas with some fallow agricultural lands in the southern portion of the site. Trout Brook Road bisects the property. Wetlands are located throughout the property. A large wetland area associated with Mineral Springs Brook is located north of Trout Brook Road. Many watercourse features and wetlands are located on the portion south of Trout Brook Road as well. Wetlands are associated with the pond on the southern portion of the property. A pond is located on the lower, old farm area and, of course, this area has been greatly disturbed by past agricultural activity.

Figure 1 identifies the location of the site on a local street map. Figure 2 shows the site location and area topography on the United States Geological Survey (USGS) 7 ½' series, Cornwall-on-Hudson, NY and Popolopen Lake, NY, quadrangle.

The Cornwall, NY and Popolopen Lake, NY quadrangles of the National Wetlands Inventory (NWI), included as Figure 3, indicates the presence of:

- Palustrine Forested Broad-Leaved Deciduous Temporarily Flooded (PFO1A),
- Palustrine Forested Broad-Leaved Deciduous Seasonally Flooded/Saturated (PFO1E),
- Palustrine Unconsolidated Bottom Permanently Flooded Diked/Impounded (PUBHh),
- Riverine Upper Perennial Unconsolidated Bottom Permanently Flooded (R3UBH),
- Riverine Upper Perennial Unconsolidated Shore Temporarily Flooded (R3USA), and
- Riverine Upper Perennial Unconsolidated Shore Seasonally Flooded (R3USC).

wetlands on the site.

The Cornwall, NY and Popolopen Lake, NY quadrangle of the NY State Freshwater Wetlands map, included as Figure 4, does not indicate the presence of DEC wetlands on the site. Our field review indicates that none of the wetlands on site are categorized as DEC wetlands.

The lots in question have been studied in considerable detail during critical seasons by C&H Environmental, Inc., and we are confident of the delineation. The location of the wetland line has been surveyed by GEOD Corporation, (Newfoundland, NJ). The C&H delineation is included as Figure 5. The wetlands and watercourses on-site are generally well defined. Both U.S.A.C.O.E. jurisdictional and non-jurisdictional features exist on site (refer to figure 5).

VEGETATION

Common upland species for the property include: Red Cedar, White Pine, Chestnut Oak, White Oak, Northern Red Oak, Black Cherry, Sugar Maple, Red Maple, White Ash, Grey Birch, Black Birch, Black Locust, Shagbark Hickory, Quaking Aspen, Black Walnut, Tuliptree, Red Pine, Sassafras, Eastern Hemlock, Crab Apple, Flowering Dogwood, Mountain Laurel, Fly Honeysuckle, Multiflora Rose, Japanese Barberry, Goldenrod, Lowbush Blueberry, Christmas Fern, New York Fern, Canada Mayflower, Virginia Creeper and Garlic Mustard.

Common wetland species for the property include: Red Maple, Green Ash, Yellow Birch, Ironwood, Slippery Elm, Northern Arrowwood, Red-osier Dogwood, Spicebush, Highbush Blueberry, Jewelweed, Cinnamon Fern, Sensitive Fern, Soft Rush, Jack-in-the-Pulpit, Sedges and Sphagnum Moss.

SOILS

Sheet 64 of the Soil Survey for Orange County classifies the soils on site as:

- Alden silt loam (Ab),
- Bath-Nassau shaly silt loam, 3 to 8% slopes (BnB),
- Bath-Nassau shaly silt loam, 8 to 15% (BnC),
- Erie gravelly silt loam, 0 to 3% slopes (ErA),
- Erie gravelly silt loam, 3 to 8% slopes (ErB),
- Erie extremely stony silt loam, gently sloping 1/ (ESB),
- Fredon Loam (Fd),
- Halsey silt loam (Ha),
- Hollis soils, moderately steep 1/ (HLD),
- Hoosic gravelly sandy loam, 3 to 8 percent slopes (HoB),
- Hoosic gravelly sandy loam, 8 to 15 percent slopes (HoC),
- Mardin gravelly silt loam, 3 to 8% slopes (MdB),
- Mardin gravelly silt loam, 8 to 15% slopes (MdC),
- Mardin gravelly silt loam, 15 to 25% slopes(MdD),

- Mardin soils, steep 1/ (MNE),
- Pits, gravel (Pg),
- Rock outcrop-Arnot complex, moderately steep 1/ (RKD),
- Rock outcrop- Arnot complex, very steep 1/ (RKF),
- Rock outcrop-Hollis Complex, very steep 1/ (ROF)
- Scio silt loam, 0 to 3% slopes (ScA),
- Scio silt loam, 3 to 8% slopes (ScB)
- Swartswood & Mardin very stony soils, sloping 1/ (SXC),
- Swartswood & Mardin very stony soil, moderately sloping (SXD), and
- Wayland silt loam (Wd). (See Figure 6)

The Alden, Halsey, and Wayland series are listed on the Hydric Soils of New York list as VP, very poorly drained.

Soil colors in the uplands are mainly 10YR4/4, 10YR4/3, 10YR3/3 and 10YR5/6 in the diagnostic horizon for upland soils. The soil colors in the wetlands are typically 10YR2/1, and 10YR2/2, 10YR5/1 with mottles in the diagnostic horizon for wetland soils.

HYDROLOGY

Wetland and Watercourse areas all have water at or near the surface during the growing season. All other areas are well drained in at least the upper twenty-four inches of the soil.

CONCLUSION

The total area of the site is 708 acres. The wetlands were identified according to the Unified Federal Methodology. Demarcations between wetland and upland are generally sharp and can be observed at any time of the year.

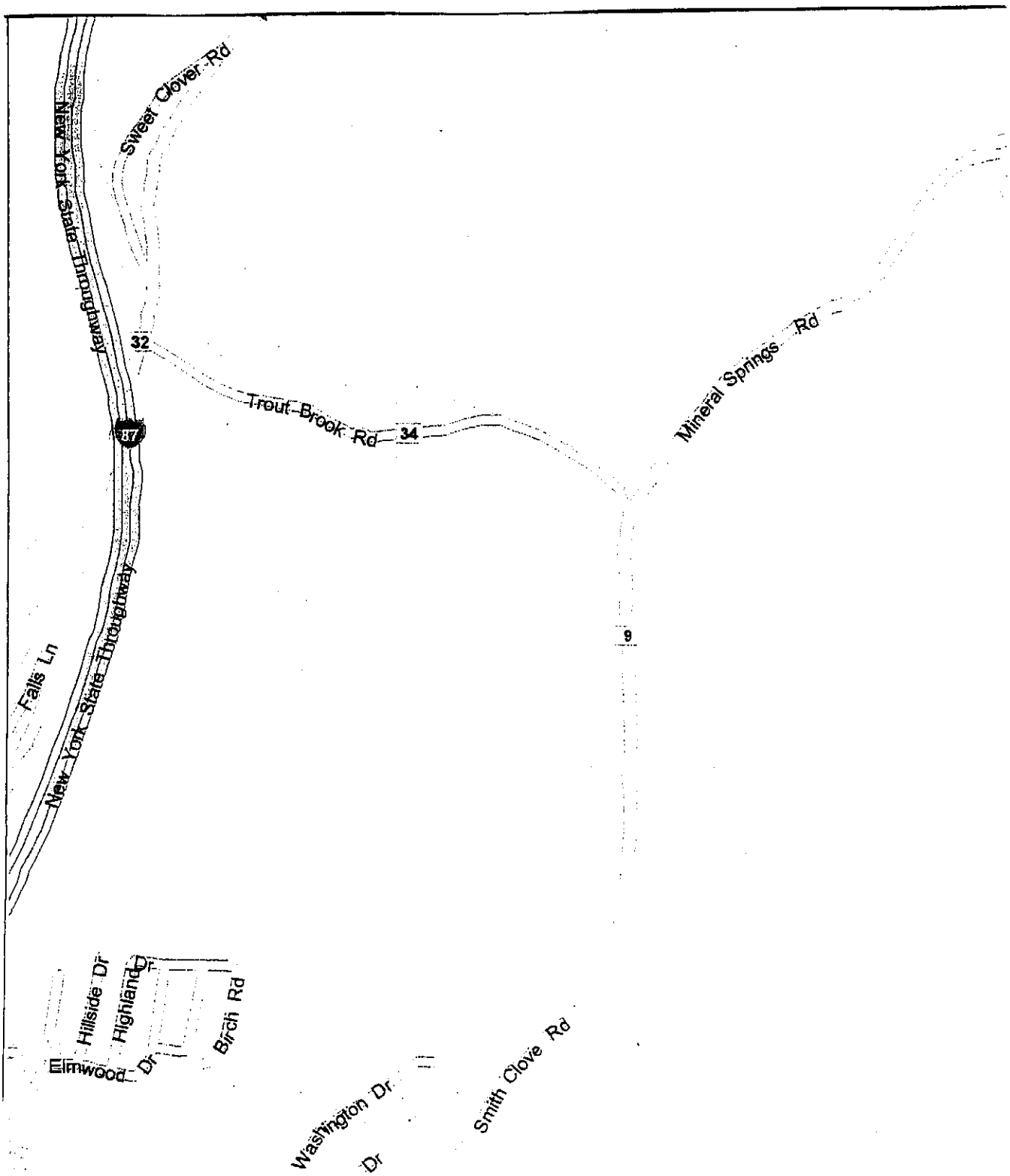

Figure 1. Site location on a local street map.

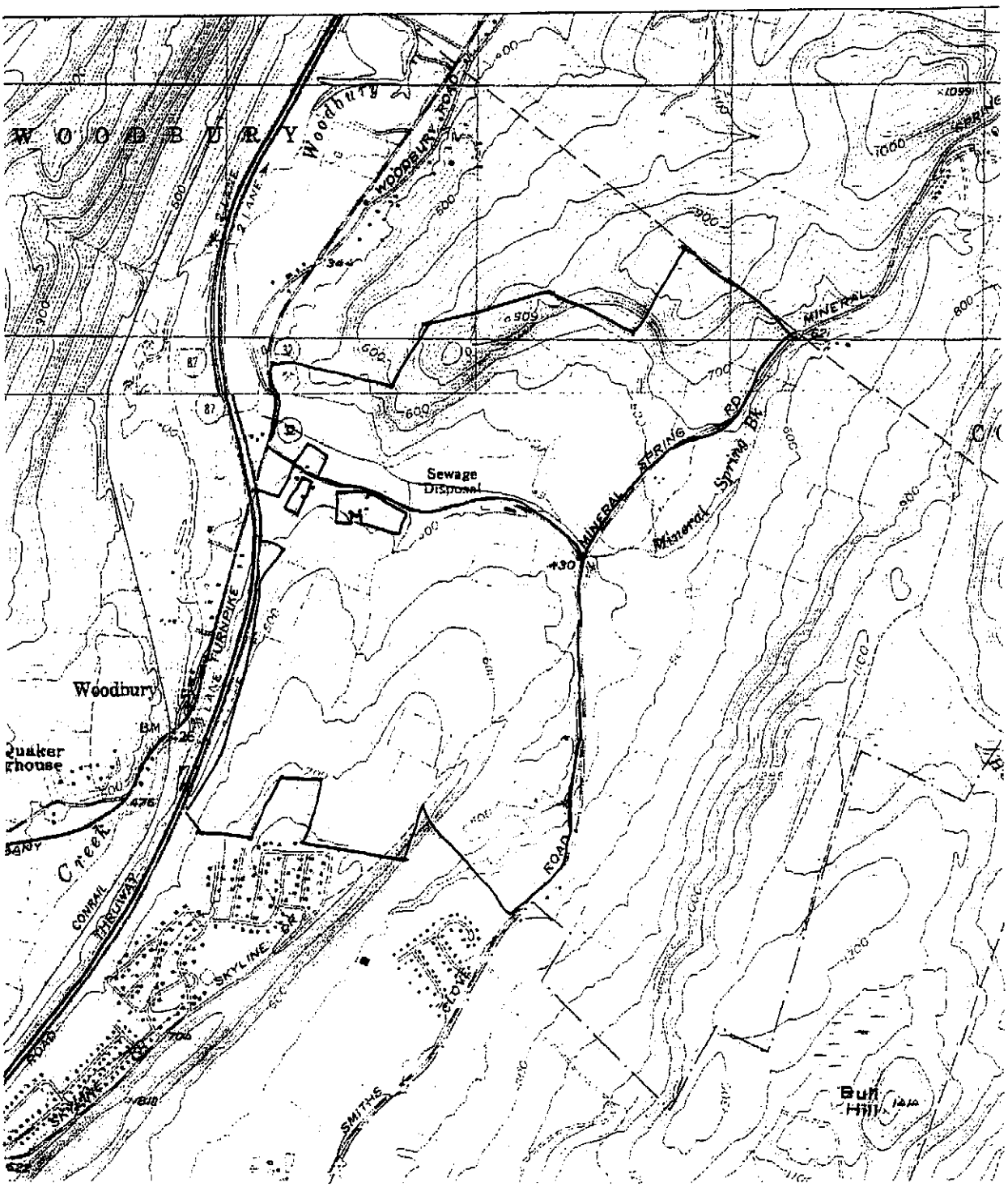

Figure 2. Site location on USGS 7 ½' series, Cornwall-on-Hudson, NY and Popolopin, NY quadrangles.

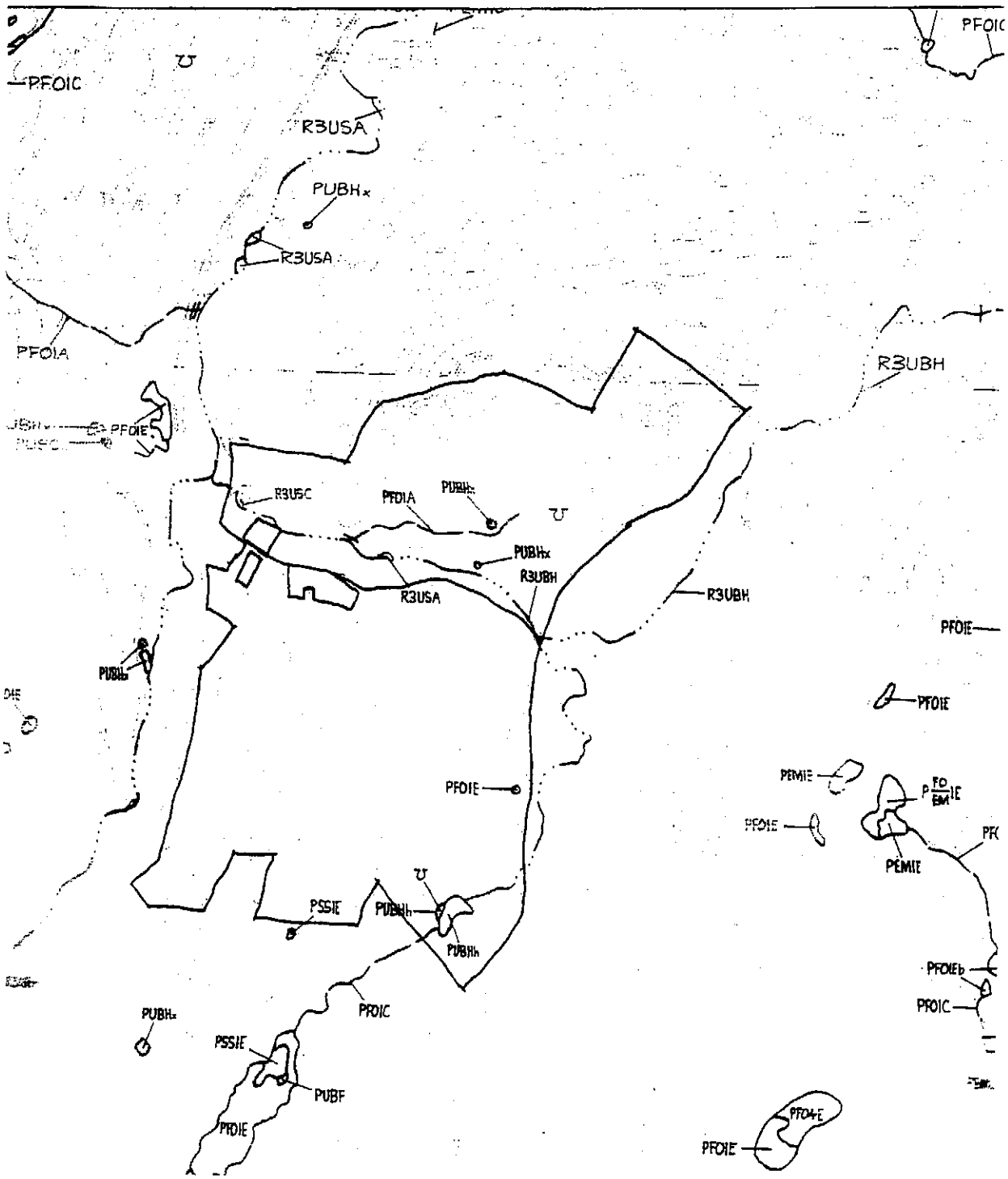

Figure 3. Site location on the NWI, Cornwall, NY and Popolopin, NY quadrangle.

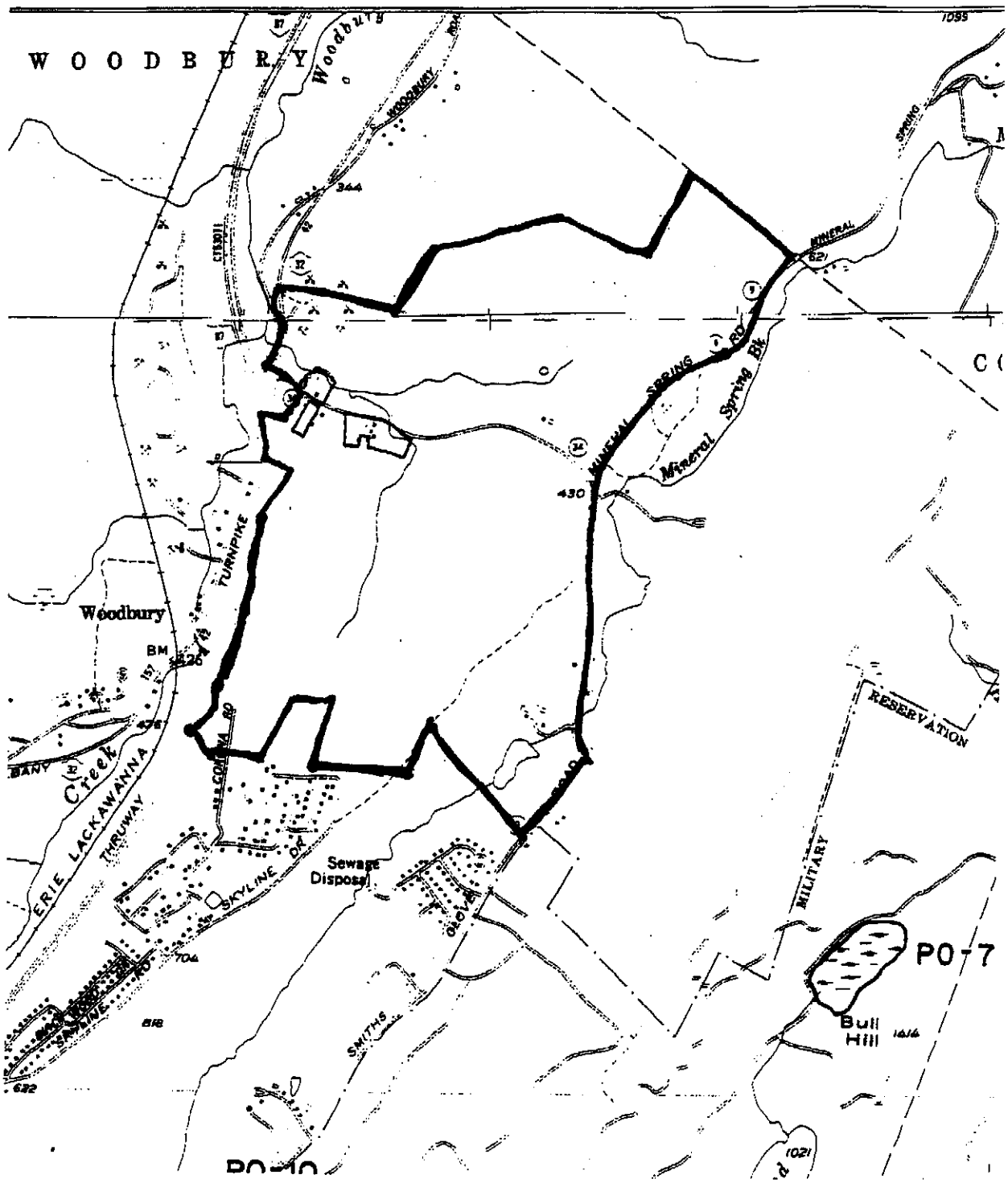

Figure 4. Site location on the NY Freshwater Wetlands Map, Cornwall, NY and Popolopin, NY quadrangle.

Figure 6. Site location on Sheet 64 of the Soil Survey of Orange County, NY .

APPENDIX A: SITE PLANT SPECIES

This appendix lists the scientific names of the plant species found on site. The classification of regional and national indicator status is taken from "National List of Plant Species that Occur in Wetlands: Northeast (Region 1)" produced by the Fish and Wildlife Service (USDI) in cooperation with the National and Regional Interagency Review Panels.

Common Name	Scientific Name	REG	NAT'L
American Beech	*Fagus grandifolia*	FACU	FACU
Black Birch	*Betula lenta*	FACU	FACU
Black Cherry	*Prunus serotina*	FACU	FACU
Black Locust	*Robinia pseudoacacia*	FACU-	UPL, FAC
Black Walnut	*Juglans nigra*	FACU	FACU
Canada Mayflower	*Maianthemum canadense*	FAC-	FACU, FAC
Cattail	*Typha latifolia*	OBL	OBL
Chestnut Oak	*Quercus prinus*	----	----
Christmas Fern	*Polystichum acrostichoides*	FACU-	UPL, FAC
Cinnamon Fern	*Osmunda cinnamomea*	FACW	FACW, FACW+
Common Reed	*Phragmites australis*	FACW	FACW, FACW+
Crab Apple	*Pyrus coronaria*	----	-----
Eastern Hemlock	*Tsuga canadensis*	FACU	FACU
Flowering Dogwood	*Cornus florida*	FACU-	FACU-, FACU
Fly Honeysuckle	*Lonicera canadensis*	FACU	FACU
Garlic Mustard	*Alliaria petiolata*	FACU-	FACU-, FACW
Goldenrod	*Solidago spp.*	----	-----
Gray Birch	*Betula populifolia*	FAC	FAC
Green Ash	*Fraxinus pennsylvanica*	FACW	FAC, FACW
Highbush Blueberry	*Vaccinium corymbosum*	FACW-	FACW-, FACW
Ironwood	*Carpinus caroliniana*	FAC	FAC
Jack-in-the-pulpit	*Arisaema triphyllum*	FACW-	FAC, FACW
Japanese Barberry	*Berberis thungbergii*	FACU	UPL, FACU
Jewelweed	*Impatiens capensis*	FACW	FACW, FACW+
Lowbush Blueberry	*Vaccinium angustifolium*	FACU-	FACU-, FACU
Mountain Laurel	*Kalmia latifolia*	FACU	FACU-, FACU
Multiflora Rose	*Rosa multiflora*	FACU	UPL, FACU
New York Fern	*Thelypteris noveboracensis*	FAC	FAC, FAC+
Northern Arrowwood	*Viburnum recognitum*	FACW-	FACW-, FACW
Northern Red Oak	*Quercus rubra*	FACU-	FACU-, FACU+
Quaking Aspen	*Populus tremula*	FACU	FACU, FAC+
Red Cedar	*Juniperus virginiana*	FACU	FACU-, FACU
Red Maple	*Acer rubrum*	FAC	FACU-, FACU+
Red Pine	*Pinus resinosa*	FACU	FACU

Red-osier Dogwood	*Cornus stolonifera*	FACW+	FAC, FACW+
Sassafras	*Sassafras albidum*	FACU-	FACU-, FACU
Sedge	*Carax stricta*	OBL	OBL
Sensitive Fern	*Onoclea sensibilis*	FACW	FACW
Shagbark Hickory	*Carya ovata*	FACU-	FACU-, FACU+
Skunk Cabbage	*Symplocarpus foetidus*	OBL	OBL
Slippery Elm	*Ulmus rubra*	FAC	FAC
Soft Rush	*Juncas effuses*	FACW+	FACW+, OBL
Sphagnum Moss	*Sphagnum spp.*	----	-----
Spicebush	*Lindera benzoin*	FACW-	FACW-, FACW
Sugar Maple	*Acer saccharum*	FACU-	UPL, FACU
Tuliptree	*Liriodendron tulipifera*	FACU	FACU, FAC
Virginia Creeper	*Parthenocissus quinquefolia*	FACU	FACU, FAC
White Ash	*Fraxinus americana*	FACU	FACU
White Oak	*Quercus alba*	FACU-	FACU-, FACU+
White Pine	*Pinus stobus*	FACU	FACU
Yellow Birch	*Betula alleghaniensis*	FAC	FACU+, FAC

3.2 WATER RESOURCES

3.2.1 Existing Water Resource Conditions.

Description of Wetlands on site

There are wetlands located throughout the property. The wetlands on the entire property have been delineated according to the 1987 Army Corps of Engineers Wetland Delineation Manual. A Jurisdictional Determination Application has been submitted to the Army Corps of Engineers for the area south of Trout Brook Road (Block 1, Lot 12.5). The wetland areas identified on site are listed below:

Block 1, Lot 11

The wetlands located on this lot are associated with Mineral Springs Brook. The wetlands in this area have been identified on the Cornwall, NY and Popolopen Lake, NY quadrangles of the National Wetlands Inventory (NWI). They are identified as Palustrine Forested Broad-Leaved Deciduous Temporarily Flooded (PFO1A), Unconsolidated Bottom Permanently Flooded Diked/Impounded (PUBHh), Riverine Upper Perennial Unconsolidated Bottom Permanently Flooded (R3UBH), Riverine Upper Perennial Unconsolidated Shore Temporarily Flooded (R3USA), and Riverine Upper Perennial Unconsolidated Shore Seasonally Flooded (R3USC) on the NWI maps. These areas are not identified on the NY State Freshwater Wetlands map (NYS DEC maps). The wetlands in the area have been mapped according to the criteria set forth in the 1987 Army Corps of Engineers Wetland Delineation Manual. Two ponds, watercourses, and tributary wetlands were located in this area.

Common vegetation in these wetland areas consisted of Green Ash, Highbush Blueberry, Spicebush, Sensitive Fern, Sedges, and Skunk Cabbage. The soils in this area were gray (10YR5/1) with yellowish brown mottling (10YR5/6) in most of the areas and black (10YR2/1) in areas with greater inundation.

Block 1, Lot 12.5

Watercourses and wetland areas have been identified throughout this property. These areas have been delineated and a Jurisdictional Determination Application has been submitted to the Army Corps of Engineers. As shown of figure XX (name of Figure), the individual wetland areas are labeled. Twenty Six wetland areas (A through Z) were identified on the property. A description of each wetland area is listed below:

Area A

Wetland area A is located in the north western corner of the property. Vegetation consists of Green Ash (*Fraxinus pennsylvanica)*, Ironwood (*Carpinus caroliniana)*, Fly Honeysuckle (*Lonicera Canadensis)*, Northern Arrowwood (*Viburnum recognitum)*, Spicebush (*Lindera benzoin)*, and Skunk Cabbage (*Symplocarpus foetidus)*. This vegetation is consistent with hydric conditions. The soil in this area was black (10YR2/1). This area is 0.53 acres. This area is not identified on the NWI or the NYDEC maps.

Area B

Wetland Area B is a small isolated pocket located along the western property boundary. The vegetation in this pocket consists of skunk cabbage and sphagnum moss (*Sphagnum spp.)*. The soil in this area was black (10YR2/1). The area of this pocket is 386 ft^2. This area is not identified on the NWI or the NYDEC maps.

Area C

Wetland Area C is an isolated pocket located along the western property boundary. The vegetation in this pocket consists of Spicebush, Cinnamon Fern (*Osmunda cinnamomea*), and Skunk Cabbage. The soil in this area was black (10YR2/1). The area of this pocket is 0.23 acres. This area is not identified on the NWI or the NYDEC maps.

Area D

Wetland Area D is a wetland area located in the south-western corner of the property. The vegetation in this pocket consists of Spicebush, Cinnamon Fern, and Skunk Cabbage. The soil in this area was black (10YR2/1). The area of this wetland is 0.51 acres. A watercourse flows from this pocket and drains off site. This area is not identified on the NWI or the NYDEC maps.

Area E

Wetland Area E is a wetland area located along the southern property boundary. The vegetation in this area consists of Skunk Cabbage and Sphagnum Moss. The soil in this area was black (10YR2/1). The area of this wetland is 0.13 acres. This area is not identified on the NWI or the NYDEC maps.

Area F

Wetland Area F is a wetland area located along the southern property boundary. The vegetation in this area consists of Skunk Cabbage and Sphagnum Moss. The soil in this area was black (10YR2/1). The area of this wetland is 186 ft^2. This area is not identified on the NWI or the NYDEC maps.

Area G
Wetland Area G is a wetland area located along the southern property boundary. The vegetation in this area consists of Skunk Cabbage and Sphagnum Moss. The soil in this area was black (10YR2/1). The area of this wetland is 0.07 acres. This area is not identified on the NWI or the NYDEC maps.

Area H
Wetland Area H is a wetland area located along the southern property boundary. The vegetation in this area consists of Red Maple (*Acer rubrum*), Green Ash, Ironwood, Northern Arrowwood, Spicebush, Sensitive Fern, and Sphagnum Moss. The soil in this area was very dark grayish brown (10YR3/2) and gray (10YR5/1) with yellowish brown (10YR5/6) mottles. The area of this wetland is 0.97 acres. This area is not identified on the NWI or the NYDEC maps.

Area I
Wetland Area I is a wetland area located along the southern property boundary. The vegetation in this area consists of Red Maple, Green Ash, Ironwood, Northern Arrowwood, Spicebush, Sensitive Fern, and Sphagnum Moss. The soil in this area was very dark grayish brown (10YR3/2) and gray (10YR5/1) with yellowish brown (10YR5/6) mottles. The area of this wetland is 3.68 acres. This area is not identified on the NYDEC map. The southern tip of this wetland is identified on the NWI as Palustrine Scrub-Shrub Broad-leaved Deciduous Seasonally Flooded/Saturated (PSS1E) wetland.

Area J
Wetland Area J is a wetland area located in the central portion of the property. The vegetation in this area consists of Red Maple, Yellow Birch (*Betula alleghaniensis*), Ironwood, Spicebush, and Skunk Cabbage. The soil in this area was very dark grayish brown (10YR3/2) and gray (10YR5/1) with yellowish brown (10YR5/6) mottles. The area of this wetland is 5.37 acres. This area is not identified on the NWI or the NYDEC maps.

Area K
Wetland Area K is an isolated wetland pocket located to the east of wetland area J in the northern area of the property. The vegetation in this area consists of Skunk Cabbage and Sphagnum Moss. The soil in this area was black (10YR2/1). The area of this wetland is 0.02 acres. This area is not identified on the NWI or the NYDEC maps.

Area L
Wetland Area L is an isolated wetland pocket located to the east of wetland area J in the northern area of the property. The vegetation in this area consists of Skunk Cabbage and Sphagnum Moss. The soil in this area was black (10YR2/1). The area of this wetland is 211 ft^2. This area is not identified on the NWI or the NYDEC maps.

Area M
Wetland Area M is a wetland area located along the northern property boundary. This area empties into a watercourse that flows under Trout Brook Road. The vegetation in this area consists of Green Ash, Ironwood, Fly Honeysuckle, Northern Arrowwood, Spicebush, and Skunk Cabbage. The soil in this area was very dark grayish brown (10YR3/2) and gray (10YR5/1) with yellowish brown (10YR5/6) mottles. The area of this wetland is 0.26 acres. This area is not identified on the NWI and NYDEC maps.

Area N
Wetland Area N is a wetland area located along the northern property boundary. This area empties into a watercourse that flows under Trout Brook Road. The vegetation in this area consists of Skunk Cabbage and Sphagnum Moss. The soil in this area was black (10YR2/1). The area of this wetland is 0.05 acres. This area is not identified on the NWI and NYDEC maps.

Area O
Wetland Area O is an isolated wetland pocket located along the northern property boundary. The vegetation in this area consists of Green Ash, Ironwood, Fly Honeysuckle, Northern Arrowwood, Spicebush, and Skunk Cabbage. The soil in this area was very dark grayish brown (10YR3/2) and gray (10YR5/1) with yellowish brown (10YR5/6) mottles. The area of this wetland is 0.15 acres. This area is not identified on the NWI and NYDEC maps.

Area P
Wetland Area P is an isolated wetland pocket located along the northern property boundary. The vegetation in this area consists of Green Ash, Ironwood, Fly Honeysuckle, Northern Arrowwood, Spicebush, and Skunk Cabbage. The soil in this area was very dark grayish brown (10YR3/2) and gray (10YR5/2) with yellowish brown (10YR5/6) mottles. The area of this wetland is 0.12 acres. This area is not identified on the NWI and NYDEC maps.

Area Q
Wetland Area Q is a wetland area located in the northern area of the property. This area empties into a watercourse that flows under Trout Brook Road. The vegetation in this area consists of Green Ash, Ironwood, Fly Honeysuckle, Northern Arrowwood, Spicebush, and Skunk Cabbage. The soil in this area was very dark grayish brown (10YR3/2) and gray (10YR5/1) with yellowish brown (10YR5/6) mottles. The area of this wetland is 0.43 acres. This area is not identified on the NWI and NYDEC maps.

Area R
Wetland Area R is a wetland area located along the northern property boundary. This area empties into a watercourse that flows under Trout Brook Road. The vegetation in this area consists of Green Ash, Ironwood, Fly Honeysuckle, Northern Arrowwood, Spicebush, and Skunk Cabbage. The soil in this area was black (10YR2/1) and black (10YR2/1) with gray (10YR5/1) mottles. The area of this wetland is 1.38 acres. This area is not identified on the NWI and NYDEC maps.