NEW YORK STATE | Department of Environmental Conservation | Office of General Services | Department of State

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Environmental Permits
NYSDEC Region 2 New York

US Army Corps of Engineers

JOINT APPLICATION FORM

For Permits for activities activities affecting streams, waterways, waterbodies, wetlands, coastal areas, sources of water, and endangered and threatened species.

You must separately apply for and obtain Permits from each involved agency before starting work. Please read all instructions.

1. **Applications To:**

>NYS Department of Environmental Conservation ☑ Check here to confirm you sent this form to NYSDEC.

Check all permits that apply:
- ☐ Stream Disturbance
- ☐ Excavation and Fill in Navigable Waters
- ☐ Docks, Moorings or Platforms
- ☐ Dams and Impoundment Structures
- ☐ 401 Water Quality Certification
- ☐ Freshwater Wetlands
- ☐ Tidal Wetlands
- ☐ Wild, Scenic and Recreational Rivers
- ☐ Coastal Erosion Management
- ☑ Water Withdrawal
- ☐ Long Island Well
- ☑ Incidental Take of Endangered / Threatened Species

>US Army Corps of Engineers ☑ Check here to confirm you sent this form to USACE.

Check all permits that apply: ☐ Section 404 Clean Water Act ☐ Section 10 Rivers and Harbors Act

Is the project Federally funded? ☐ Yes ☑ No

If yes, name of Federal Agency:

General Permit Type(s), if known: Nationwide Permit 29

Preconstruction Notification: ☑ Yes ☐ No

>NYS Office of General Services ☐ Check here to confirm you sent this form to NYSOGS.

Check all permits that apply:
- ☐ State Owned Lands Under Water
- ☐ Utility Easement (pipelines, conduits, cables, etc.)
- ☐ Docks, Moorings or Platforms

>NYS Department of State ☐ Check here to confirm you sent this form to NYSDOS.

Check if this applies: ☐ Coastal Consistency Concurrence

2. **Name of Applicant**: Keen Equities, LLC

Taxpayer ID (if applicant is NOT an individual): 20-3410737

Mailing Address: 4922 11th Avenue

Post Office / City: Brooklyn

State: NY

Zip: 11219

Telephone: (949) 769-9478

Email: YCR@Windsorglobal.com

Applicant Must be (check all that apply): ☑ Owner ☐ Operator ☐ Lessee

3. **Name of Property Owner (if different than Applicant)**: Same as Applicant

Mailing Address:

Post Office / City:

State:

Zip:

Telephone:

Email:

For Agency Use Only	Agency Application Number:

4. **Name of Contact / Agent**

CPC c/o Simon Gelb

Mailing Address	Post Office / City	State	Zip
PO Box 2020	Monroe	NY	10949

Telephone 845-774-8000 Email gelbsimon@gmail.com

5. **Project / Facility Name**

Clovewood

Property Tax Map Section / Block / Lot Number: 208-1-2 & 208-1-3

Project Street Address, if applicable	Post Office / City	State	Zip
505 Clove Road	Monroe	NY	10950

Provide directions and distances to roads, intersections, bridges and bodies of water

On the east side of NYS Route 208 at the intersection with Clove Road

☐ Town ☑ Village ☐ City

County	Stream/Waterbody Name
Orange	Tributary of Satterly Creek

South Blooming Grove

Project Location Coordinates: Enter Latitude and Longitude in degrees, minutes, seconds:

Latitude: 41 ° 22 ' 36 " Longitude: 74 ° 9 ' 42.3 "

6. **Project Description:** Provide the following information about your project. Continue each response and provide any additional information on other pages. **Attach plans on separate pages.**

a. Purpose of the proposed project:

Proposed 600 lot conservation type residential subdivision on approximately 708 acres of land to serve local housing needs. Project to be served by new central water and sewer facilities.

b. Description of current site conditions:

Mix of woodlands and wetland and remains of former golf course with approximately 60 structures associated with the former Lake Anne Country Club.

c. Proposed site changes:

Demolition of existing structures and addition of roads, utilities and 600 fee simple dwelling units.

d. Type of structures and fill materials to be installed, and quantity of materials to be used (e.g., square feet of coverage, cubic yards of fill material, structures below ordinary/mean high water, etc.):

600 residential structures with associated improvements. Improvements will result in the addition of approximately 68.5 acres of impervious area. There will be no fill imported to the site nor will existing wetlands or surface waters be filled. There is no structures below mean high water mark.

e. Area of excavation or dredging, volume of material to be removed, location of dredged material placement:

Total area of disturbance = 252 +/- acres. Area of temporary disturbance = 4.7 +/- acres. Area of permanent disturbance = 247.3 +/- . There will be no material removed from the site.

f. Is tree cutting or clearing proposed? ☑ Yes If Yes, explain below. ☐ No

Timing of the proposed cutting or clearing (month/year): November through March

Number of trees to be cut: >1,000 Acreage of trees to be cleared: 199 +/-

g. Work methods and type of equipment to be used:

Standard excavation and construction methods used for residential development.

h. Describe the planned sequence of activities:

Obtain necessary permits; delineation of limits of disturbance; installation of erosion control; clearing and grubbing; mass earth work; installation of utilities; installation of roads and drainage; construction of dwelling structures.

i. Pollution control methods and other actions proposed to mitigate environmental impacts:

Standard erosion and sediment controls in accordance with NYS Standards. The project is designed as a conservation subdivision leaving 50% open space and would include 433 acres permanently preserved through deed restriction. Steep slopes are avoided to the greatest extent possible and a voluntary 100 buffer to surface waters is provided where possible.

j. Erosion and silt control methods that will be used to prevent water quality impacts:

Full erosion and sediment control plan prepared and included in the design drawings and SWPPP. Plan includes temporary and permanent measures in accordance with NYS DEC Standards.

k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:

Regulated areas avoided to the greatest extent practical by use of a conservation type subdivision which proposes approx 50% of the parcel preserved as open space. Wetland areas avoided and the only area of proposed disturbance to a portion of the 100-foot wetland buffer area is temporary and for the installation of a sewer-force main to an already disturbed area. Open bottom structures for stream or drainage crossings.

l. Proposed use: ☑ Private ☐ Public ☐ Commercial

m. Proposed Start Date: April 2023 Estimated Completion Date: April 2026

n. Has work begun on project? ☑ Yes If Yes, explain below. ☐ No

Test wells have been drilled.

o. Will project occupy Federal, State, or Municipal Land? ☐ Yes If Yes, explain below. ☑ No

p. List any previous DEC, USACE, OGS or DOS Permit / Application numbers for activities at this location:

DEC Application ID No. 3-3320-00150/00001,2,3

q. Will this project require additional Federal, State, or Local authorizations, including zoning changes?

☑ Yes If Yes, list below. ☐ No

State - DEC - Stormwater SPDES; Sanitary SPDES; Water Taking. DOT - Highway work permit
County - DPW - Highway Work Permit; County Planning 239; County Health - Realty Subdivision & Water Main Ext.
V. South Blooming Grove - Realty Subdivision.

7. **Signatures.**

Applicant and Owner (If different) must sign the application. If the applicant is the landowner, the **landowner attestation form** can be used as an electronic signature as an alternative to the signature below, if necessary. Append additional pages of this Signature section if there are multiple Applicants, Owners or Contact/Agents.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief.

Permission to Inspect - I hereby consent to Agency inspection of the project site and adjacent property areas. Agency staff may enter the property without notice between 7:00 am and 7:00 pm, Monday - Friday. Inspection may occur without the owner, applicant or agent present. If the property is posted with "keep out" signs or fenced with an unlocked gate, Agency staff may still enter the property. Agency staff may take measurements, analyze site physical characteristics, take soil and vegetation samples, sketch and photograph the site. I understand that failure to give this consent may result in denial of the permit(s) sought by this application.

False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the NYS Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than $10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Signature of Applicant Y.C. Rubin — Date: Dec. 6, 2021

Applicant Must be (check all that apply): ☑ Owner ☐ Operator ☐ Lessee

Printed Name: Yehoshua Rubin — Title: Manager

Signature of Owner (if different than Applicant) — Date:

Printed Name: — Title:

Signature of Contact / Agent Simon Gelb — Date: 12/06/21

Printed Name: Simon Gelb, CPC — Title: Agent

For Agency Use Only **DETERMINATION OF NO PERMIT REQUIRED**

Agency Application Number:

(Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative:

Printed Name: — Title:

Signature: — Date:

Article 11 – Incidental Take Application
&
Mitigation Plan

for the

Divrei Chaim f/k/a Clovewood Project

Village of South Blooming Grove, Orange County, New York

Prepared For:
CPC, LLC
P.O. Box 2020
Monroe, New York 10949

Prepared By:

NCES
NORTH COUNTRY ECOLOGICAL SERVICES, INC.

November 18, 2021
revised April 17, 2023

Table of Contents

1.0 INTRODUCTION

At the request of Simon Gelb of CPC on behalf of Keen Equities, LLC (the "Applicant"), North Country Ecological Services, Inc. (NCES) conducted an ecological investigation on a 866+/- acres consisting of a 708+/- acre property formerly known as "Clovewood" and now referred to as "Divrei Chaim" (the "Site") in the Village of South Blooming Grove and a 158+/- acre neighboring parcel owned by the Applicant in the Town of Blooming Grove. The ecological investigation was conducted as a requisite part of the Environmental Impact Statement (EIS) being compiled for a residential subdivision (the "Project") being proposed on the Site as well as part of the Article 11 Incidental Taking Permit Application from NYS Department of Environmental Conservation (DEC) and associated Mitigation Plan (the "Application"). During the EIS process, the DEC raised questions concerning the existing ecological character of the Site and requested baseline information pertaining to the existing ecological communities, wildlife habitats, and the potential for presence of state and/or federally-listed Endangered, Threatened or Rare (ETR) species of flora and fauna. Accordingly, NCES was retained by the Applicant to expand on the ecological assessment of the Site.

NCES completed ecological assessments over a multi-year period, with multi-season surveys conducted during the 2014, 2015, 2016, and 2017 field seasons. During the surveys, the existing conditions of the Site were documented and specific habitat analyses were completed. In addition, reviews of the Site for the presence of listed ETR species were conducted. The findings of the ecological assessments were detailed in the "Endangered and Threatened Species Report – Clovewood" (dated September 23, 2016 and last revised January 23, 2017). As outlined in the Endangered and Threatened Species Report, individual Timber Rattlesnakes (*Crotalus horridus*) were observed off of the project Site and various habitat suitable to the existence of rattlesnakes was documented on the Site. Timber Rattlesnakes are listed by the DEC

as a Threatened species.

At the conclusion of the Site surveys, the Endangered and Threatened Species Report was provided to DEC Regional Staff for review. As a result of their review, DEC Regional Biologists identified the entire Site as "occupied" habitat for Timber Rattlesnakes based on its proximity to a known den and the seasonal travel patterns of the snakes. The DEC also determined that the proposed residential development would result in the impact of habitats that are conducive to the existence of the species. Therefore, the project would have the potential to have a negative, adverse impact on the local population of Timber Rattlesnakes. As a result, the Applicant is seeking the approval of an Article 11 Incidental Take Permit (ITP) from the DEC for the Project.

This ITP Application is submitted as required by NYCRR Part 182, Article 11 of the Environmental Conservation Law (ECL). The ITP is required to authorize the clearing, grading, and subsequent development of occupied foraging habitat that has been deemed conducive to the existence of Timber Rattlesnakes. The ITP would also cover a direct incidental take of individual Timber Rattlesnakes.

2.0 SITE LOCATION AND DESCRIPTION

The Clovewood property is located at 505 Orange County Route 27 a/k/a Clove Road and has another entrance located at 1100 NYS Route 208 in the Village of South Blooming Grove, Orange County, New York (Figure 1). The centralized coordinates of the property are 41º 22' 36.0" N Latitude and 74º 9' 42.3" W Longitude. An upland ridge, known as Schunnemunk Mountain, extends along the southeastern property boundary. Elevations range from 1,460 feet above Mean-Sea-Level (MSL), located near the top of Schunnemunk Mountain, to approximately 470 feet above MSL, found near the intersection of Route 208 and Clove Road, resulting in an elevation difference of approximately 1,000± feet.

The Site can generally be characterized as a fallow, vacant parcel of land. The Site is predominantly forested (81.3% is wooded). However, the northwestern portion of the Site was previously developed and operated as a private golf course known as the "Lake Ann Golf Course". The golf course has since been abandoned and the land that was previously cleared/graded for the fairways, greens and irrigation ponds are still evident, but are now fallow and exist as early successional field and/or successional shrub land. Several buildings are found throughout the northwest corner of the property. Most of these structures were associated with the previous golf facility.

The northern half of the Site was also historically farmed. Several old roads extend through the Site and remnant fields, stone structures, stone walls, and wire fencing were documented on the property that indicate prior agricultural usage of the property. Lower elevational forested areas have been logged. Until recently, the Site had been leased and was utilized for passive recreational purposes, inclusive of hiking, ATV riding, and hunting. Several gravel roadways and trails are interspersed throughout the Site. The majority of the roadways are contained within historically manipulated lands, or where prior logging activities have occurred. A few trails extend eastward onto the wooded hillside and the steep ridge that is located in the eastern portion of the property.

Land use surrounding the property consists of single-family residential and commercial development. The property is bordered by large scale, moderate density, single-family residential developments along Clove Road and Rte. 208, respectively. Other single-family residences and undeveloped forested and agricultural lands are found to the northwest of the site, along Clove Road. Local commercial establishments are located within two separate strip malls that are located at the intersection of Clove Road and Rte. 208. Undeveloped forested land borders the property to the south and east.

3.0 EXISTING CONDITIONS

3.1 Existing Ecological Communities

Based on the definitions presented in the *Ecological Communities of New York State* (Edinger, 2014) and the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, 1979), the following communities are found on the property:

- Chestnut oak forest
- Acidic talus slope woodland
- Oak-tulip tree forest
- Successional southern hardwood forest
- Successional old field
- Successional shrub land
- Red maple hardwood swamp/Palustrine forested wetland
- Palustrine scrub-shrub wetland
- Palustrine emergent wetland
- Artificial pond
- Rocky Headwater Stream

In addition to these existing, natural ecological communities, for the purposes of identifying all potential cover/resting/foraging habitat, the existing development located in the northwest corner of the Site is included. While existing development is not a natural ecological community type, the area of former development provides cover habitat and potential foraging areas for snakes and other indigenous wildlife. Therefore, it is included in the habitat evaluations conducted on the property. The extent of the existing ecological communities and development present within the

boundaries of the Site are detailed in Table 1 following.

Table 1: Existing Ecological Communities		
Ecological Community Type	**Overall Size**	**Pertcange of Site**
Acidic Talus Slope Woodland	68.18± Acres	10.0%
Chestnut Oak Forest	43.00± Acres	6.5%
Oak-Tulip Tree Forest	164.30± Acres	23.0%
Successional Hardwood Forest	286.15± Acres	39.5%
Successional Old Field	65.40± Acres	10.0%
Successional Shrub Land	25.63± Acres	3.0%
Palustrine Forested Wetland	14.31± Acres	1.5%
Palustrine Scrub-shrub Wetland	10.74± Acres	1.5%
Palustrine Emergent Wetland	05.47± Acres	0.7%
Artificial Pond	04.46± Acres	0.7%
Existing Res. Development	20.53± Acres	4.0%
Rocky Headwater Stream	22,640± Linear Feet	N/A
Totals	**708.17± Acres**	**100.00%**

The location and configuration of the existing ecological communities that have been documented on the property are shown on the drawing prepared by the Engineer that is titled “Existing Ecological Communities Map – Lands of Clovewood”. A copy of this drawing is contained in Figure 3.

3.2 Vegetation

During the assessment, NCES identified eleven (11) different ecological communities within the boundaries of the Site. Each of these ecological communities, with the exception of the Artificial ponds and Rocky headwater streams, contain different vegetative structure and distinct species of vegetation that define them. The Rocky headwater streams are primarily void of vegetation as they function as intermittent, or perennial streams. In addition, the ponds are man/made structures that are open bodies of water that were created many years ago when the property was farmed, or as a golf course. The dominant species of vegetation observed within each of the vegetated ecological communities are listed below:

Acidic Talus Slope Woodland

Some of the dominant species of vegetation observed within the Acidic talus slope woodland ecological community included, but are not limited to: chestnut oak, mountain paper birch (*Betula cordifolia*), striped maple (*Acer pensylvanicum*), shrub oak, mountain laurel, rhododendron, witch-hazel (*Hamamelis virginiana*), black huckleberry, low-bush blueberry, wild sarsaparilla, rock polypody (*Polypodium virginianum*), wood fern (*Dryopteris intermedia*), and various mosses. This ecological community possesses many rock outcrops and was located along the steepest sloped portions of ridge that extends along the southeast property boundary. The Acidic talus slope is situated between the Chestnut oak forest and the Oak-Tulip tree forest communities and predominantly occurs between elevations 1,020' and 1,240'.

Chestnut Oak Forest

Some of the dominant species of vegetation observed within the Chestnut oak forest ecological community included, but are not limited to: chestnut oak (*Quercus montana*), shrub oak (*Quercus ilicifolia*), red oak (*Quercus rubra*), mountain laurel (*Kalmia latifolia*), rhododendron (*Rhododendron spp.*), black huckleberry (*Gaylussacia baccata*), low-bush blueberry (*Vaccinium palladium*), wild sarsaparilla

(*Aralia nudicaulis*) and Pennsylvania sedge (*Carex pennsylvanica*). This ecological community was located at the highest elevational portions (at or above 1,240' above MSL) of the ridge that extends along the southeast property boundary.

Oak Tulip Tree Forest

Some of the prominent species of vegetation observed within the Oak-Tulip tree forest ecological community included, but are not limited to: northern red oak (*Quercus rubra*), white oak *(Quercus alba*), tulip tree (*Liriodendron tulipifera*), American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), white ash (*Fraxinus americana*), black birch (*Betula lenta*), black cherry (*Prunus serotina*), shagbark hickory (*Carya ovata*), Japanese barberry (*Berberis thunbergii*), witch-hazel, winged euonymus (*Euonymus atlatus*), wild sarsaparilla, wood fern, Christmas fern (*Polystichum agrostichoides*), garlic mustard (*Alliaria officinalis*), common blue violet (*Viola sororia*), wild geranium (*Geranium maculatum*) and false solomon's seal (*Smilacina racemosa*).

This ecological community is contained along the less steep areas of the ridge that extends along the southeastern property boundary. This ecological community is contained in areas that were not previously developed or cleared by the golf facility. This ecological community is positioned between the Acidic-talus slope woodland and the Successional southern hardwood forest and is readily established between elevations 940' and 1020'.

Successional Southern Hardwood Forest

Some of the prominent species of vegetation observed within the Successional southern hardwood forest ecological community included, but are not limited to: sugar maple, red maple, black locust (*Robinia pseudoacacia*), walnut (*Juglans* spp), quaking aspen (*Populus tremuloides*), wild apple (*Malus sylvestris*), common buckthorn

(*Rhamnus cathartica*), honeysuckle (*Lonicera tatarica*), multiflora rose (*Rosa multiflora*), Japanese barberry, red raspberry (*Rubus idaeus*), black raspberry (*Rubus allegheniensis*), Virginia creeper (*Parthenocissus quinquefolia),* oriental bittersweet *(Celastris orbiculata)* poison ivy *(Toxicodendron radicans),* garlic mustard, common blue violet, snakeroot *(Ageritina altissima) and stick-tight (Lappula virginiana).* This forested community comprises the majority of the forested lands that are located within and/or immediately adjacent to previously cleared land found below the 940' elevation.

Successional Old Field

Some of the prominent species of vegetation observed within the Successional old field ecological community included, but are not limited to: Canada goldenrod (*Solidago canadensis*), early goldenrod (*Solidago juncea*), timothy (*Phleum pratense*), wild carrot (*Daucus carota*), spotted knapweed (*Centaurea maculosa*), black-eyed susan (*Rudbeckia hirta*), common milkweed (*Asclepias syraca*), ragweed (*Ambrosia artemisiifolia*), little blue stem (*Andropogon scoparius*), quack grass (*Agropyron repens*), birdsfoot trefoil (*Lotus corniculatus*), orchard grass (*Dactylis glomerata*), evening primrose (*Oenothera biennis*), herbaceous cinquefoil (*Potentilla simplex*), red clover (*Trifolium pratense*), white clover (*Trifolium repens*), mullein (*Verbascum thappsus*) and dewberry (*Rubus procumbens*). This ecological community is limited to the areas that were contained within the previous golf course fairways, fringe rough and greens. All of these fields are located below the 940' elevation.

Successional Shrubland

Some of the prominent species of vegetation observed within the Successional shrubland ecological community included, but are not limited to: gray dogwood (*Cornus racemosa*), common buckthorn, tatarian honeysuckle, winged euonymus, multiflora rose, Japanese barberry, oriental bittersweet, catbrier (*Smilax* spp.) summer

grape (*Vitis aestivalis*), blackberry (*Rubus occidentalis*), red raspberry (*Rubus idaeus*), Canada goldenrod, early goldenrod, spotted knapweed, ragweed, and dewberry. This ecological community is limited to areas that were cleared for the previous golf facility, but which were not graded utilized for play. These areas are transitional habitats found between the Successional old field and the Successional southern hardwood ecological communities.

Red Maple Hardwood Swamp / Palustrine Forested Wetland

Some of the prominent species of vegetation observed within the Red-Maple hardwood swamp/Palustrine forested wetland ecological community included, but are not limited to red maple, green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), ironwood (*Carpinus caroliniana*), box elder maple (*Acer negundo*), witch hazel (*Hamamelis virginiana*), highbush blueberry (*Vaccinium corymbosum*) silky dogwood (*Cornus amomum*), tussock sedge (*Carex stricta*), fox sedge (*Carex vulpinoidea*), skunk cabbage (*Symplocarpus foetidus*), sensitive fern (*Onoclea sensibilis*), fowl manna grass (*Glyceria striata*) and moneywort (*Lysimachia nummularia*). This wetland community is located within natural topographical depressions found within forested components of the property, where previous disturbances from the golf facility did not occur.

Palustrine Scrub-shrub and Emergent Wetland

Some of the prominent species of vegetation observed within the Palustrine scrub-shrub and emergent wetland communities included, but are not limited to, silky dogwood, red- osier dogwood (*Cornus stolonifera*), gray dogwood, arrowwood (*Viburnum dentatum*), nannyberry (*Viburnum lentago*), sensitive fern, tussock sedge, late goldenrod (*Solidago gigantea*), slender goldenrod (*Solidago tenuifolia*), jewelweed (*Impatiens capensis*) common reed (*Phragmites australis*), cattail (*Typha latifolia*), purple loosestrife (*Lythrum salicaria*), boneset (*Eupatorium perfoliatum*),

joe-pye weed (*Eupatorium maculatum*), willow herb (*Epilobium glandulosum*), fringed sedge (*Carex crinita*), lurid sedge (*Carex lurida*), dark green bulrush (*Scirpus atrovirens*), wool grass (*Scirpus cyperinus*), soft rush (*Juncus effusus*), tussock sedge, fox sedge, NY Aster (*Aster novi-belgii*) and New England Aster (*Aster novae-angilae*). These wetland communities are limited to the western half of the property, in areas that were part of the previous golf course facility.

3.3 Soils

According to the USDA Natural Resources Conservation Service Web Soil Survey 3.0 for Orange County, New York (the "Soil Survey"), eleven (11) different soil series are found within the boundaries of the property. The soil types identified include: Alden silt loam (Ab); Arnot-Lordstown complex, sloping (ANC); Arnot-Lordstown complex, very steep (ANF); Canandaigua silt loam (Ca); Erie gravelly silt loam, with 0 to 8 percent slopes (ErA & ErB); Hoosic gravelly sandy loam, with 8 to 15 percent slopes (HoC); Mardin gravelly silt loam, with 3 to 25 percent slopes (MdB, MdC & MdD); Raynham silt loam (Ra); Swartswood and Mardin soils, sloping, very stony (SXC); Udorthents, smoothed (UH); and Unadilla silt loam, with 0 to 8 percent slopes (UnB) (Figure 2). In addition, the Soil Survey also indicates a few separate areas of standing, open water (W). These areas of open water correlate with the man-made ponds that exist on the Site.

4.0 PROJECT DESCRIPTION

The Project proposed is a residential development of 600 single-family lots/homes on approximately 708.2± acres of land located in Blaggs Clove on the east side of NYS Route 208 and Clove Road. The Project is situated within the Village of South Blooming Grove, which was incorporated in July of 2006, approximately six months after the Applicant purchased the Site. The Village encompasses 4.98± square miles or approximately 3,187± acres of land and has a population of approximately 3,182. The Project Site contains approximately one-quarter of the Village's total land area.

Approximately 702± acres of the Site are within the Village's RR Zoning District, which permits residential subdivisions where density is determined in accordance with a formula set forth in the Village Zoning Code. Approximately 6.2± acres of the Site are in the RC-I Zoning District. The Site is allowed to be developed with 617 dwelling units (527 from the RR Zoning District and 90 from the RC-1 Zoning District). The Applicant has reserved approximately 22 acres of land in the RR Zoning District for future development with no current plans for its development. As a result, the Project's density is reduced from 617 dwelling units to 600, of which 506 would be market-rate housing and 94 would be affordable housing in accordance with the Village Zoning Code. The Project is consistent with the Village Zoning Code and its land use regulations. As a result, no rezoning, zoning changes, waivers and/or variances are required.

The Site is predominantly comprised vacant, forested land, with the exception of 3 structures associated with the abandoned former Lake Anne Country Club, which would be demolished as part of the Project. The Project is clustered on approximately 252.0± acres of land and would leave 433± acres of the Site undeveloped to be deed restricted. The Project also results in the creation of approximately 60 acres of easily accessible public Village parkland.

In addition to the residences proposed, the Project also entails the installation of associated infrastructure, including but not limited to: roads, utilities, on-site water supply, a sewage treatment plant, stormwater and erosion control systems, and community and recreational facilities. As determined by the Village, the Project's internal road network would be dedicated to the Village and maintained by the Village. The Site development plan, showing the extent of all development proposed is included in Figure 4.

4.1 Purpose and Need for the Project

The Project proposed the development of 600 single family homes in order to meet current and future, local and regional housing needs, including those for affordable housing.

5.0 PROPOSED ECOLOGICAL IMPACT

The Project has been designed as a "cluster style" development, at the request of the Village of South Blooming Grove and in accordance with its Zoning Code. A cluster development was requested in order to limit the overall footprint of the project area. As currently designed, the project area encompasses approximately 252.0± acres. By clustering the development, 433.0± acres of the Site are located outside of the development area and will remain undisturbed, and ultimately be preserved as available habitat for indigenous wildlife species, including Timber Rattlesnakes.

While the Project incorporates use of 252.0± acres of the Site, not all of the lands within the project area will be permanently impacted. According to the design engineers, approximately 4.70± acres of the Project Area will be impacted "temporarily" and will be revegetated.

The proposed Project Area, and the extent of the permanent and temporary impacts to the existing ecological communities generated by the development, are shown on the drawing titled "Impact to Existing Ecological Communities Map – Lands of Clovewood", contained in Figure 5. These impacts are further outlined in Table 2 following.

Table 2: Clovewood: Ecological Community Type Table					
Ecological Community Type	**Overall Size**	**Permanent Impact Proposed**	**Temporary Impact Proposed**	**Overall Impact Proposed**	**Percent Impacted**
Acidic Talus Slope Woodland	68.18± Acres	None	None	None	0%
Chestnut Oak Forest	43.00± Acres	None	None	None	0%
Oak-Tulip Tree Forest	164.30± Acres	04.00± Acres	None	4.00± Acres	2%
Successional Hardwood Forest	286.15± Acres	195.30± Acres	None	195.30± Acres	68%
Successional Old Field	65.40± Acres	33.40± Acres	03.80± Acres	37.20± Acres	57%
Successional Shrub Land	25.63± Acres	01.80± Acres	00.40± Acres	02.20± Acres	8%
Palustrine Forested Wetland	14.31± Acres	None	None	None	0%
Palustrine Scrub-shrub Wetland	10.74± Acres	None	None	None	0%
Palustrine Emergent Wetland	05.47± Acres	None	None	None	0%
Artificial Pond	04.46± Acres	None	None	None	0%
Existing Res. Development	20.53± Acres	12.80± Acres	00.50± Acres	13.30± Acres	65%
Rocky Headwater Stream	22,640± Linear Feet	295± Linear Feet	None	295± Linear Feet	1%
Totals	**708.17± Acres**	**247.30± Acres**	**4.70± Acres**	**252.00± Acres**	**35.60%**

The development is predominantly located within the portion of the property that has been previously cleared, graded, and partially developed for the former Lake Ann Country Club and Golf Course. By limiting the proposed development to previously developed lands, impact to the undisturbed forested habitats found on the property are minimized.

The project would preserve 433± acres of habitat via deed restriction for the benefit of the Timber Rattlesnake species. The 433± acres represent 50% of lands controlled by the Project Applicant, including the 708-acre project site as well as a contiguous parcel consisting of 158 acres in the Town of Blooming Grove. This deed restricted acreage is shown on Figure 6.

The development has also been designed to avoid direct impact to regulated wetlands and to limit the disturbance to defined stream channels. The stream impacts proposed

are warranted for road crossings, which are required to gain access to developable portions of the Site.

Throughout the Article 11 application/permitting process, the project has changed to meet the requirements of the Article 11 permit standards. For example, the project initially proposed to permanently preserve only the lands located above 940 AMSL; however, after discussions with the Department, the Applicant would preserve the above referenced 433± acres via deed restriction for the benefit of the Timber Rattlesnake species. The deed restricted 433± acres represents 50% of the total lands controlled by the Applicant and results in a net conservation benefit to the species. The Applicant would also improve two 2±-acre portions of the permanently preserved acreage in order to provide more optimal habitat area for Timber Rattlesnakes.

Additionally, the Applicant has changed the project in regard to permit issuance standards. For example, the project will have a DEC qualified timber rattlesnake monitor/handler on-site during soil disturbance activities between the months of April 1 and November 1 of any given year. The applicant has also provided additional education and encounter materials, and updated information related to financing the mitigation measures.

5.1 Timber Rattlesnake Impact Assessment

As a result of the planned development, it has been determined that the residential subdivision avoids the direct impact of the potential basking, shedding, gestating, and denning habitats that are located above the 940' elevation (as documented by NCES and detailed in the Endangered and Threatened Species Report). These habitats are inclusive of the Acidic Talus Slope Woodland and the Chestnut Oak Forest Community. In addition, the project only proposes the impact of 3.80± acres (2%) of the Oak-Tulip Tree Forest community, which exists between the potential basking, shedding, gestating and denning habitats and the previously disturbed sections of the property

that are located in the northern half of the Site.

The proposed development is generally limited to the previously disturbed portions of the property, which are found below the 940' elevation. While these areas have been previously developed as part of the former golf course, according to the DEC, the ecological communities found in the development area provide suitable foraging habitat for Timber Rattlesnakes. Based on the proposed development plans, 252.0± acres of potential foraging habitat will be impacted by the project. The nature of expected take or taking would be related to only incidental or accidental taking during construction, which would be extremely rare and no actual take or taking, is anticipated. Due to the measures employed by the Applicant during construction and post-development and as approved by the DEC, Timber Rattlesnake protection is a top priority. Exclusionary fencing will be installed, daily inspections of the fencing will occur, education and encounter plans will be provided to the contractor so all involved with the construction are fully aware of, and understand, the necessity for full vigilance to protect the species when on-site. Should an accidental take occur, the Applicant, Timber Rattlesnake monitor, and the DEC will be notified. The nature and cause of the take will be evaluated and additional measures will be immediately employed to resolve the cause to the taking.

Of the impacts proposed, 247.30± acres will result in permanent habitat conversion and the remaining 4.70± acres of impact are only temporary and result from minor proposed land clearing and grading activities. While the temporary impacts will generate a short temporal loss in available habitat, these areas will be revegetated and maintained as open space, post construction. Therefore, the temporary impact areas will exist as available habitat for indigenous species of wildlife utilizing the Site.

The Project would not jeopardize the continued existence of Timber Rattlesnakes and would mitigate the potential impacts to the species foraging habitat through the permanent preservation of 433 acres described above via deed restriction.

6.0 ADAPTIVE MITIGATION MEASURES

In accordance with DEC's "Guidelines for Reviewing Projects for Potential Impacts to the Timber Rattlesnake", all impacts to the potential/suitable basking and gestating habitats have been avoided and no aspect of the proposed developed is located within 660 feet of any known hibernacula. As impact to foraging habitat is unavoidable, adaptive mitigative measures are proposed to be implemented during construction to minimize the potential for direct and indirect impacts to Timber Rattlesnakes.

These mitigative measures include the following: Preservation of Undeveloped Land as Wildlife Habitat; Timber Rattlesnake On-Site Contractor Education and Encounter Plan; Timber Rattlesnake Sighting Protocol; temporary exclusionary fencing, if required by NYSDEC; and an DEC qualified and licensed On-site Snake Monitor.

Preservation of Habitat for Wildlife

The project will include the permanent preservation of 433± acres of land as viable rattlesnake habitat, via a formal deed restriction. See Section 7.0 of this document for details.

Timber Rattlesnake On-Site Contractor Education and Encounter Plan

This education plan will be presented in a seminar format (by NCES Staff) to the general contractors that will be working on the site prior to the initiation of any construction activities. This education plan can also be presented numerous times throughout the construction season, when snakes are active (April - October), so that new crews working on the project are knowledgeable about how to operate if a snake is found within the construction site and also the regulatory requirements when working around rattlesnakes.

The education will address safety and set forth routine procedures for snake encounters. All workers at the Site will be made aware of not only the likelihood of encountering Timber Rattlesnakes, but how to safely protect themselves and the snake from injury and/or death during an encounter. NCES will work directly with DEC biologists to develop a plan that outlines a procedure for safe capture, handling, and relocation of a rattlesnake if one should be encountered and requires removal. A copy of the On-site Contractor Education and Encounter Plan is included in Attachment I. Since the Project construction will occur for an extended period of time, NCES anticipates being on the Site and working directly with the contractors on a regular basis. Each contractor will also be provided with information on how to handle an encounter with a rattlesnake and where to find the Timber Rattlesnake Sighting Protocol.

Timber Rattlesnake Sighting Protocol

The On-site Contractor Education and Encounter Plan will be clearly posted in all contractor construction trailers, prior to the commencement of any construction activities. This plan also contains the Timber Rattlesnake Sighting Protocol, which defines the procedures to be followed should a rattlesnake be encountered within, or immediately adjacent to, active work areas. A copy of the Sighting Protocol is contained in Attachment II.

NCES Staff, or a member of the contractor's crew (who has attended the required Education Plan seminar), will be responsible for maintaining compliance with the encounter plan. If NCES Staff is un-available, a list of other qualified Snake Monitors (as approved by the DEC) will also be posted and they can be contacted by contractors directly to handle individual snakes, if required.

If a Timber Rattlesnake is encountered, the DEC Region 3 Office will be notified within 24 hours of the event and will also be provided with a copy of a sighting report

that will document the following: the location of sighting, date, time, weather conditions, sex and approximate length of the snake, representative photographs, and the location of where the snake was relocated. Copies of all sighting reports will be kept and readily available upon request.

Exclusionary Fencing

If required by the DEC, 4.0' tall exclusionary fencing would be properly installed around the project's water towers. It would be inclusive of:

- ¼ inch square hardware cloth or wire mesh;
- A minimum of 48" high;
- Anchored into the ground with reinforcement bars placed on the "disturbance side" of the barrier and spaced between 6 – 8 feet apart; and,
- Secured at the base (barrier/ground interface) with at least 6" of fence material covered with soil backfill.

On-site Snake Monitor

For any clearing/grading and soil disturbing construction work that will occur (in whole or in part) from April 1 through October 31 of any construction season, a qualified and licensed Snake Monitor will be on-call and available to monitor construction zones for the presence of snakes. The Snake Monitor must be a qualified biologist that has knowledge of Timber Rattlesnake ecology and approved relocation procedures who has been approved by NYSDEC to fulfill this role. The Snake Monitor must also have experience handling rattlesnakes and be licensed by New York State to do so.

The Snake Monitor will be on-call during all soil disturbance construction activities

from April 1 through November 1 of any given year, and would be responsible for conducting reconnaissance surveys for Timber Rattlesnakes within the work area (prior to the initiation of any disturbance activities) and relocating snakes outside of active construction zones, as required. Additional responsibilities of the Snake Monitor will include:

- Implementation of the current education program and BMP's for snake encounters;
- Education of the on-site contractors;
- Consultation with the contractor to ensure all contracts have attended an Education and Encounter seminar; and
- Document all encounters with snakes.

The Snake Monitor can designate an on-site contractor to assist with daily inspections. The responsibility of the designated on-site contractor, who would work under the specific direction of the Snake Monitor, is to conduct reconnaissance surveys within the work area (prior to the initiation of any disturbance activities) and; if required by the DEC, the maintenance of the exclusionary fencing around the project's water towers. If a Timber Rattlesnake is encountered by the designated contractor, the Snake Monitor will be contacted to remove and relocate the snake.

The aforementioned mitigative measures are to be implemented throughout the course of the entire development. The Snake Monitor is not needed during the winter months (November 1 – March 31), as that is when snakes are confined to overwintering denning habitat and not present within summer dispersal/foraging habitat.

6.1 Post Construction Mitigative Measures

After construction, and once residents are living at the development, post-construction mitigation measures to prevent/reduce conflict between humans, pets, and Timber

Rattlesnakes are also required. These post-construction mitigation measures to be implemented include a resident Wildlife Education Plan to help identify typical wildlife and snakes that may be encountered.

Management of rattlesnakes encountered after construction and of continuing education about the rattlesnakes will be handled by Blooming Grove's UJC Emergency Response Division (ERD) organization, which will be funded by the Grantor. ERD will also handle regular community-based education and encounter training to be provided at an annual workshop and provision of flyers to all residences in the development. The flyer will include the Resident Education & Encounter Plan and the Timber Rattlesnake Sighting Protocol included in Attachments I, II and III of the incidental take permit application.

The Resident Wildlife Education Plan covers safety and identifies routine procedures for snake encounters. This education plan will be presented in a pamphlet that can be given to each resident of the development. The pamphlet will cover the likelihood of encountering Timber Rattlesnakes and how to safely keep residents and individual snakes from injury and/or death during an encounter. NCES has worked directly with DEC biologists to develop a plan that outlines a procedure for safe capture, handling, and relocation of a rattlesnake if one should be encountered and requires removal. A copy of the resident Wildlife Education Plan is included in Attachment III and a copy of the maintenance/operation Wildlife Education Plan is included in Attachment IV.

6.2 Long Term Site Management

On-site developed facilities on the project site such as the stormwater structures, roadways, water supply system, and wastewater disposal system, etc. will require access for operation as well as maintenance and repair. The well locations will be accessed using the existing access roads and they will be gated and locked. Only authorized personnel who are required to monitor, maintain, and/or service the wells, water towers and pump house will have access to these areas

Routine yearly maintenance of the access roads, the wells, and the pump house will be scheduled from October through April, during times when Timber Rattlesnakes are not typically located in summer foraging habitats, and are likely denned for the winter. Servicing the well and pump house during these times will decrease the likelihood of an encounter along the roads or at the well site locations themselves. If emergency maintenance is required during the summer months, authorized personnel will be provided with the Timber Rattlesnake On-Site Contractor Education and Encounter Plan.

Minor upgrades to the utility roads will be required, such as installing fabric and gravel to firm up the roads where needed. No paving of the roads is proposed. The roads leading to the wells will only be travelled for maintenance purposes, on an "as needed" basis, to reduce incidental encounters with Timber Rattlesnakes. Any maintenance personnel will attend the Timber Rattlesnake On-Site Contractor Education and Encounter Plan and be provided with the Sighting Protocol so they are educated on how to safely react, should an encounter with a Timber Rattlesnake occur.

NCES has developed a maintenance/operation Education Plan which is included in Attachment IV. The maintenance/operation education plan will be presented to those involved in the maintenance and operation of on-site developed facilities including the stormwater structures, roadways, water supply, and wastewater supply systems, etc. . The individuals accessing the wells will have read the Rattlesnake Encounter Plan so they are aware of Timber Rattlesnakes and how to proceed if one is encountered.

The Applicant will also work with NYSDEC on rattlesnake habitat enhancements and management, e.g. selective tree removal to enhance basking habitat described in Section 8.0 below.

7.0 HABITAT PRESERVATION PLAN

In accordance with the ITP issuance standards imposed by the DEC, a project resulting the

incidental take of a listed species must offer an overall "net conservation benefit" to the species in order for the ITP to be authorized. This project will completely avoid the potential/suitable denning, basking, shedding, and gestation habitats; will implement adaptive mitigation measures, to avoid direct impact to Timber Rattlesnakes during construction; and, will supplement post- construction and long-term management plans. In addition, the Applicant also proposes the permanent preservation of 433± acres of land (290.88 acres on-site and 142.42 acres off-site on an adjacent parcel owned by the Applicant) as viable rattlesnake habitat, via a formal deed restriction.

The areas to be preserved contain the denning, basking, shedding, and gestation habitats that were documented by NCES on the property. The preservation area maintains an undisturbed buffer between the proposed development and adjacent undeveloped public owned state park lands (Schunnemunk Mountain State Park). This permanently protected property adequately mitigates impact to foraging habitat, and provides a net conservation benefit to Timber Rattlesnakes.

The preservation of this land will be accomplished via a deed restriction that will prevent future development or encroachment of any kind. The preservation area is inclusive of 290.88± acres of the Site, as well as 142.42± acres off-site of additional land owned by the Applicant and which borders the Site to the east in the Town of Blooming Grove. Per NCES's Spring 2020 habitat assessment, this additional property is comprised of the same ecological communities as documented on the Site. Therefore, the additional land to contains habitat that would also be conducive to Timber Rattlesnake foraging activity. The location and configuration of the preservation area is shown on the drawing titled "Timber Rattlesnake Resource Property Area Map". A copy of this map, along with a completed Metes and Bounds description is contained in Figure 6.

The land encompassed within the deed restricted areas is comprised of the Acidic Talus Slope Woodland, Chestnut Oak Forest, Oak-Tulip Tree, and Successional Southern Hardwood Forest communities. These ecological communities provide suitable denning, basking,

shedding, gestating, and foraging habitat for Timber Rattlesnakes. The deed restricted lands are also contiguous with other undisturbed and unfragmented forested communities that contain suitable habitat and which that are found along the Schunnemunk Mountain Ridge and within the adjacent state park lands. Timber Rattlesnakes are also known to occupy these adjacent lands.

The preservation plan results in the establishment of a large, contiguous, un-fragmented expanse of forested habitat that abuts Schunnemunk Mountain State Park, which is located to the southeast of the Site. Additionally, other undeveloped forested habitats conducive to the presence of rattlesnakes are also located within Earl Reservoir Park, which is located to the northeast of the Site. The preservation of the land as proposed by the Applicant, coupled with the unfragmented forested habitats that are located in the adjacent parks, will maintain a large, contiguous, area of land that will provide substantial, viable habitat for the local population of Timber Rattlesnakes known to exist in the geographic region.

8.0 HABITAT ENHANCEMENT ACTIVITES

Two separate areas at the toe of slope of Schunnemunk Mountain's Talus Slope shall be cleared of trees and shrubs to provide additional basking habitat for the Timber Rattlesnake (Crotalus horridus). These areas were selected by NCES as areas where clearing could take place with no disturbance to the vegetation on the Talus Slope, that is more sensitive to disturbance, and would be more difficult to execute the clearing of vegetation. Existing logging roads and ATV trails can be utilized to access the two areas with less disturbance to the existing forested community and wetlands.

1) Tree and shrub cutting would be conducted between November 1 and March 31 to avoid disturbances to Timber Rattlesnakes and bats that utilize the property. In addition, the frozen ground will reduce any impacts to the soils along the access roads. Trees and shrubs will be cut flush to the ground with no stumping.

2) Tree tops and shrubs will be removed from the areas and moved off-site, or chipped with

the chips dispersed into the adjacent forested lands, but not within designated wetlands.

3) Tree trunks that are 18" diameter, or larger, will be cut to 10' lengths will be kept within the cleared areas to provide habitat for Timber Rattlesnakes. Four (4) lengths of log per 200 sq. ft. of open area will be left as habitat. The stumps will be laid out in random locations. Some will be placed abutting with another log placed at a 90º. This will provide diverse habitat and allow snakes to select basking locations against the logs that provide the optimal location for sunlight and to regulate body temperatures.

4) Each area will be maintained in winter (November 1 – March 31) by hand clearing (hand tools and chainsaws) every two (2) years to maintain the area as viable basking habitat. Woody vegetation will be cut and removed from the areas. Weedwhackers or other similar tools can be used to cut herbaceous vegetation to ground level. No herbicides will be used to maintain the area as a clearing for Timber Rattlesnakes.

5) Signage stating "Environmentally Sensitive Area – Keep Out" will be placed every 25 yards surrounding the two (2) areas to identify the Enhancement Areas. See example of such signage below.

The clearing would occur within 30 days of NYSDEC confirmation the clearing locations, as long as those 30 days are not within the days of April 1 and November 1.

9.0 MONITORING EFFECTIVENESS OF PLAN

The proposed short- and long-term mitigation measures will be monitored for effectiveness as described below.

Short-term Monitoring & Reports

The DEC qualified timber rattlesnake monitor/handler would be on-site during soil disturbance activities between the months of April 1 and November 1. When on-site, the DEC qualified monitor would conduct daily inspections of the construction area to look for signs of the presence of Timber Rattlesnakes and would detail the results of the inspections in a log. If any Timber Rattlesnakes are observed, it will be noted, and the methods described in the Education and Encounter Plan would be employed.

When construction activities are planned around the water towers where fencing would be installed during the months of April 1 and November 1, the DEC qualified monitor would inspect the fence and the area around the fence to look for the presence of Timber Rattlesnakes as well as to look for any defects in the fencing. If any defects are observed, the fence would be immediately repaired, and detailed logs of the defect and its repair would be kept and made available to the Applicant and DEC staff when requested. If any Timber Rattlesnakes are observed along the fence, it will be noted, and the methods described in the Education and Encounter Plan would be employed.

Daily logs would be made available to the Applicant and their consultants, as well as to DEC staff when requested. At the end of season (April 1 to November 1), the Applicant would draft a summary report of the daily monitoring, which would be available to DEC staff when requested. The summary report would include information regarding any Timber Rattlesnake sightings, any repairs or issues with the fencing located around the water towers, and other methods utilized to protect Timber Rattlesnakes.

Long-term Monitoring & Reports

Long-term monitoring and reports would include annual reports summarizing the seasonal summary reports; detailing any defects found and repaired to the fencing around the water towers; all encounters with Timber Rattlesnakes and how the encounter was resolved; and documentation of any nuisance snakes removed out of the construction area and the

development, post-construction. The report will also contain the number of Timber Rattlesnake Education and Encounter seminars held for contractors, residents, and maintenance personnel of the development. A tally of the number of the Education and Encounter Plans will be provided and the methods in which the documents were distributed will be summarized.

Additionally, on behalf of the Applicant, NCES will conduct an annual inspection of the Timber Rattlesnake Habitat Enhancement Areas and a summary of wildlife observed within it. The inspection will include a determination whether the areas require maintenance (between November 1st and March 31st) to remove brush or overgrowth. The report will contain a qualitative determination of its effectiveness and photographs.

The short-term monitoring will occur while any portion of the project is under construction and the long-term monitoring will occur for a period of two (2) years after construction is complete.

10.0 DESCRIPTION OF FUNDING SOURCE

The Project Applicant will provide a $100,000.00 letter of credit, which will cover the costs of the basking habitat improvements, UJC ERD costs and training costs.

The cost of training and equipment for the UJC ERD is initially less than $10,000 with an annual contribution of approximately $5,000 for these purposes. The cost of this public education and the associated pamphlets is initially less than $1,000 and on an annual basis approximately $500.

The cost of the clearing of trees to enhance basking habitat is approximately $7,500 per acre, or approximately $25,000 for the areas to be cleared as part of the Project's rattlesnake habitat enhancement. The clearing would occur within 30 days of NYSDEC confirmation the clearing locations, as long as those 30 days are not within the day of April 1 and November 1.

Draft Deed Restricion

DECLARATION OF RESTRICTIVE COVENANTS

THIS DECLARATION OF RESTRICTIVE COVENANTS is made this _____day of _____, 2022 by Keen Equities LLC as landowner (hereinafter referenced as "Declarant") with a mailing addresses at 4922 11th Avenue, Brooklyn, NY 11219.

RECITALS

WHEREAS, Declarant is the owner in fee of certain real property comprising 290.88 acres ± located in the Village of South Blooming Grove, Orange County, New York, which property is more particularly described as a portion of tax map ID number 208-1-3 (the "Property"). The Declarant's deed to the Property is recorded at Liber 12065, page 124; and

WHEREAS, Declarant also owns in fee certain adjacent real property comprising 142.42 acres located in the Town of Blooming Grove, Orange County, New York, which property is more particularly described as tax map ID number 41-1-1.13 (the "Additional Property"). The Declarant's deed to the Additional Property is recorded at Liber 12065, page 124; and

WHEREAS, Declarant has applied for all necessary municipal and State permits for a 600 unit single family home residential project known as Clovewood, as shown on the site plan, entitled "Clovewood Site Plan Package" dated last revised October 27, 2021 prepared by Kirk Rother Engineering; and

WHEREAS, the area to be preserved as a Resource Protection Area, a total of 433 contiguous acres identified above as a portion of the Property and all of the Additional Property is shown on a map entitled "Timber Rattlesnake—Resource Protection Area", dated last revised June 17, 2021 prepared by Kirk Rother Engineering and filed in the Office of the Orange County Clerk on _____, as Map Number_____, attached hereto as Exhibit "A"; and

WHEREAS, the metes and bounds description of the area to be preserved as a Resource Protection Area is attached hereto as Exhibit "B"; and

WHEREAS, the Property and surrounding lands contain basking and foraging habitat (but not winter habitat in the form of a hibernaculum) for the Timber Rattlesnake (*Crotalus horridus*), a New York State "threatened and/or endangered" species protected by Environmental Conservation Law ("ECL") Section 11-0535 and the New York Code of Rules and Regulations (6 N.Y.C.R.R. Part 182); and

WHEREAS, Declarant has applied to the New York State Department of Environmental Conservation ("NYSDEC) for an Incidental Take Permit, number 3-3320-00150/00003 ("Incidental Take Permit") to allow it to develop the Property in accordance with 6 N.Y.C.R.R. Part 182; and

WHEREAS, the NYSDEC requires, as a condition precedent to the issuance of the aforesaid Incidental Take Permit, a firm commitment by the Declarant establishing a Resource Protection Area; and

WHEREAS, the Resource Protection Area is to be comprised of a total of 433 acres as set forth in the metes and bounds description attached hereto as Exhibit "B" and made a part hereof and as shown on the "Timber Rattlesnake--Resource Protection Area" map attached hereto as Exhibit "A" and made a part hereof, and shall remain substantially in its natural condition; and

WHEREAS, this Declaration of Restrictive Covenant is made to satisfy the requirements of the NYSDEC as a condition to the issuance of the Incidental Take Permit in connection with the Property;

NOW THEREFORE, for ten dollars ($10.00) and other good and valuable consideration as set forth above, Declarant hereby declares as follows:

The Declarant shall ensure that these Prohibitions shall run with the Resource Protection Area identified and depicted on the map entitled " Timber Rattlesnake—Resource Protection Area" dated last revised June 17, 2021, prepared by Kirk Rother Engineering, and be binding on the Declarant and its successors, assigns, lessees, and other occupiers and users, and shall be expressly set forth in the metes and bounds description of all subsequent deeds to the Property or any subdivision of lots thereof.

1. **Prohibitions.** The killing or injuring of any Timber Rattlesnake or harming of their habitat is prohibited by law in any and all locations in New York State, within or without the Resource Protection Area. In addition, within the Resource Protection Area, there shall be no future filling, flooding, excavating, mining or drilling; no removal of natural materials including rocks; no clearing, burning, cutting or destroying of trees or vegetation, except removal or trimming of vegetation hazardous to person or property, or as authorized by a NYSDEC Permit; no planting or introduction of non-native or exotic species of trees or other vegetation; no dumping of trash, waste, or garbage; no construction; no construction and/or installation of all improvements and accoutrements; and no alteration of the topography within the Resource Protection Area in any manner, except as authorized by the Incidental Take Permit issued by NYSDEC ECL Article 11 and 6 N.Y.C.R.R. Part 182.

2. **Construction.** In addition to the permanent preservation of the Resource Protection Area pursuant to the terms of the preceding paragraph 1 ("Prohibitions"), the Property is subject to Incidental Take Permit number X-XXXX-XXXX/XXXX issued by NYSDEC pursuant to ECL Article 11 and is subject to the Conditions of that Permit. The Permit is attached as Exhibit "C."

3. **Marking.** The Declarant shall mark the limits of the Resource Protection Area in a manner approved by the NYSDEC and future landowner(s) shall maintain the marking in place so as to notify the public that the Resource Protections Area is an area preserved for conservation purposes. Figure Name and Number depicts that Resource Protection Signage, which illustrates the signage to be placed, and the spacing of such signage.

4. Ownership of Resource Protection Areas Reserved to Declarant and its Successors. The covenants set forth in this Declaration are created solely for the protection of the Resource Protection Areas, and Declarant reserves the ownership of the fee simple estate upon the Resource Protection Areas and all rights appertaining thereto, including the right to engage in all

acts or uses not prohibited by this Declaration and not inconsistent with the conservation purposes hereof to itself and to its successors and assigns in interest(s) in the Property or any portion thereof. It is expressly understood and agreed that the terms of this Declaration do not grant or convey to members of the general public any rights of ownership, entry or use of the Resource Protection Areas.

5. **NYSDEC Access**. The Declarant authorizes the NYSDEC to enter upon the Resource Protection Areas for scientific study, habitat management and to review the condition of the Resource Protection Areas to ensure encroachment or unauthorized occupation by others is not occurring.

6. **Recording.** The Declarant shall, within two weeks of filing, submit proof of filing of this Declaration from the Orange County Office of Land Records showing the Liber and page number at which the Declaration was filed, the date of filing, and a copy of this Declaration to:

Regional Permit Administrator
NYSDEC Region 3
21 South Putt Corners Rd.
New Paltz, NY 12561

7. **No Third Parties**: NYSDEC shall have the sole authority to enforce this Declaration. Nothing in this Declaration is intended to, nor shall it be construed to, create rights in any person, party or entity other than NYSDEC.

9. **Notice to Government**. Any permit application or request made to any governmental entity and affecting the Resource Protection Areas shall expressly reference and include a copy (with the recording stamp) of this Declaration. Any such governmental authority to whom an application or request has been made shall notify NYSDEC at the address specified in paragraph 6 above that such permit application or request has been made.

10. **Amendment**. This Declaration may only be amended by a recorded document signed by the Declarant with the written approval of NYSDEC.

11. **Severability Provision**. Should any separable part of this Declaration be held contrary to law, the remainder shall continue in full force and effect.

12. **Provide Copy of Permit to Purchasers**. The Declarant shall provide a copy of the Incidental Take Permit number X-XXXX-XXXX/XXXX issued by NYSDEC pursuant to ECL Article 11 to any purchaser or leasee of the Property (or any lots created subsequently out of the Property).

IN WITNESS WHEREOF, the Declarant has duly executed this Declaration of Restrictive Covenants on the date written above.

Keen Equities LLC, Declarant

By: _____

Printed Name: _____

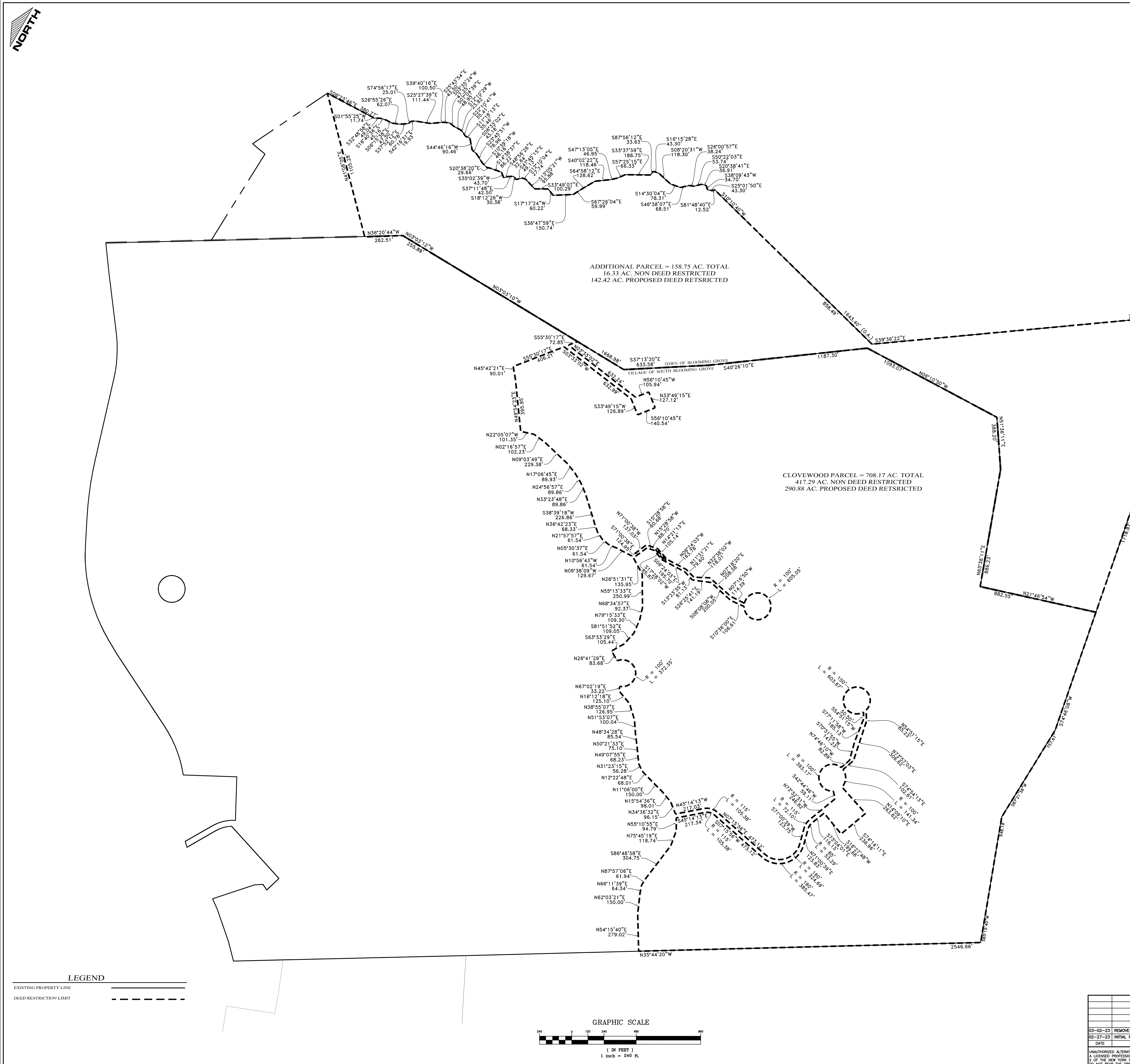
Title: _____

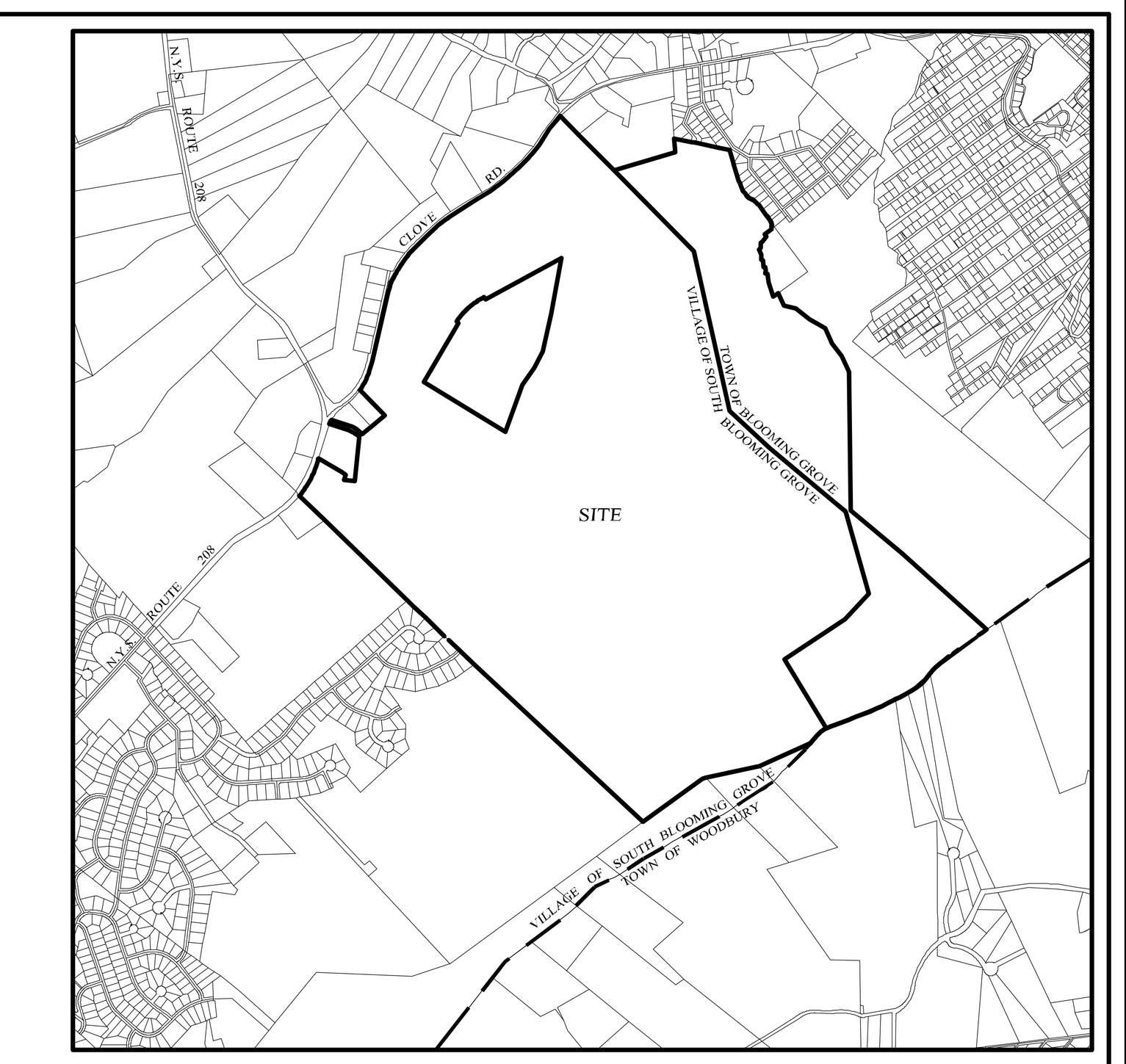
----------Notary Acknowledgment----------

STATE OF NEW YORK)
) ss.:
COUNTY OF ORANGE)

On this ____ day of _____ in the year Two Thousand Twenty Two, before me personally appeared _____personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed in the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
NOTARY PUBLIC – STATE OF NEW YORK





LOCATION MAP
SCALE : 1" = 2,000'

GENERAL NOTES:

1. VILLAGE OF SOUTH BLOOMING GROVE TAX MAP DESIGNATION: SEC. 208, BLK. 1, LOTS 2 & 3.
2. AREA OF SOUTH BLOOMING GROVE PARCEL PER SURVEY BY LANC & TULLY PC: 708.17± AC.
3. TOWN OF BLOOMING GROVE TAX MAP DESIGNATION: SEC. 41, BLK 1, LOT 1.13.
4. AREA OF PARCEL PER SURVEY : 158.75± AC.
5. EXISTING FEATURES AND INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES.

Lands of

CLOVEWOOD

TOWN OF BLOOMING GROVE, ORANGE COUNTY, NEW YORK

PROJECT TITLE

METES & BOUNDS OF DEED RESTRICTED AREAS MAP

DRAWING TITLE

KIRK ROTHER, P.E.
CONSULTING ENGINEER, PLLC
5 Saint Stephens Lane, Warwick NY 10990
(845) 988-0620

DATE	REVISIONS
03-02-23	REMOVE AREA HATCH
02-27-23	INITIAL PREPARATION

KIRK ROTHER, P.E. N.Y.S. LIC. NO. 079053 DATE

D.O.T. SHEET #	D.E.C. SHEET #	D.O.H. SHEET #	SHEET #
N.A.	N.A.	N.A.	1 OF 1
CAD #	PROJECT #	SCALE	
14107DEEDRESTR.DWG	14107.0	AS SHOWN	

Implementation Agreement

Implementation Agreement
In Support of the NYSDEC Incidental Take Permit for the Timber Rattlesnake
Submitted by CPC, LLC for Clovewood Residential Development
Village of South Blooming Grove
Orange County, NY

Property Owner CPC LLC

This Implementation Agreement is by the Property Owner, CPC, LLC (hereinafter referenced as "Grantor").

FACTS AND PURPOSES

Facts: The Grantor has entered into this Agreement in consideration of the following facts:

The Grantor's property is an approximately 708 +/- acre parcel (tax map parcel Section 208, Block 1, Lots 2 and 3) located at 505 Clove Road in the Village of South Blooming Grove, Orange County, New York. This is defined as the "Project Site." The Applicant seeks to build 600 subdivided residential units along with driveways, accessways and utilities, as well as accessory uses such as sidewalks and lighting. A portion of this property will be subjected to a Deed Restriction to be held by the Village of South Blooming Grove as a part of this Application.

The Grantor also owns approximately 158 +/- acre parcel (tax map parcel #Section 41, Block 1, Lot 1.13) located in the Town of Blooming Grove, Orange County, New York. A portion of this parcel will also be subjected to a Deed Restriction as part of this Application.

The Project Site, including the adjacent land in the Town of Blooming Grove, is determined to potentially provide foraging habitat for the State listed endangered Timber Rattlesnake (*Crotalus horridus*) (Covered Species).

The Grantor has developed a series of measures, described in the Incidental Take Permit Application prepared by North Country Ecological Services, Inc., last updated December 16, 2022, to minimize and mitigate to the maximum extent practicable the effect of possible take of Covered Species incidental to the Grantor's covered activities.

Purposes: The purposes of this Agreement are:

To demonstrate compliance with NYSDEC Endangered Species regulations at 6 NYCRR 182.6(e), which require the development of an Implementation Agreement that includes: a) The identification of all parties that will be involved in implementing the endangered and threatened species mitigation plan, with individuals funding and implementing the plan clearly identified; b) The identification of a timeline for implementation of measures outlined in the mitigation plan; c) A specific description of the funding available for, and dedicated to, implementation of the plan and a description of the methods of assurance or guarantee that the funds will be available as necessary; and d) Signature by the Grantor.

To define the Grantor's roles and responsibilities and provide a common understanding of actions that will be taken to minimize and mitigate potential effects on the Species within the project site and to avoid jeopardy to the listed Covered Species.

To provide assurances to the Grantor that as long as the terms and conditions of the Incidental Take Permit and this Implementation Agreement are correctly performed, no additional mitigation will be required of the Grantor for Timber Rattlesnakes, except as provided in this agreement or required by law.

To ensure, that as a mitigation measure, the NYSDEC has legal access to the Project Site to review conditions on the site relative to Timber Rattlesnakes.

NYSDEC JURISDICTION

The NYSDEC has jurisdiction under Article 11 of the New York State Environmental Conservation Law, with regulations at 6 NYCRR 182 to require that an Applicant obtains an incidental take permit prior to engaging in any activity that is likely to result in a take of any species listed as endangered or threatened under these regulations.

GRANTOR RIGHTS AND OBLIGATIONS

Rights: Through this Implementation Agreement and the issuance of the Incidental Take Permit, the Grantor has the right to construct a 600 unit residential project located on the project site as shown on the Plans in the Incidental Take Application.

Obligations: Through this implementation Agreement and the issuance of the Incidental Take Permit, the Grantor will meet the following obligations and costs:

Prior to Construction

1. Deed Restriction language has been established by the Grantor's attorney and is attached to the Incidental Take Permit Application. Once approved by NYSDEC as part of the permit issuance, the Deed Restriction be filed with the Orange County Clerk's Office and proof of filing will be provided to NYSDEC.

2. Grantor shall follow all of the educational and mitigation plans set forth in the Incidental Take Application listed as follows: training and notifying all contractors and subcontractors who will be operating on the site with the rattlesnake training materials, providing them with photographs of timber rattlesnakes and information where the species is likely to be encountered. Instructions to stop work in the area including and near to the rattlesnake and to notify the rattlesnake monitor if any timber rattlesnakes are identified during construction to ensure that the individuals are not adversely affected but are relocated for their safety. Because temporary barriers are largely impractical for a project of this size and complexity, the use of a qualified and NYSDEC ETSSCI licensed species monitor will be required during all ground disturbance activities from April 1 through November 1 of a

given year. A detail showing the fencing that is proposed around the water towers is included in Figure 6 of the incidental take permit application.

3. The Grantor shall permanently preserve 433+/- acres of timber rattlesnake foraging habitat as described in the Application for the Incidental Take Permit. The permanent preservation of this habitat will be achieved using a Deed Restriction filed in the Orange County Clerk's Office. A copy of the instrument is attached, and a map is included showing the deed restricted area, along with its metes and bounds description. The area to be deed restricted is very large, however, signs will be posted with language provided by NYSDEC at areas where public use may intersect with this area, i.e. trail heads, roads and the like.

Construction

The Grantor does not intend to undertake construction in phases but to build the common infrastructure for the Project, i.e. water lines, sewer lines, roadways and other utilities, all at once. During construction a qualified and NYSDEC ETSSCI licensed rattlesnake monitor will be on site during all ground disturbance activities between April 1 and November 1 of a given year.

As mentioned above all contractors and subcontractors will be trained on how to identify and how not to disturb timber rattlesnakes. This training will be undertaken by the rattlesnake monitor who will instruct the construction workers on the importance of stopping work and notifying the rattlesnake monitor if they identify a timber rattlesnake during construction.

Records will be maintained of any rattlesnake encountered during construction and the re-disposition of the individual rattlesnake. The records will be made available on site to the NYSDEC staff. Photographs will also be taken of the rattlesnake and its relocation.

Post Construction

The Grantor will have the following obligations post construction: the Grantor will provide continuing education to the residents of the new development. As part of each contract to purchase real estate the Grantor shall provide the purchaser with a document detailing the timber rattlesnake information and a copy of a handout to be approved by NYSDEC setting forth information regarding the snake, why it is protected and how one should react when encountering a rattlesnake.

Management of rattlesnakes encountered after construction and of continuing education about the rattlesnakes will be handled by Blooming Grove's UJC Emergency Response Division (ERD) organization, which will be funded by the Grantor. The cost of training and equipment is initially less than $10,000 with an annual contribution of approximately $5,000 for these purposes.

ERD will also handle regular community-based education and encounter training to be provided at an annual workshop and provision of flyers to all residences in the development. The flyer will include the Resident Education & Encounter Plan and the Timber Rattlesnake Sighting Protocol included in Attachments I, II and III of the incidental take permit application. The cost of this public education is initially less than $1,000 and on an annual basis approximately $500.

In addition, after the construction of the project the Applicant will complete two consecutive years of rattlesnake surveys on the land to be deed restricted. All data will be given to the NYSDEC. The Applicant will also work with NYSDEC on rattlesnake habitat enhancements and management, e.g. very selective tree removal to enhance basking habitat. The cost of the clearing of trees to enhance basking habitat is approximately $7,500 per acre, or approximately $25,000 for the areas to be cleared as part of the Project's rattlesnake habitat enhancement. The clearing would occur within 30 days of NYSDEC confirmation the clearing locations, as long as those 30 days are within the day of April 1 and November 1.

ACCESS

The Grantor will grant access to the NYSDEC for Timber Rattlesnake research - The following language is placed in the Deed Restriction:

NYSDEC Access. The Property Owner authorizes the NYSDEC to enter upon the Deed Restricted Area for scientific study, habitat management and to review the condition of the area to ensure encroachment or unauthorized occupation by others is not occurring.

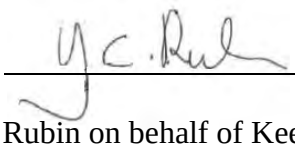
FINANCIAL ASSURANCES OF THE GRANTOR

The costs to the Grantor for implementation of this agreement are set forth above and in the incidental take permit application and shall be secured by a letter of credit in the amount of $100,000. Once construction has been completed and the obligations of the Grantor fulfilled the NYSDEC will consider reducing the amount of the letter of credit to cover the on-going public education and rattlesnake encounter intervention being provided by the ERD. Some amount will also need to be retained to maintain signage at public interception points proximate to the Timber Rattlesnake Protection Area, i.e. the Deed Restricted Area.

AUTHORIZATION

The signatory below is authorized to execute this Agreement on behalf of that Party. This Implementing Agreement will be in effect as of the date that the NYSDEC issues the Incidental Take Permit.

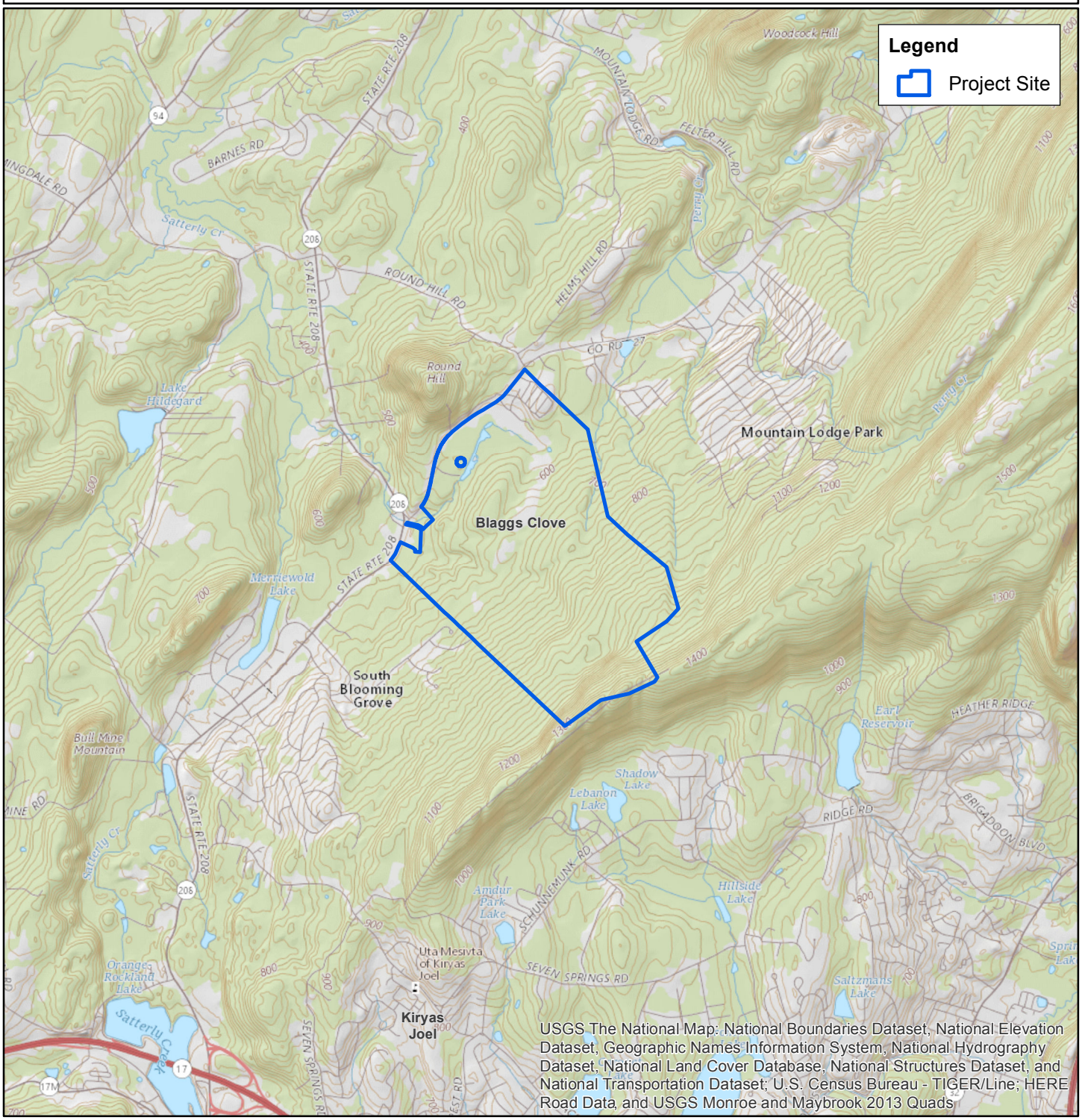
Dated: 3/6/23

By: 

YC Rubin on behalf of Keen Equities LLC
Title: Managing Member of the LLC

Figure 1

Figure 1



N

0 3,300

Feet

Data Source:
Orange County GIS Division, 06/2016
USGS National Map and Monroe and Maybrook 2013 Quads

Map prepared for CPC by:
Sarcinello Planning & GIS Services

Clovewood Project

SITE LOCATION MAP

Village of South Blooming Grove
Orange County
New York

SBL # 208-1-2&3

Community Planning CPC Consultants

P.O. Box 2020, Monroe, NY 10949
Tel: (845) 774-8000 | cpcnynj@gmail.com

Figure 2

Figure 2

NORTH

TOWN OF BLOOMING GROVE
VILLAGE OF SOUTH BLOOMING GROVE

RKC

CLOVEWOOD
SOIL TYPE LEGEND

COLOR	SYMBOL	SOIL TYPE	AREA
	Ab	ALDEN SILT LOAM	13.9± AC.
	AnC	ARNOT-LORDSTOWN COMPLEX, MODERATELY STEEP	10.5± AC.
	AnF	ARNOT-LORDSTOWN COMPLEX, VERY STEEP	32.6± AC.
	Ca	CANANDAIGUA SILT LOAM	19.8± AC.
	ErB	ERIE GRAVELLY SILT LOAM,	33.1± AC.
	HlC	ERIE GRAVELLY SILT LOAM, 0% - 3% SLOPES.	0.3± AC.
	HoC	HOOSIC GRAVELLY SANDY LOAM, 8% - 15% SLOPES.	2± AC.
	MdB	MARDIN GRAVELLY SILT LOAM, 3% - 8% SLOPES	58.6± AC.
	MdC	MARDIN GRAVELLY SILT LOAM, 8% - 15% SLOPES	277.2± AC.
	MdD	MARDIN GRAVELLY SILT LOAM, 15% - 25% SLOPES	11± AC.
	Ra	RAYNHAM SILT LOAM	9.4± AC.
	SxC	SWARTSWOOD AND MARDIN VERY STONY SOILS	189.6± AC.
	UnB	UNADILLA SILT LOAM, 0% - 8% SLOPES	6.2± AC.
	UH	UDORTHENTS, SMOOTHED	41.8± AC.
	W	WATER	2.2± AC.

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)

1 inch = 200 ft.

LINETYPE LEGEND

EXISTING PROPERTY LINE

USDA SOILTYPE LINE

GENERAL NOTES:

1. VILLAGE OF SOUTH BLOOMING GROVE TAX MAP DESIGNATION: SEC. 208, BLK. 1, LOTS 2 & 3.
2. AREA OF PARCEL PER SURVEY BY LANC & TULLY PC: 708.17± AC.
3. EXISTING FEATURES AND INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES.
4. SOILS MAPPING INFORMATION TAKRN FROM USDA SOIL SURVEY.

Lands of

CLOVEWOOD

VILLAGE OF SOUTH BLOOMING GROVE,
ORANGE COUNTY, NEW YORK

PROJECT TITLE

SOILS
MAP

DRAWING TITLE

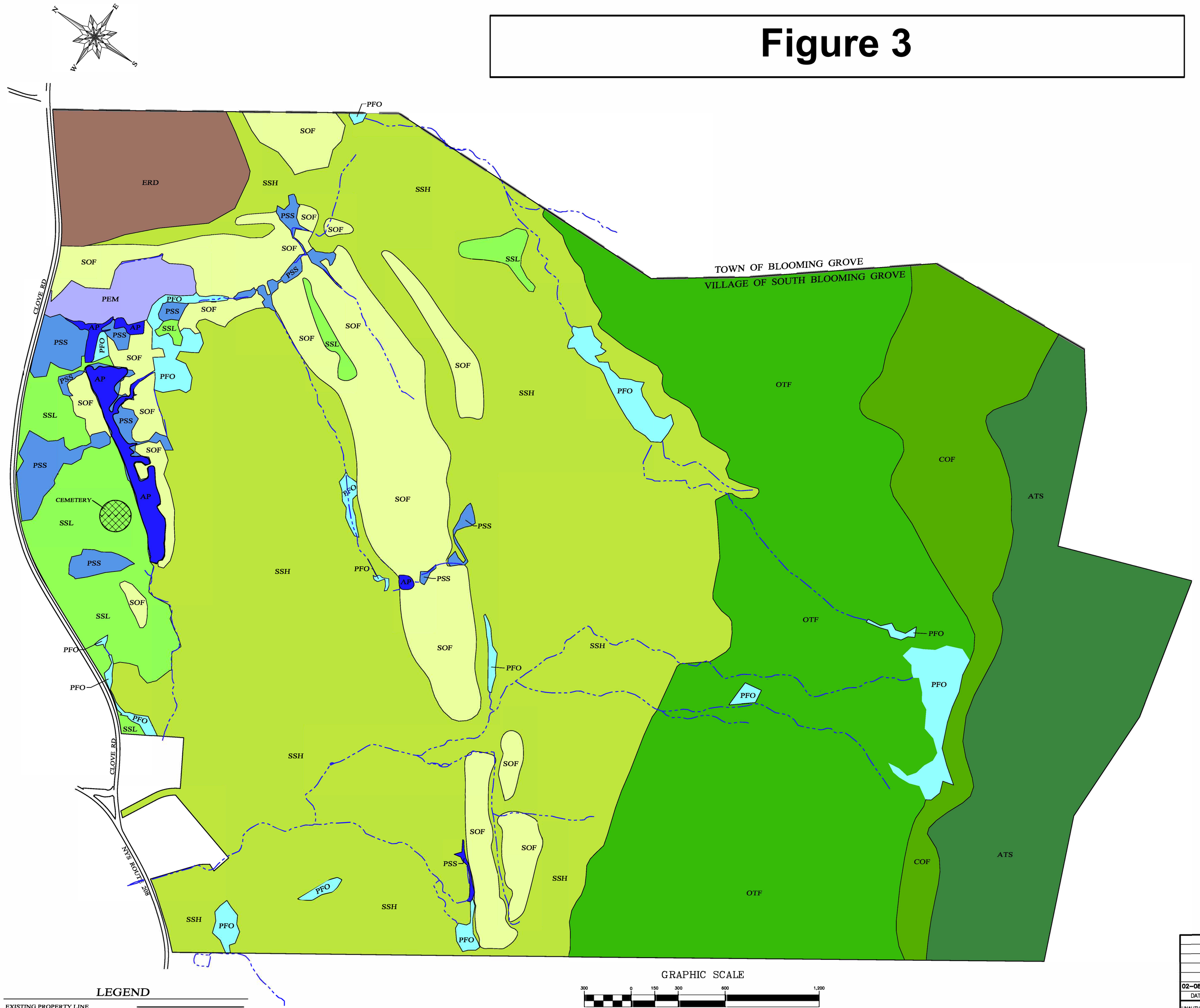
DATE	REVISIONS
01-03-19	REVISE SOILS
10-13-15	INITIAL PREPARATION

KIRK ROTHER, P.E.
CONSULTING ENGINEER, PLLC
5 Saint Stephens Lane, Warwick NY 10990
(845) 988-0620
KIRK ROTHER, P.E. N.Y.S. LIC. NO. 079053 DATE

O.O.T. SHEET #	O.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	1 OF 1
CAD #	PROJECT #	SCALE	
14107 USE	14107.0	AS SHOWN	

Figure 3

Figure 3



EXISTING ECOLOGICAL COMMUNITIES

LEGEND	EXISTING ECOLOGICAL COMMUNITY	OVERALL AREA
ATS	ACIDIC TALUS SLOPE WOODLAND	68.18 ± AC.
COF	CHESTNUT OAK FOREST	43.00 ± AC.
OTF	OAK-TULIP TREE FOREST	164.30 ± AC.
SSH	SUCCESSIONAL SO. HARDWOOD FOREST	286.15 ± AC.
SOF	SUCCESSIONAL OLD FIELD	65.40 ± AC.
SSL	SUCCESSIONAL SHRUB LAND	25.63 ± AC.
PFO	PALUSTRINE FORESTED WETLAND	14.31 ± AC.
PSS	PALUSTRINE SCRUB-SHRUB WETLAND	10.74 ± AC.
PEM	PALUSTRINE EMERGENT WETLAND	5.47 ± AC.
AP	ARTIFICIAL POND	4.46 ± AC.
ERD	EXISTING RESIDENTIAL DEVELOPMENT	20.53 ± AC.
	TOTAL AREA	708.17 ± AC.
RHS	ROCKY HEADWATER STREAM	22,640 ± L.F.

GENERAL NOTES:

1. VILLAGE OF SOUTH BLOOMING GROVE TAX MAP DESIGNATION: SEC. 208, BLK. 1, LOTS 2 & 3.
2. AREA OF PARCEL PER SURVEY BY LANC & TULLY PC: 708.17± AC.
3. EXISTING FEATURES AND INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES.

LEGEND

EXISTING PROPERTY LINE
ECOLOGICAL COMMUNITY BOUNDARY
EXISTING EDGE OF PAVEMENT
EXISTING WATERCOURSE
ZONING BOUNDARY

GRAPHIC SCALE

300 0 150 300 600 1,200

(IN FEET)
1 inch = 300 ft.

Lands of
CLOVEWOOD
VILLAGE OF SOUTH BLOOMING GROVE,
ORANGE COUNTY, NEW YORK
PROJECT TITLE

EXISTING ECOLOGICAL COMMUNITIES MAP
DRAWING TITLE

KIRK ROTHER, P.E.
CONSULTING ENGINEER, PLLC
5 Saint Stephens Lane, Warwick NY 10990
(845) 988-0620

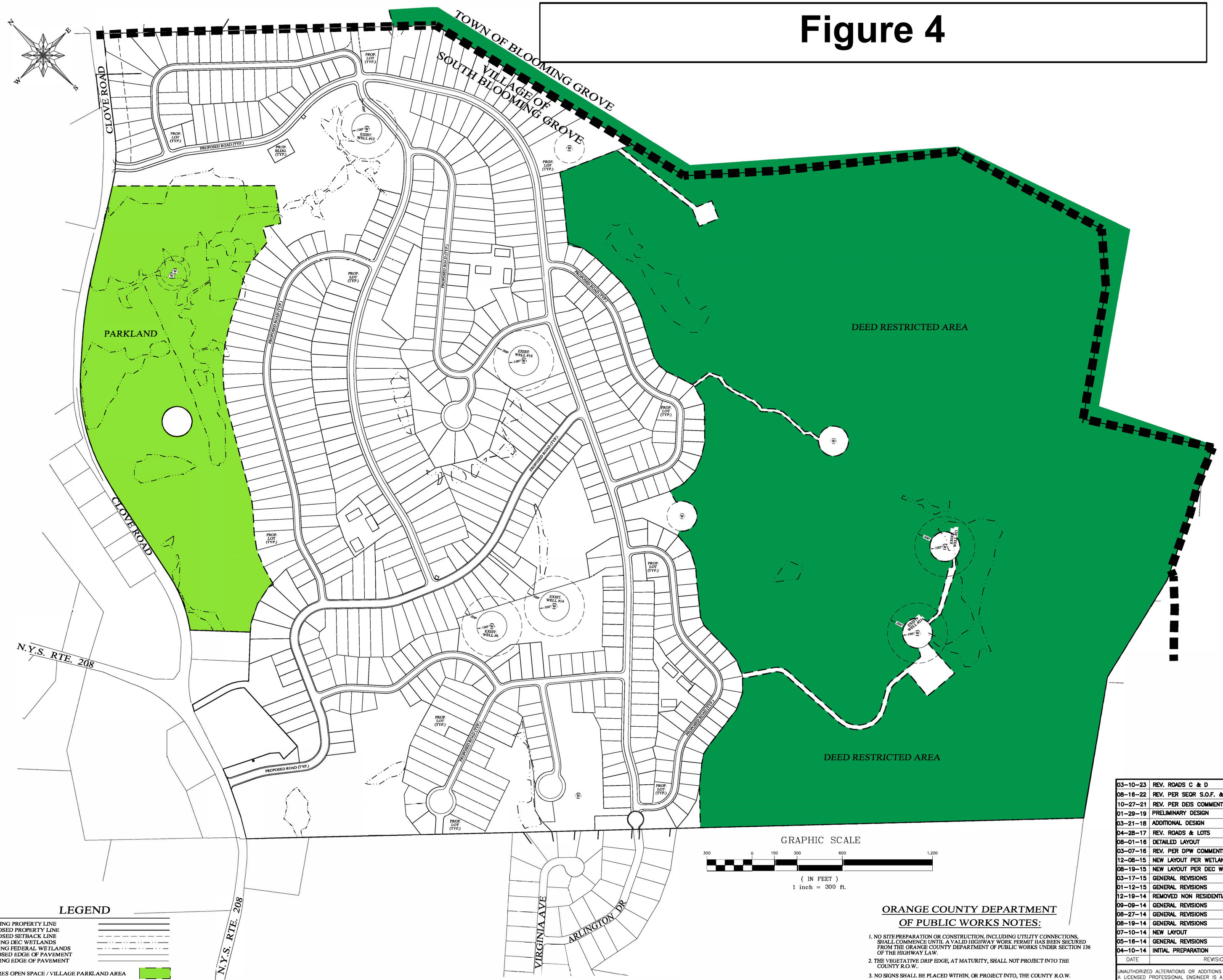
DATE	REVISIONS
02-08-21	INITIAL PREPARATION

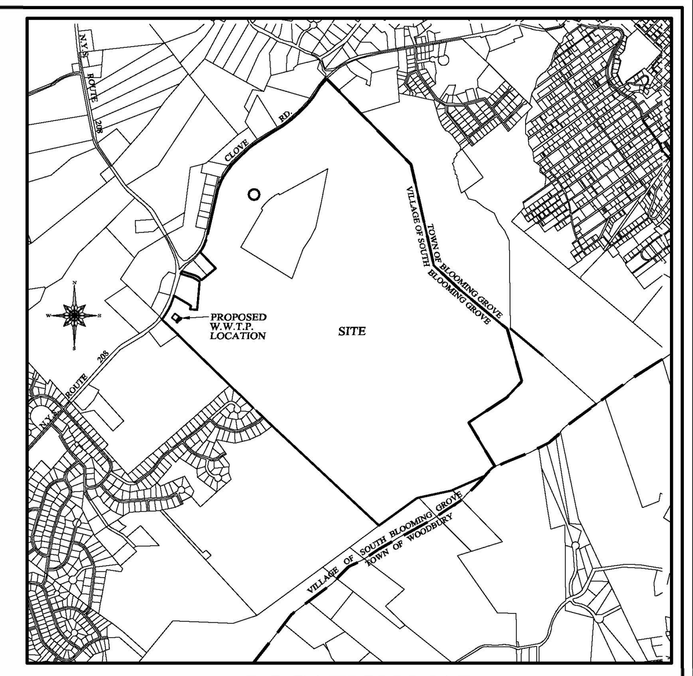
KIRK ROTHER, P.E. N.Y.S. LIC. NO. 079053 DATE

D.O.T. SHEET #	D.E.C.. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	ECM 1
CAD #	PROJECT #	SCALE	
14107ECOAREA	14107.0	AS SHOWN	

Figure 4

Figure 4





LOCATION MAP
SCALE : 1" = 2,000'

PROPOSED BULK REQUIREMENTS

	MINIMUM
LOT AREA (S.F.)	10,000
FRONTAGE (FT.)	60*
FRONT YARD (FT.)	33**
REAR YARD (FT.)	40
SIDE YARD (FT.)	15
	MAXIMUM
BUILDING COVERAGE (%)	50

*MINIMUM FRONTAGE ON CURVED LOTS SHALL BE MEASURED AT THE FRONT SETBACK LINE

**MINIMUM FRONT YARD SHALL BE 40 FEET AS MEASURED FROM THE EDGE OF PAVEMENT.

WATER / SEWAGE USE CALCULATIONS

(600 UNITS) (110 GPD / BEDROOM) (4 BEDROOM PER UNIT)= 264,000 GPD
(600) (110) (4) = 264,000 GPD

GENERAL NOTES:

1. VILLAGE OF SOUTH BLOOMING GROVE TAX MAP DESIGNATION: SEC. 208, BLK. 1, LOTS 2 & 3.
2. AREA OF PARCEL PER SURVEY BY LANC & TULLY PC: 708.17± AC.
3. TOTAL PROPOSED NUMBER OF SINGLE FAMILY LOTS: 600
4. TOTAL PROPOSED AFFORDABLE HOUSINGLOTS: 94
5. EXISTING FEATURES AND INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES.
6. LOTS TO BE SREVED BY MUNICIPAL WATER AND SEWER.
7. ALL NEW UTILITIES SHALL BE INSTALLED UNDER GROUND.
8. THE DESIGN AND LOCATION OF SANITARY FACILITIES (WATER AND SEWER) SHALL NOT BE CHANGED.
9. THE APPROVED PLANS MUST BE FILED WITH THE ORANGE COUNTY CLERK'S OFFICE PRIOR TO OFFERING LOTS FOR SALE AND WITHIN 90 DAYS OF THE LAST APPROVAL OF THE FINAL PLANS.
9. NO LOT IS TO BE FURTHER SUBDIVIDED WITHOUT ORANGE COUNTY DEPT OF HEALTH REVIEW AND APPROVAL.
10. ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPT OF HEALTH BASED UPON DEVELOPMENT FACTS AND THE REALITY SUBDIVISION REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
11. DUE TO POTENTIAL HABITAT FOR THE INDIANA BAT, TREE CUTTING SHALL BE LIMITED TO NOV 1ST THROUGH MARCH 31ST.

LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK LINE
- EXISTING DEC WETLANDS
- EXISTING FEDERAL WETLANDS
- PROPOSED EDGE OF PAVEMENT
- EXISTING EDGE OF PAVEMENT
- 60 ACRES OPEN SPACE / VILLAGE PARKLAND AREA
- 295 ACRES OPEN SPACE / DEC DEED RESTRICTED AREA

ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS NOTES:

1. NO SITE PREPARATION OR CONSTRUCTION, INCLUDING UTILITY CONNECTIONS, SHALL COMMENCE UNTIL A VALID HIGHWAY WORK PERMIT HAS BEEN SECURED FROM THE ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS UNDER SECTION 136 OF THE HIGHWAY LAW.
2. THE VEGETATIVE DRIP EDGE, AT MATURITY, SHALL NOT PROJECT INTO THE COUNTY R.O.W..
3. NO SIGNS SHALL BE PLACED WITHIN, OR PROJECT INTO, THE COUNTY R.O.W.

DATE	REVISIONS
03-10-23	REV. ROADS C & D
08-16-22	REV. PER SEQR S.O.F. & NYS DEC COMMENTS
10-27-21	REV. PER DEIS COMMENTS
01-29-19	PRELIMINARY DESIGN
03-21-18	ADDITIONAL DESIGN
04-28-17	REV. ROADS & LOTS
08-01-16	DETAILED LAYOUT
03-07-16	REV. PER DPW COMMENTS
12-08-15	NEW LAYOUT PER WETLAND BUFFER & WELLS
08-19-15	NEW LAYOUT PER DEC WETLANDS
03-17-15	GENERAL REVISIONS
01-12-15	GENERAL REVISIONS
12-19-14	REMOVED NON RESIDENTIAL USES
09-09-14	GENERAL REVISIONS
08-27-14	GENERAL REVISIONS
08-19-14	GENERAL REVISIONS
07-10-14	NEW LAYOUT
05-16-14	GENERAL REVISIONS
04-10-14	INITIAL PREPARATION

CLOVEWOOD

VILLAGE OF SOUTH BLOOMING GROVE, ORANGE COUNTY, NEW YORK

PROJECT TITLE

COVER SHEET

DRAWING TITLE

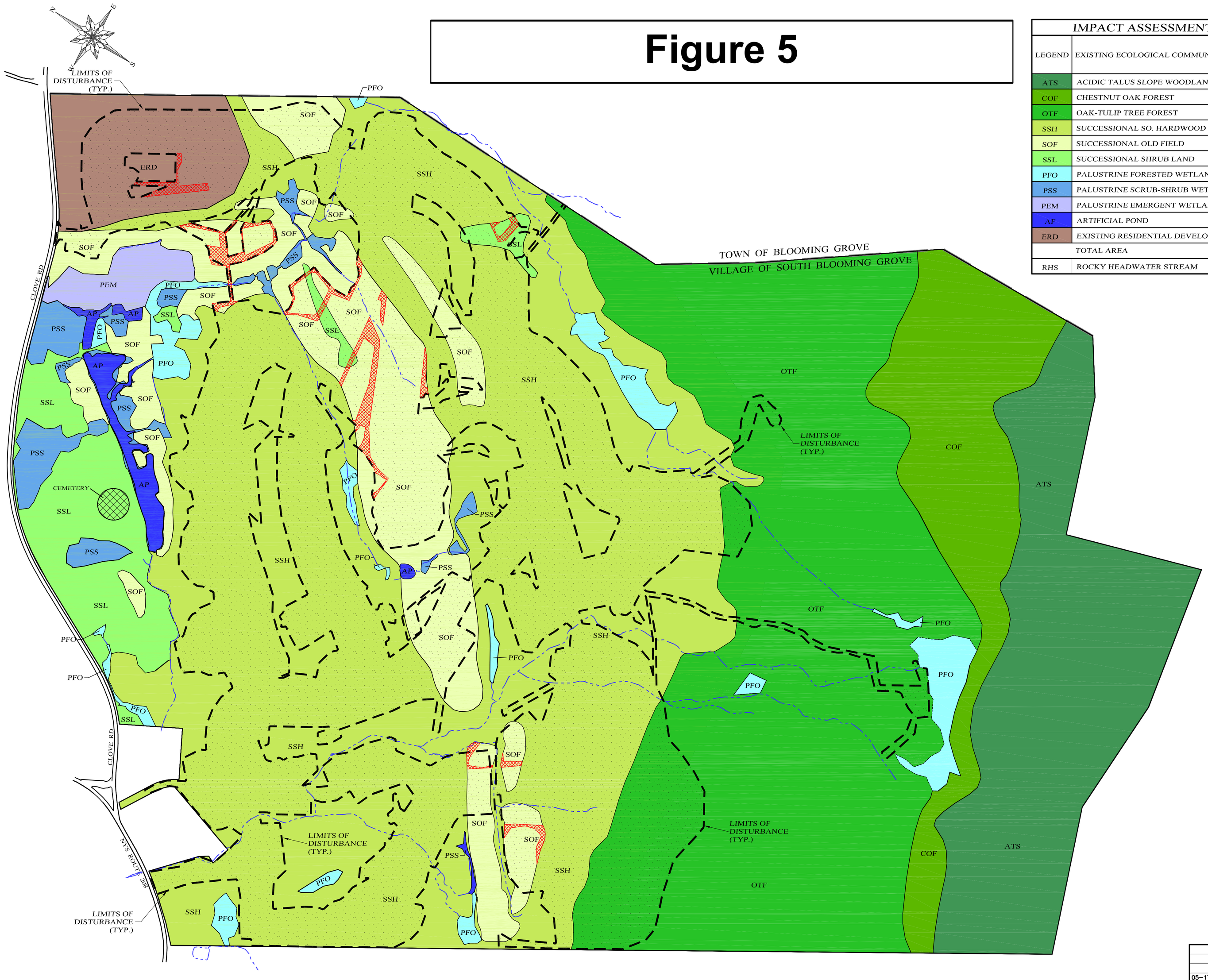
KIRK ROTHER, P.E.
CONSULTING ENGINEER, PLLC
5 Saint Stephens Lane, Warwick NY 10990
(845) 988-0620

KIRK ROTHER, P.E. N.Y.S. LIC. NO. 079053 DATE

D.O.T. SHEET #	D.E.C.. SHEET #	D.O.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	C 1
CAD #	PROJECT #	SCALE	
14107 BASE	14107.0	AS SHOWN	

Figure 5

Figure 5



IMPACT ASSESSMENT OF THE EXISTING ECOLOGICAL COMMUNITIES

LEGEND	EXISTING ECOLOGICAL COMMUNITY	OVERALL COMMUNITY AREA	OVERALL IMPACT PROPOSED	PERMANENT IMPACT PROPOSED	TEMPORARY IMPACT PROPOSED
ATS	ACIDIC TALUS SLOPE WOODLAND	68.18 ± AC.	0.0 ± AC.	0.0 ± AC.	0.0 ± AC.
COF	CHESTNUT OAK FOREST	43.00 ± AC.	0.0 ± AC.	0.0 ± AC.	0.0 ± AC.
OTF	OAK-TULIP TREE FOREST	164.30 ± AC.	4.00 ± AC.	4.00 ± AC.	0.0 ± AC.
SSH	SUCCESSIONAL SO. HARDWOOD FOREST	286.15 ± AC.	195.30 ± AC.	195.30± AC.	0.0 ± AC.
SOF	SUCCESSIONAL OLD FIELD	65.40 ± AC.	37.20 ± AC.	33.40 ± AC.	3.80 ± AC.
SSL	SUCCESSIONAL SHRUB LAND	25.63 ± AC.	2.20 ± AC.	1.80 ± AC.	0.40 ± AC.
PFO	PALUSTRINE FORESTED WETLAND	14.31 ± AC.	0.00 ± AC.	0.0 ± AC.	0.0 ± AC.
PSS	PALUSTRINE SCRUB-SHRUB WETLAND	10.74 ± AC.	0.00 ± AC.	0.0 ± AC.	0.00 ± AC.
PEM	PALUSTRINE EMERGENT WETLAND	5.47 ± AC.	0.0 ± AC.	0.0 ± AC.	0.0 ± AC.
AF	ARTIFICIAL POND	4.46 ± AC.	0.0 ± AC.	0.0 ± AC.	0.0 ± AC.
ERD	EXISTING RESIDENTIAL DEVELOPMENT	20.53 ± AC.	13.30 ± AC.	12.80 ± AC.	0.50 ± AC.
	TOTAL AREA	708.17 ± AC.	252.0 ± AC.	247.30 ± AC.	4.70 ± AC.
RHS	ROCKY HEADWATER STREAM	22,640 ± L.F.	295 ± LF	295 ± LF	0.0 ± LF

GENERAL NOTES:

1. VILLAGE OF SOUTH BLOOMING GROVE TAX MAP DESIGNATION: SEC. 208, BLK. 1, LOTS 2 & 3.
2. AREA OF PARCEL PER SURVEY BY LANC & TULLY PC: 708.17± AC.
3. EXISTING FEATURES AND INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES.

LEGEND

EXISTING PROPERTY LINE
ECOLOGICAL COMMUNITY BOUNDARY
EXISTING EDGE OF PAVEMENT
EXISTING WATERCOURSE
ZONING BOUNDARY
LIMITS OF DISTURBANCE

PERMANENT IMPACT AREA
TEMPORARY IMPACT AREA

GRAPHIC SCALE

300 0 150 300 600 1,200

(IN FEET)
1 inch = 300 ft.

Lands of

CLOVEWOOD

VILLAGE OF SOUTH BLOOMING GROVE, ORANGE COUNTY, NEW YORK

PROJECT TITLE

IMPACT TO EXISTING ECOLOGICAL COMMUNITIES MAP

DRAWING TITLE

KIRK ROTHER, P.E.
CONSULTING ENGINEER, PLLC
5 Saint Stephens Lane, Warwick NY 10990
(845) 988-0620

KIRK ROTHER, P.E. N.Y.S. LIC. NO. 079053 DATE

DATE	REVISIONS
05-17-21	REVISE LIMIT OF DISTURBANCE & FIGURES
02-25-21	REVISE FIGURES / ADD COLUMN
02-08-21	INITIAL PREPARATION

D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	ECM 2
CAD #	PROJECT #	SCALE	
14107ECOAREA	14107.0	AS SHOWN	

Figure 6

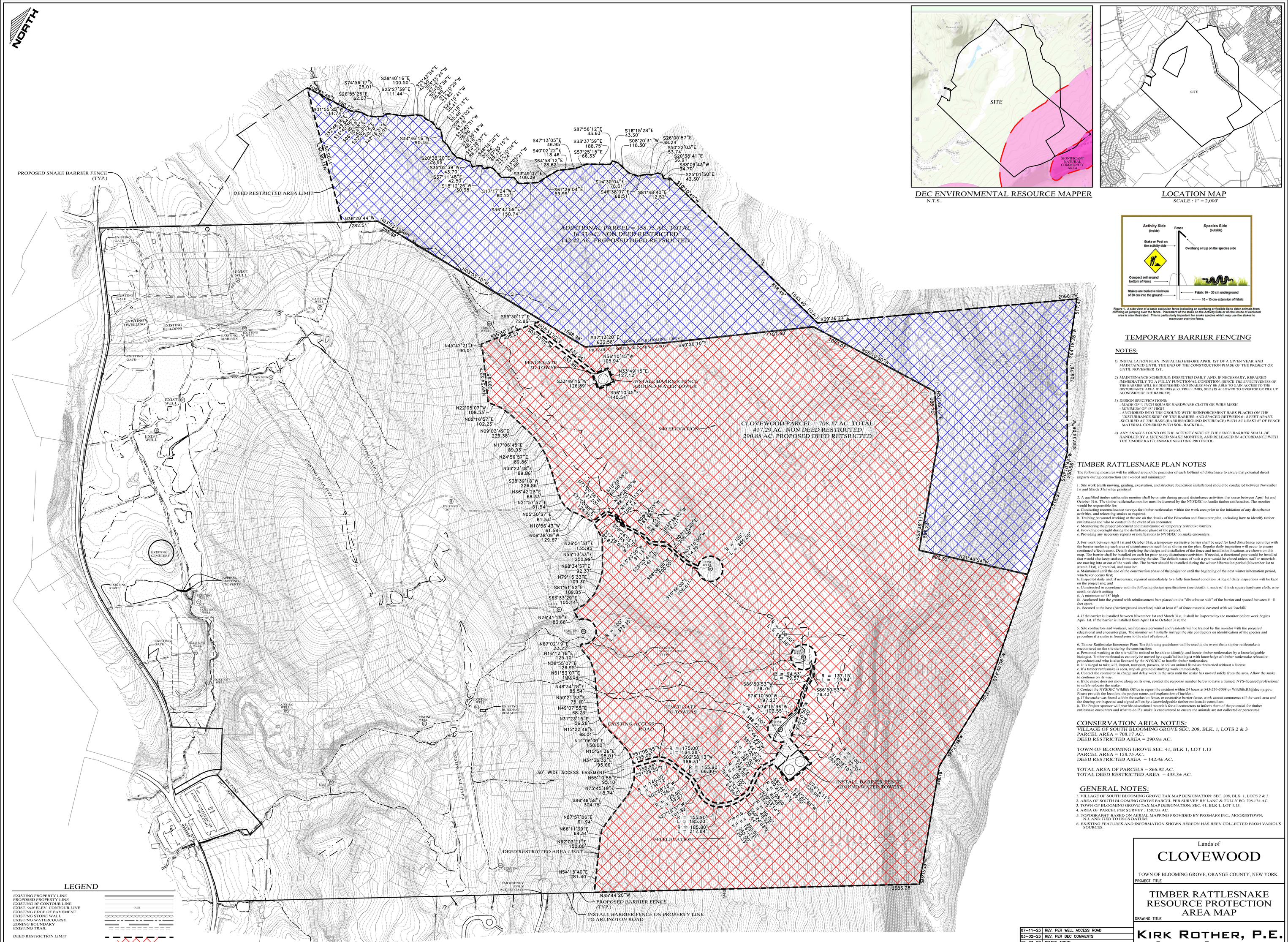


Figure 1. A side view of a basic exclusion fence including an overhang or flexible lip to deter animals from climbing or jumping over the fence. Placement of the stake on the Activity Side or on the inside of excluded area is also illustrated. This is particularly important for snake species which may use the stakes to maneuver over the fence.

TEMPORARY BARRIER FENCING

NOTES:

1) INSTALLATION PLAN: INSTALLED BEFFORE APRIL 1ST OF A GIVEN YEAR AND MAINTAINED UNTIL THE END OF THE CONSTRUCTION PHASE OF THE PROJECT OR UNTIL NOVEMBER 1ST.

2) MAINTENANCE SCHEDULE: INSPECTED DAILY AND, IF NECESSARY, REPAIRED IMMEDIATELY TO A FULLY FUNCTIONAL CONDITION. (SINCE THE EFFECTIVENESS OF THE BARRIER WILL BE DIMINISHED AND SNAKES MAY BE ABLE TO GAIN ACCESS TO THE DISTURBANCE AREA IF DEBRIS (E.G. TREE LIMBS, SOIL) IS ALLOWED TO OVERTOP OR PILE UP ALONGSIDE OF THE BARRIER).

3) DESIGN SPECIFICATIONS:
- MADE OF ¼ INCH SQUARE HARDWARE CLOTH OR WIRE MESH
- MINIMUM OF 48" HIGH
- ANCHORED INTO THE GROUND WITH REINFORCEMENT BARS PLACED ON THE "DISTURBANCE SIDE" OF THE BARRIER AND SPACED BETWEEN 6 - 8 FEET APART.
-SECURED AT THE BASE (BARRIER/GROUND INTERFACE) WITH AT LEAST 6" OF FENCE MATERIAL COVERED WITH SOIL BACKFILL

4) ANY SNAKES FOUND ON THE ACTIVITY SIDE OF THE FENCE BARRIER SHALL BE HANDLED BY A LICENSED SNAKE MONITOR, AND RELEASED IN ACCORDANCE WITH THE TIMBER RATTLESNAKE SIGHTING PROTOCOL.

TIMBER RATTLESNAKE PLAN NOTES

The following measures will be utilized around the perimeter of each lot/limit of disturbance to assure that potential direct impacts during construction are avoided and minimized:

1. Site work (earth moving, grading, excavation, and structure foundation installation) should be conducted between November 1st and March 31st when practical.

2. A qualified timber rattlesnake monitor shall be on site during ground disturbance activities that occur between April 1st and October 31st. The timber rattlesnake monitor must be licensed by the NYSDEC to handle timber rattlesnakes. The monitor would be responsible for:
a. Conducting reconnaissance surveys for timber rattlesnakes within the work area prior to the initiation of any disturbance activities, and relocating snakes as required.
b. Training personnel working at the site on the details of the Education and Encounter plan, including how to identify timber rattlesnakes and who to contact in the event of an encounter.
c. Monitoring the proper placement and maintenance of temporary restrictive barriers.
d. Providing oversight during the disturbance phase of the project.
e. Providing any necessary reports or notifications to NYSDEC on snake encounters.

3. For work between April 1st and October 31st, a temporary restrictive barrier shall be used for land disturbance activities with the barrier enclosing each area of disturbance on each lot as shown on the plan. Regular daily inspection will occur to ensure continued effective ness. Details depicting the design and installation of the fence and installation locations are shown on this map. The barrier shall be installed on each lot prior to any disturbance activities. If needed, a functional gate would be installed that would also keep snakes from accessing the site. The default status of such a gate would be closed unless staff or materials are moving into or out of the work site. The barrier should be installed during the winter hibernation period (November 1st to March 31st), if practical, and must be:
a. Maintained until the end of the construction phase of the project or until the beginning of the next winter hibernation period, whichever occurs first;
b. Inspected daily and, if necessary, repaired immediately to a fully functional condition. A log of daily inspections will be kept on the project site; and
c. Constructed in accordance with the following design specifications (see detail): i. made of ¼ inch square hardware cloth, wire mesh, or debris netting
ii. A minimum of 48" high
iii. Anchored into the ground with reinforcement bars placed on the "disturbance side" of the barrier and spaced between 6 - 8 feet apart.
iv. Secured at the base (barrier/ground interface) with at least 6" of fence material covered with soil backfill

4. If the barrier is installed between November 1st and March 31st, it shall be inspected by the monitor before work begins April 1st. If the barrier is installed from April 1st to October 31st, the

5. Site contractors and workers, maintenance personnel and residents will be trained by the monitor with the prepared educational and encounter plan. The monitor will initially instruct the site contractors on identification of the species and procedure if a snake is found prior to the start of sitework.

6. Timber Rattlesnake Encounter Plan: The following guidelines will be used in the event that a timber rattlesnake is encountered on the site during the construction:
a. Personnel working at the site will be trained to be able to identify, and locate timber rattlesnakes by a knowledgeable biologist. Timber rattlesnakes can only be moved by a qualified biologist with knowledge of timber rattlesnake relocation procedures and who is also licensed by the NYSDEC to handle timber rattlesnakes.
b. It is illegal to take, kill, import, transport, possess, or sell an animal listed as threatened without a license.
c. If a timber rattlesnake is seen, stop all ground disturbing work immediately.
d. Contact the contractor in charge and delay work in the area until the snake has moved safely from the area. Allow the snake to continue on its way.
e. If the snake does not move along on its own, contact the response number below to have a trained, NYS-licensed professional to safely relocate the snake.
f. Contact the NYSDEC Wildlife Office to report the incident within 24 hours at 845-256-3098 or Wildlife.R3@dec.ny.gov. Please pass-ide the location, the project name, and explanation of incident.
g. If the snake was found within the exclusion fence, or restrictive barrier fence, work cannot commence till the work area and the fencing are inspected and signed off on by a knowledgeable timber rattlesnake consultant.
h. The Project sponsor will provide educational materials for all contractors to inform them of the potential for timber rattlesnake encounters and what to do if a snake is encountered to ensure the animals are not collected or persecuted.

CONSERVATION AREA NOTES:

VILLAGE OF SOUTH BLOOMING GROVE SEC. 208, BLK. 1, LOTS 2 & 3
PARCEL AREA = 708.17 AC.
DEED RESTRICTED AREA = 290.9± AC.

TOWN OF BLOOMING GROVE SEC. 41, BLK 1, LOT 1.13
PARCEL AREA = 158.75 AC.
DEED RESTRICTED AREA = 142.4± AC.

TOTAL AREA OF PARCELS = 866.92 AC.
TOTAL DEED RESTRICTED AREA = 433.3± AC.

GENERAL NOTES:

1. VILLAGE OF SOUTH BLOOMING GROVE TAX MAP DESIGNATION: SEC. 208, BLK. 1, LOTS 2 & 3.
2. AREA OF SOUTH BLOOMING GROVE PARCEL PER SURVEY BY LANC & TULLY PC: 708.17± AC.
3. TOWN OF BLOOMING GROVE TAX MAP DESIGNATION: SEC. 41, BLK 1, LOT 1.13.
4. AREA OF PARCEL PER SURVEY : 158.75± AC.
5. TOPOGRAPHY BASED ON AERIAL MAPPING PROVIDED BY PROMAPS INC., MOORESTOWN, N.J. AND TIED TO USGS DATUM.
6. EXISTING FEATURES AND INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES.

LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- EXISTING 10' CONTOUR LINE
- EXIST. 940' ELEV. CONTOUR LINE (940)
- EXISTING EDGE OF PAVEMENT
- EXISTING STONE WALL
- EXISTING WATERCOURSE
- ZONING BOUNDARY
- EXISTING TRAIL
- DEED RESTRICTION LIMIT
- ON SITE CONSERVATION AREA
- DEED RESTRICTION LIMIT
- OFF SITE CONSERVATION AREA
- PROPOSED SNAKE FENCE
- PROPOSED RATTLESNAKE CLEARING AREA

GRAPHIC SCALE
240 0 120 240 480 960
(IN FEET)
1 inch = 240 ft.

Lands of
CLOVEWOOD
TOWN OF BLOOMING GROVE, ORANGE COUNTY, NEW YORK
PROJECT TITLE

TIMBER RATTLESNAKE RESOURCE PROTECTION AREA MAP
DRAWING TITLE

DATE	REVISIONS
07-11-23	REV. PER WELL ACCESS ROAD
03-02-23	REV. PER DEC COMMENTS
12-07-22	REVISE AREAS
06-17-21	REVISE AREAS
05-12-21	REVISE AREAS
03-17-21	ADD FENCE
02-08-21	REVISE AREAS
01-08-20	INITIAL PREPARATION

KIRK ROTHER, P.E.
CONSULTING ENGINEER, PLLC
5 Saint Stephens Lane, Warwick NY 10990
(845) 988-0620

KIRK ROTHER, P.E. N.Y.S. LIC. NO. 079053 DATE

D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	1 OF 1
CAD #	PROJECT #	SCALE	
14107scondwlds	14107.0	AS SHOWN	

Attachment I

General Contractor

Timber Rattlesnake Education & Encounter Plan

Timber Rattlesnakes are listed as a Threatened species in NYS and any encounter with a rattlesnake that results in the harm or death of the snake can result in a violation, personal legal action, and/or fines from the NYS Department of Environmental Conservation (DEC).

It is illegal to kill, capture, disturb, harm, pursue, possess, or sell Timber Rattlesnakes, or any part thereof in New York State. No person may handle a Timber Rattlesnake unless they are licensed to do so by the DEC.

This Education and Encounter Plan is required by the DEC for any person working as a contractor, or as a sub-contractor, on the property. These guidelines have been prepared to provide instruction and guidance to prevent harm to individual snakes and how to properly handle an incidental encounter with a Timber Rattlesnake. Basic knowledge of identifying species of snakes will help protect both people and snakes that are on the property.

Key Points:

1) If required by the DEC, a Snake Exclusion Fence and Licensed Snake Monitor would be part of the project. The fence would be inspected to ensure it's functioning as intended. If repairs to the fence are required, those repairs would be conducted immediately.

2) READ OVER THE SPECIES BIOLOGY and their visual Characteristics (see attached DEC Timber Rattlesnake Fact Sheet). A lot of the time, snakes are misidentified. Refer to the Timber Rattlesnake Fact Sheet that is attached for more information about Timber Rattlesnake biology and life history.

NCES
North Country Ecological Services, Inc.

1) Snakes are “ambush” predators and as a result, you can normally find them tucked up against or under rocks, debris, equipment, or spoil piles where rodents will travel and forage. Individual rattlesnakes may also be seen traveling in open areas, from one hiding place to another.

2) Rattlesnakes are Exothermic (cold blooded). Individuals will bask in the morning to increase their body temperature and will be found where sunlight can warm their bodies. Once a snake gets warm, it may pursue prey or hide and wait to ambush its meal. As a result, keep an eye out and be vigilant when on site. Rattlesnakes may be found alongside construction equipment or materials. AND they may be well camouflaged.

3) As the day passes and ambient air temperature increase, rattlesnakes may travel under equipment, machinery, or other surface materials to get out of the direct sun. A visual inspection of the area surrounding machinery and any stockpiled materials is recommended.

4) Typically, individual snakes will rattle as a warning, indicating that you are too close. However, they don’t always rattle. Timber Rattlesnakes are not overly aggressive and will only strike when they feel threatened, provoked, or if they have to defend themselves. Most people are bitten as they are harassing a snake, or if they accidentally step on or immediately near one. But when left alone and given a wide berth, rattlesnakes will try to get away and not initiate a strike.

5) Rattlesnakes cannot throw themselves at a person and they do not seek out people to bite. They use their venom to incapacitate prey and to defend themselves against predators. Their “strike range” is typically ½ of their coiled body length.

Remain vigilant throughout daily work activities. Even if not first discovered during an early morning reconnaissance, snakes may travel during the day be encountered later in the day along the exclusionary fence. Also, be sure to inspect the perimeters of equipment and materials for snakes after periods of no use (ie. after lunch or required breaks). If a snake is encountered be careful and avoid direct contact.

Timber Rattlesnakes have a relatively thick body in respect to its length and the scales are keeled (raised and rough) In the photograph below, note the thick body of this Timber Rattlesnake compared to the boot, this snake offered no inclination to bite and wandered away. As it crawled, it held its tail raised above the ground unlike any other snake in the state.

NCES
North Country Ecological Services, Inc.

The large keeled scales of this Rattlesnake have a rough appearance which may cause some confusion when comparing one to the Water Snake or Hognose Snake. Timber Rattlesnakes do not live in the water or hang around at the waters edge. Only a rattlesnake has a rattle on the end of its tail, it is hard to mis-identify the rattle of a rattlesnake. They do not always rattle prior to striking, so being vigilant and observant is highly recommended to avoid direct contact with a snake.

******At no point should anyone, other than NCES, the DEC, or a licensed Timber Rattlesnake Monitor attempt to capture, move, or handle a rattlesnake.******

<u>If a snake is encountered:</u>

- Stay calm and carefully move away from the snake.
- Inform others in the work area of the location of the snake and inform them to move directly away from the snake.
- Shut down any machinery, if possible, without getting within 15' of the snake. Stay as far away from the snake as possible.
- Inform the someone in charge that a snake has been found and that NCES or another DEC Licensed Snake Handler needs to be contacted so that the snake can be relocated.
- Have 1 person keep an eye on the snake from a safe distance (15' plus) so that NCES Staff or another Licensed Snake Handler knows where to look and find the snake once on-site. This person should also ensure that no one else comes into incidental/accidental contact with the snake.

NCES, or others who are licensed to handle the snake will notify the NYSDEC that a Timber Rattlesnake has been found and that it was relocated to a wooded portion of the property on the same day, well away from any people of structures, to further avoid an encounter.

NCES
North Country Ecological Services, Inc.

If bitten by a Timber Rattlesnake

By Mayo Clinic Staff

Most snakes aren't dangerous to humans. Only about 15% worldwide and 20% in the United States are venomous. In North America, these include the rattlesnake, coral snake, water moccasin and copperhead. Their bites can cause severe injuries and sometimes death.

If a venomous snake bites you, call 911 or your local emergency number immediately, especially if the bitten area changes color, begins to swell or is painful. Many Emergency Rooms stock antivenom drugs, which may help you.

If possible, take these steps while waiting for medical help:

- Move beyond the snake's striking distance.
- Remain still and calm to help slow the spread of venom.
- Remove jewelry and tight clothing before you start to swell.
- Position yourself, if possible, so that the bite is at or below the level of your heart.
- Clean the wound with soap and water. Cover it with a clean, dry dressing.

Caution

- Don't use a tourniquet or apply ice.
- Don't cut the wound or attempt to remove the venom.
- Don't drink caffeine or alcohol, which could speed your body's absorption of venom.
- Don't try to capture the snake. Try to remember its color and shape so that you can describe it, which will help in your treatment. If you have a smartphone with you and it won't delay your getting help, take a picture of the snake from a safe distance to help with identification.

Symptoms

Most snakebites occur on the extremities. Typical symptoms of the bite from a nonvenomous snake are pain and scratches at the site.

Usually, after a bite from a venomous snake, there is severe burning pain at the site within 15 to 30 minutes. This can progress to swelling and bruising at the wound and all the way up the arm or leg. Other signs and symptoms include nausea, labored breathing and a general sense of weakness, as well as an odd taste in the mouth.

Some snakes, such as coral snakes, have toxins that cause neurological symptoms, such as skin tingling, difficulty speaking and weakness.

Sometimes, a venomous snake can bite without injecting venom. The result of these "dry bites" is irritation at the site.

Attachment II

Timber Rattlesnake Sighting Protocol

Should a Timber Rattlesnake be encountered, Immediately Contact

North Country Ecological Services, Inc.
Office (518) 725-1007

Stephen P. George (518) 527-6175
Thomas M. Ward (518) 852-8264

NCES Staff will document the encounter and safely relocate the snake

*****It is illegal to kill, capture, disturb, harm, pursue, possess, or sell a timber rattlesnake in New York, and that no one may handle a timber rattlesnake unless they have been licensed to do so by the DEC.*****

*****At no point should anyone, other than NCES, the DEC, or another licensed Timber Rattlesnake Monitor attempt to capture, move, or handle in a rattlesnake in any manner.*****

- Stay calm and safely move away from the snake.
- Inform others in the work area of the location of the snake and inform them to move directly away from the snake.
- Shut down any machinery, if possible, without getting within 15' of the snake.
- Inform the on-site foreman that a snake has been found and that NCES needs to be contacted to remove the snake.
- Have 1 person keep an eye on the snake from a safe distance (15' plus) so NCES knows where to look once we are on the site and so nobody else comes into incidental/accidental contact with the snake.

NCES will notify the NYSDEC that a Timber Rattlesnake has been found and that it was moved to a wooded portion of the property on the same day.

The rattlesnake barrier, if required by the DEC, will be inspected by a person who received training to ensure that the fence is in fully functional condition, and the inspections will be documented in a log that is kept on the site.

For the safety of all workers on the project, if a Timber Rattlesnake is found within the work site and inside the barrier fence, all work in the area would stop immediately. Work can resume once the Licensed Snake Monitor has removed the snake, inspected the remainder of the work area, and cleared the site for the resumption of work.

All construction personnel, after they have received training from NCES, will sign a log maintained on the site certifying they have been trained.

****NCES is not liable for any injury, death, or damage to persons or property that may occur as a result of any on-site personnel, coming into contact with a Timber Rattlesnake, at any time.****

*****If NCES Staff is unable to get to the Site and handle the Rattlesnake encounter, the following individuals (DEC Approved Rattlesnake Responders) can be contacted to capture and relocate individual snakes.*****

1) Ed McGowen (845) 446-5916

2) Bob Savarese (845) 928-7815

3) Marty Kupersmith (914) 262-3246

4) David Griggs (845) 988-6029

5) Tim & Susan Sharko (845) 988-9369

6) Randy Stechart (845) 252-3517

Attachment III

Timber Rattlesnake Education & Encounter Plan for Community Residents

****It is illegal to kill, capture, disturb, harm, pursue, possess, or sell a Timber Rattlesnake (or any pert thereof) in New York, and no one may handle a rattlesnake unless licensed to do so by the DEC.****

Avoidance of close contact with a Timber Rattlesnake is the best way to protect both residents of the community and individual rattlesnakes from direct harm. At no point should anyone, other than NCES, the DEC, or a Licensed Timber Rattlesnake Handler attempt to capture, relocate or handle, a Timber Rattlesnake.

Timber Rattlesnake Facts & Characteristics

To properly identify a timber rattlesnake, review visual characteristics section of this plan. A lot of times snakes are misidentified. Also refer to the *DEC Timber Rattlesnake Fact Sheet* that is attached for more information about Timber Rattlesnake biology and life history.

1) Snakes are "ambush" predators and as a result, you can normally find them tucked up against rocks, debris, equipment, or spoil where rodents will travel. They may be seen traveling in open areas, such as fields. They will be found and around house foundations and other structures, wood piles, leaf piles, and outdoor monuments.
2) They will bask in the morning to increase their body temperature and will be found where sunlight can warm their bodies. Once the snake gets warm, it may pursue prey or hide and wait to ambush its meal. SO, keep an eye out and be vigilant that snakes may be alongside equipment or materials. AND they may be well camouflaged.
3) Once the day heats up, they may travel under vehicles or structures to get out of the direct sun.

NCES
North Country Ecological Services, Inc.

4) Typically, they will rattle as a warning that you are too close but they don't always rattle. They are not overly aggressive and they will strike when they feel threatened or when they have to defend themselves. Most people get bitten as they are harassing a snake. But when left alone and given a wide berth, they will try to get away and not initiate a strike.

5) They cannot throw themselves at a person and they do not seek out people to bite. They use their venom to kill prey and to defend themselves. Their "strike range" is typically ½ of their coiled body length.

Be vigilant that snakes may be on-site and/or along the perimeter of the fences and along logs that they may backed up against, keep an eye out, when in doubt be careful and avoid contact. Inspect the perimeters of equipment and materials for snakes up against them.

If a snake if found on a roadway, path, or where routine maintenance is being conducted (mowing, weed trimming, tree removal), avoid the snake and the area until the snake has moved on.

The snake has a thick body in respect to its length and the scales appear raised, rough and keeled. Note the thick body of this Timber compared to the boot, this snake offered no inclination to bite and wandered away. As it crawled, it held its tail raised above the ground, unlike any other snake in the state.

The large keeled scales of this Rattlesnake have a rough appearance which may cause some confusion when comparing one to the Water Snake or Hognose Snake. Timbers do not live in the water or hang around at the water's edge. Only a Rattlesnake has a rattle on the end of its tail.

Individual Timber Rattlesnakes are known to occur in different color phases, as observed in the photographs above. Therefore, proper identification is key.

****If a Timber Rattlesnake is encountered***

please follow these guidelines:

- Stay calm and carefully move away from the snake.
- Inform others present in the general area of the location of the snake and inform them to move directly away from the snake.
- Turn off machinery and avoid loud noises or sudden movements within 30' of the snake.
- Immediately contact NCES staff, or another Licensed Timber Rattlesnake Handler so that the snake can be safely relocated. If they cannot be reached, contact the Regional Wildlife Biologists at the DEC Region 3 Office (845) 256-3098.
- Have 1 person keep an eye on the snake from a safe distance (25' plus) so NCES or another Licensed Timber Rattlesnake Handler knows where to look once on the site.

To Avoid Encounters During Routine Activities

Any required outdoor activities, that can be accomplished during the period of the year when snakes are denning (winter hibernation period), should be scheduled between October and April.

Timber Rattlesnakes are attracted to warm areas such as pavement, sidewalks, doorsteps, and other open, sunny areas to bask. As part of their daily movements, they can be found anywhere while searching for prey, which is primarily small rodents and other small mammals.

To avoid incidents that could harm a Timber Rattlesnake during daily & routine grounds maintenance outside of the winter denning period, follow these general guidelines:

- During routine lawn mowing, raise the mower deck as high as possible to avoid a snake being impacted by the mower's blades.
- Avoid work in and around rock piles, wood piles, leaf piles, around machinery, and along building foundations without a visual inspection for snakes.

If bitten by a Timber Rattlesnake

By Mayo Clinic Staff

Most snakes aren't dangerous to humans. Only about 15% worldwide and 20% in the United States are venomous. In North America, these include the rattlesnake, coral snake, water moccasin and copperhead. Their bites can cause severe injuries and sometimes death.

If a venomous snake bites you, call 911 or your local emergency number immediately, especially if the bitten area changes color, begins to swell or is painful. Many Emergency Rooms stock antivenom drugs, which may help you.

If possible, take these steps while waiting for medical help:

- Move beyond the snake's striking distance.
- Remain still and calm to help slow the spread of venom.
- Remove jewelry and tight clothing before you start to swell.
- Position yourself, if possible, so that the bite is at or below the level of your heart.
- Clean the wound with soap and water. Cover it with a clean, dry dressing.

Caution

- Don't use a tourniquet or apply ice.
- Don't cut the wound or attempt to remove the venom.
- Don't drink caffeine or alcohol, which could speed your body's absorption of venom.
- Don't try to capture the snake. Try to remember its color and shape so that you can describe it, which will help in your treatment. If you have a smartphone with you and it won't delay you getting help, take a picture of the snake from a safe distance to help with identification.

Symptoms

Most snakebites occur on the extremities. Typical symptoms of the bite from a nonvenomous snake are pain and scratches at the site.

Usually, after a bite from a venomous snake, there is severe burning pain at the site within 15 to 30 minutes. This can progress to swelling and bruising at the wound and all the way up the arm or leg. Other signs and symptoms include nausea, labored breathing and a general sense of weakness, as well as an odd taste in the mouth.

Some snakes, such as coral snakes, have toxins that cause neurological symptoms, such as skin tingling, difficulty speaking and weakness.

Sometimes, a venomous snake can bite without injecting venom. The result of these "dry bites" is irritation at the site.

NCES is not liable for any injury, death or damage to property that may occur as a result of the contractor, or other on-site personnel, coming into contact with a Timber Rattlesnake, at any time.

For questions, or to schedule a presentation, please contact:

North Country Ecological Services, Inc.
25 West Fulton Street, Gloversville, New York 12078
(518) 725-1007
northcountryeco@gmail.com

Attachment IV

Maintenance/Operation Personnel
Timber Rattlesnake Education & Encounter Plan

Timber Rattlesnakes are listed as a Threatened species in NYS and any encounter with a rattlesnake that results in the harm or death of the snake can result in a violation, personal legal action, and/or fines from the NYS Department of Environmental Conservation (DEC).

It is illegal to kill, capture, disturb, harm, pursue, possess, or sell Timber Rattlesnakes, or any part thereof in New York State. No person may handle a Timber Rattlesnake unless they are licensed to do so by the DEC.

This Education and Encounter Plan is required by the DEC for any person working as a maintenance/operation personnel on the property and is involved the maintenance/operation of the property's water supply system, wastewater system, roadways, towers, etc. These guidelines have been prepared to provide instruction and guidance to prevent harm to individual snakes and how to properly handle an incidental encounter with a Timber Rattlesnake. Basic knowledge of identifying species of snakes will help protect both people and snakes that are on the property.

Key Points:

1) If required by the DEC, a Snake Exclusion Fence and Licensed Snake Monitor would be part of the project. The fence would be inspected to ensure it's functioning as intended. If repairs to the fence are required, those repairs would be conducted immediately.

2) READ OVER THE SPECIES BIOLOGY and their visual Characteristics (see attached DEC Timber Rattlesnake Fact Sheet). A lot of the time, snakes are misidentified. Refer to the Timber Rattlesnake Fact Sheet that is attached for more information about Timber Rattlesnake biology and life history.

NCES
North Country Ecological Services, Inc.

1) Snakes are “ambush” predators and as a result, you can normally find them tucked up against or under rocks, debris, equipment, or spoil piles where rodents will travel and forage. Individual rattlesnakes may also be seen traveling in open areas, from one hiding place to another.

2) Rattlesnakes are Exothermic (cold blooded). Individuals will bask in the morning to increase their body temperature and will be found where sunlight can warm their bodies. Once a snake gets warm, it may pursue prey or hide and wait to ambush its meal. As a result, keep an eye out and be vigilant when on site. Rattlesnakes may be found alongside construction equipment or materials. AND they may be well camouflaged.

3) As the day passes and ambient air temperature increase, rattlesnakes may travel under equipment, machinery, or other surface materials to get out of the direct sun. A visual inspection of the area surrounding machinery and any stockpiled materials is recommended.

4) Typically, individual snakes will rattle as a warning, indicating that you are too close. However, they don’t always rattle. Timber Rattlesnakes are not overly aggressive and will only strike when they feel threatened, provoked, or if they have to defend themselves. Most people are bitten as they are harassing a snake, or if they accidentally step on or immediately near one. But when left alone and given a wide berth, rattlesnakes will try to get away and not initiate a strike.

5) Rattlesnakes cannot throw themselves at a person and they do not seek out people to bite. They use their venom to incapacitate prey and to defend themselves against predators. Their “strike range” is typically ½ of their coiled body length.

Remain vigilant throughout daily work activities. Even if not first discovered during an early morning reconnaissance, snakes may travel during the day be encountered later in the day along the exclusionary fence. Also, be sure to inspect the perimeters of equipment and materials for snakes after periods of no use (ie. after lunch or required breaks). If a snake is encountered be careful and avoid direct contact.

Timber Rattlesnakes have a relatively thick body in respect to its length and the scales are keeled (raised and rough) In the photograph below, note the thick body of this Timber Rattlesnake compared to the boot, this snake offered no inclination to bite and wandered away. As it crawled, it held its tail raised above the ground unlike any other snake in the state.

NCES
North Country Ecological Services, Inc.

The large keeled scales of this Rattlesnake have a rough appearance which may cause some confusion when comparing one to the Water Snake or Hognose Snake. Timber Rattlesnakes do not live in the water or hang around at the waters edge. Only a rattlesnake has a rattle on the end of its tail, it is hard to mis-identify the rattle of a rattlesnake. They do not always rattle prior to striking, so being vigilant and observant is highly recommended to avoid direct contact with a snake.

******At no point should anyone, other than NCES, the DEC, or a licensed Timber Rattlesnake Monitor attempt to capture, move, or handle a rattlesnake.******

<u>If a snake is encountered:</u>

- Stay calm and carefully move away from the snake.
- Inform others in the work area of the location of the snake and inform them to move directly away from the snake.
- Shut down any machinery, if possible, without getting within 15' of the snake. Stay as far away from the snake as possible.
- Inform the someone in charge that a snake has been found and that NCES or another DEC Licensed Snake Handler needs to be contacted so that the snake can be relocated.
- Have 1 person keep an eye on the snake from a safe distance (15' plus) so that NCES Staff or another Licensed Snake Handler knows where to look and find the snake once on-site. This person should also ensure that no one else comes into incidental/accidental contact with the snake.

NCES, or others who are licensed to handle the snake will notify the NYSDEC that a Timber Rattlesnake has been found and that it was relocated to a wooded portion of the property on the same day, well away from any people of structures, to further avoid an encounter.

NCES
North Country Ecological Services, Inc.

If bitten by a Timber Rattlesnake

By Mayo Clinic Staff

Most snakes aren't dangerous to humans. Only about 15% worldwide and 20% in the United States are venomous. In North America, these include the rattlesnake, coral snake, water moccasin and copperhead. Their bites can cause severe injuries and sometimes death.

If a venomous snake bites you, call 911 or your local emergency number immediately, especially if the bitten area changes color, begins to swell or is painful. Many Emergency Rooms stock antivenom drugs, which may help you.

If possible, take these steps while waiting for medical help:

- Move beyond the snake's striking distance.
- Remain still and calm to help slow the spread of venom.
- Remove jewelry and tight clothing before you start to swell.
- Position yourself, if possible, so that the bite is at or below the level of your heart.
- Clean the wound with soap and water. Cover it with a clean, dry dressing.

Caution

- Don't use a tourniquet or apply ice.
- Don't cut the wound or attempt to remove the venom.
- Don't drink caffeine or alcohol, which could speed your body's absorption of venom.
- Don't try to capture the snake. Try to remember its color and shape so that you can describe it, which will help in your treatment. If you have a smartphone with you and it won't delay your getting help, take a picture of the snake from a safe distance to help with identification.

Symptoms

Most snakebites occur on the extremities. Typical symptoms of the bite from a nonvenomous snake are pain and scratches at the site.

Usually, after a bite from a venomous snake, there is severe burning pain at the site within 15 to 30 minutes. This can progress to swelling and bruising at the wound and all the way up the arm or leg. Other signs and symptoms include nausea, labored breathing and a general sense of weakness, as well as an odd taste in the mouth.

Some snakes, such as coral snakes, have toxins that cause neurological symptoms, such as skin tingling, difficulty speaking and weakness.

Sometimes, a venomous snake can bite without injecting venom. The result of these "dry bites" is irritation at the site.