

Draft EIS

6/19/2008

“The Lake at Sylvan Way”

Grafton, NY 12082

Rensselaer County

Lead Agency

Grafton Town Planning Board

P.O. Box G

Grafton, NY 12082

Planning Board Chairperson: Owen Grandjean

(518) 279-3565

Attorney to the Town: Salvatore Ferlazzo

(518) 462-0300

sdf@girvinlaw.com

Date of Acceptance of Draft EIS: July 9, 2008

Deadline Date for Comments:

Preparers

Stonybrook Land
41 Park Street, Room 4
Adams, MA 01220
(413)743-2400
Contact: David Lipinski

Brian R. Holbriiter, P.L.S.
Engineers
34 Center Street
Schaghticoke, NY 12154
(518)753-7592

Harold Berger, P.E.
P.O. Box 513
Clifton Park, NY 12065
(518)373-9860

Scott Reese, RLA, PLLC
15 Sevilla Drive
Clifton Park, NY 10265
(518)229-2771

Creighton Manning
17 Computer Drive
Albany, NY 12205
(518)446-0396

Kurt Weiskotten
87B West High Street
Ballston Spa, NY 12020
(518)542-3489

Nadine F. Shadlock, Esq.
12 Van Rensselaer Boulevard
Albany, NY 12204-1609
(518) 432-3310

Table of Contents

- I. Project Summary
- II. Description of the Proposed Action
 - A. Project Purpose, Need and Benefits
 - B. Location
 - C. Design and Layout
 - D. Construction and Operation
 - E. Approvals
- III. Environmental Setting
 - A. Geology
 - 1. Subsurface
 - 2. Surface
 - 3. Topography
 - B. Water Resources
 - 1. Groundwater
 - 2. Surface Water
 - C. Air Resources
 - 1. Air Quality
 - D. Terrestrial and Aquatic Ecology
 - 1. Vegetation
 - 2. Fish, Shellfish and Wildlife
 - 3. Wetlands
 - E. Agricultural Resources
 - 1. Soils – Road and Site
 - F. Human Resources
 - 1. Transportation Services
 - a. roads
 - G. Land Use
 - 1. Existing land use and zoning
 - 2. Land use plans
 - H. Community Service
 - 1. Emergency services
 - 2. Fire protection and emergency services
 - 3. Utilities
 - 4. Sewage treatment facilities and septic
 - I. Demography
 - 1. Density

J. Cultural Resources

1. Visual resources
2. Historic and archaeological resources
3. Noise – construction

IV. Significant Environmental Impacts

- A. Positive declaration
- B. Fred Howard memo
- C. Lot 13
- D. Letter

V. Mitigation Measures to Minimize Environmental Impact.

VI. Rensselaer County Department of Health

I. Project Summary.

“The Lake at Sylvan Way” is comprised of a 141 acre tract of land located on the south end of South Long Pond in the Town of Grafton, Rensselaer County, New York. This subdivision was first submitted for Planning Board consideration in October 2007; during the ensuing period the developer, Stonybrook Land, LLC has made significant refinements to the project, based upon input from both the Planning Board as well as town residents and other interested parties/ agencies. The details of the project development and design process as well as the refinements and mitigation measures incorporated are discussed throughout this DEIS.

A. Brief Description of the Action: The project proposed is a 26 lot subdivision of a 141 acres located at the end of So. Long Pond Road and along Dyken Pond. Of the 141 total acres, 20 acres are already protected. The proposal is to create a private gated community with a single private boat launch, and a 4000’ private road complete with electric and telephone services. An additional 23 acres, now known as the Otter Cove Parcel, will be conveyed to the Friends of Dyken Center.

B. Significant Beneficial and Adverse Impacts: This subdivision does involve the development into 26 lots of previously unimproved wooded lands at the South end of South Long Pond. This is a subdivision of a 141 acre tract into 26 lots which is approximately 5.4 gross acres per lot. Of this total project acreage a 23 acre parcel will be conveyed to the Friends of Dyken Center a not-for-profit conservation organization to be used for educational purposes (See Exhibit D). As mentioned, this subdivision has frontage on South Long Pond which requires measures to respect any potential impacts on this

pond. These 26 lots will be accessed via South Long Pond Road which is an unpaved Town Road; concern has been raised regarding this road surface with the additional use.

C. Mitigation Measures Proposed:

With respect to subdivision of this parcel into 26 lots, in the interest of protecting the natural beauty of this property as well as in guiding the scope and quality of improvements to this land once subdivided, the developer has included detailed restrictive covenants a copy of which is attached as Attachment # 1.

Measures to protect South Long Pond which have been incorporated into this project include but a single boat launch for this subdivision, with the non-lake front lot owners restricted to the use of only non-motorized water craft or electric motors.

As far as addressing any potential impact to South Long Pond Road, the developer has committed 2,500 yards of item # 4 gravel to the Town of Grafton for the long term protection of this Road. Additionally, the developer will provide the Town with a “Water Dog-Water Distribution Sprayer” for dust control which shall be used as directed by the Town Highway Superintendant.

The developer has also agreed to install signage along South Long Pond Road and to substantially limit construction activities to dry seasons of the year. The homeowners will each receive a membership in the Friends of Dyken Center to further support this organization and its work as well as to foster a sense of community in the neighborhood. The developer has also agreed to include a “helicopter-clear area” to allow the safe landing of a helicopter for emergencies.

D. Alternatives Considered: The alternatives considered were initially 37 lots (copy of the working plan attached Plan A) thereafter, 28 lots after preservation of a 20 acre parcel, then 27 lots and now 26 lots. Prior to submitting this subject proposal, the

possibility of utilizing the pre-existing 21 lot approved subdivision as recorded/filed at the Rensselaer County Clerk's Office. This possibility was rejected because the subdivision design did not meet today's standards.

A cluster development was also considered but was not feasible because of on-site septic and wells. The reason is that at least 2 acres are needed to design on-site septic systems with separation distances for individual wells. A minor subdivision of 3 lots was initially considered but was rejected because of concerns regarding segmentation.

The developer also offered parts as well as all of the property to the Friends of Dyken Center; Friends of Dyken does not possess the funds necessary to acquire the entire tract. As mentioned above, this entity will be acquiring a 23 acre parcel from the developer.

As far as other alternatives, leaving the property "as is" is not an alternative because of the tremendous cost paid to acquire this property.

E. Matter to be Decided: A subdivision approval from the Town of Grafton Planning Board, Rensselaer County Health Department approval for a realty subdivision, and a Storm Water Discharge Permit and boat launch permit from NYS DEC.

II. Description of the Proposed Action

A. Project Purpose, Need and Benefits: The proposed project will consist of a 26 lot subdivision which is located in direct proximity to the Dyken Environmental Center and the Friends of Dyken. The homes to be built at this subdivision will possess great proximity to abundant natural recreational and educational opportunities. This development is also consistent with present green development goals by being a walkable community with extensive passive and active recreational opportunities as well as mandated earth tone colors of home to minimize visibility and minimal impervious surfaces project wide. The proposed community with its numerous protective covenants meets most

if not all of the appropriate recommendations of the Town of Grafton Master Plan Revision (December 1990) including the following:

- i) 2 acre minimum lot size;
- ii) 100' buffers along the lake, the 20 acre land preservation area, no individual boat launches, and only 1 acre maximum of land disturbance/lot will virtually eliminate runoff and erosion from entering the lake;
- iii) The Planning Board conditions will be incorporated into the project in perpetuity through the use of restrictive covenants which will be able to be enforced by the Town Building Inspector/Code Enforcement to further protect this project from adverse impacts;
- iv) All lots will require proper erosion/sediment and septic system controls and will obtain approval from the County Health Department; and
- v) The building density is 5 acres lots with an appropriate cluster of 2 acre lots.

The developer's objective for "The Lake at Sylvan Way" is to create a "green development" which provides residential and recreational enjoyment/opportunities and minimizes, to the greatest extent possible, adverse environmental impacts.

The benefits of this type of green-oriented community will result in creating opportunities for land/home ownership, recreational enjoyment, environmental and neighborhood protection, and many jobs pre- and post- construction. Although the Town of Grafton has not adopted zoning, the restrictive covenants which will be part of this project will serve to protect the integrity and quality of this project now and in the future. This project will also result in a net increase in real estate tax revenues by creating an eventual \$12,000,000 (27 x \$450,000/Lot) private community development will result in

over \$400,000 of additional tax revenue. This is in contrast to the present total taxes of \$4,849.00 – see tax bills attached as Exhibit F).

B. Location:

1. Geographic Boundaries. The project is located at the south end of South Long Pond Road with extensive lake frontage along Dyken Pond as shown on the attached map labeled “The Lake at Sylvan Way” (Exhibit G).
2. Access to the Site. The access to the site is via South Long Pond Road (a gravel road about 18’ to 20’ wide) which starts at the intersection with paved County Route 85 which runs to paved State Route #2 in the center of Grafton.
3. Zoning. No zoning exists in the Town of Grafton.
4. Other. The property abuts the 700 acre Dyken Pond Environmental Center which is located to the west.

C. Design and Layout:

1. Total Site Area.

a. The total site area was originally 141 acres. After a minor subdivision, 23.25 acres were deeded back to the previous owner, with 20 acres set aside as a “Land Preservation Area”.

b. The proposed impervious surface area is as follows:

- | | |
|--|-------------------|
| i. 27 Houses X 2,000 sq. ft. (average) | = 54,000 sq. ft. |
| ii. 27 Driveways (gravel*) X 3,000 sq. ft. (average) | = 81,000 sq. ft. |
| iii. 4,000 ‘ of roadway (gravel*) X 26’ width | = 104,000 sq. ft. |

(*gravel drives and roadways are pervious, though they are included here).

TOTAL: 239,000 sq. ft.

(5.5 Acres out of 118)

c. The amount of land to be cleared is as follows:

- i. Each lot is limited to no greater than
acre of clearing, including septic area,
home, yard and driveway = 23 acres
17 homes X .85 acres
- ii. The roadway: 4000' X 35' width = 3.2 acres

TOTAL: 26.2 acres out of 118

d. The amount of open space is as follows:

- i. Land Preservation Area = 20 acres
- ii. 100' Protective Buffers 11,200 X 100' = 25 acres
- iii. 50' Protective Buffer 1,750' X 50' = 2 acres
- iv. Cul-de-Sac = 2 acres
- v. Otter Cover Parcel = 23 acres
- vi. R.O.W. for New Road Location = 3 acres

TOTAL: 75 acres

Additionally, restrictive covenants limit the clearing to only 26.2 total acres,
this will result in another 35 acres of land remaining in its natural state.

e. Post improvement project open space totals:

- i. 3.9% of the land will be impervious or semi-impervious (this total
includes partially pervious gravel road and driveways);
- ii. Only 18.6% of the land will be cleared;
- iii. 64% of the land will remain "open space";
- iv. 81.41% of the land will remain in its natural state.

Please see Exhibit G the Design & Layout as shown on the tax map labeled
"The Lake at Sylvan Way".

2. Structures. Only single family residential structures are allowed, with a minimum living space of 1500 sq. ft., with all outside colors to be earth-tone to blend with the natural setting. The layout of the proposed homesites, septic systems, wells, driveways & aprons will be shown on the attached engineering plans for Rensselaer County Health Department Approval and are being finalized pending final location of the road. A sample plan highlighting on-site individual storm water management for homesites will be included. The utilities layout will be underground to the greatest extent possible. The utility company in cooperation with the Highway Superintendent will dictate the final plan, on-site, with the design to be completed after final approval (See Exhibit H- 6/2/08 Memo from National Grid).
3. Parking. The only parking area proposed (unpaved) is for the cul-de-sac area to accommodate 3 vehicles, or 2000 sq. ft.
4. Other.
 - a. One 12' wide boat launch is proposed between Lots 16/17 for the exclusive private benefit of the 26 parcels. A deed restriction will prohibit individual boat launches from individual lots; and the 12 non-lakefront lots will only be allowed to carry in non-motorized watercrafts but will allow for the use of electric motors on vessels.
 - b. A stone-lined gated entrance will be constructed, similar to the recent memorial at the Grafton Center.

D. Construction and Operation: The construction of 27 homes along with the corresponding infrastructure will include 4,000 feet of new roadway and related

storm water management system construction and utility installation. The construction of the roadway and storm water management systems will be closely monitored by Town officials and the developer's engineering staff. Daily records and weekly reports will be filed and available for examination by the general public at the bulletin board at the Town Hall. The requirements for erosion and sediment control of the NYSDEC will be implemented prior to construction and will be carefully examined weekly and after each 0.5 inches of rainfall. The developer and his representatives will monitor all erosion and sediment control measures to ensure they will be 100 percent operable at all times and remain in place until the work is complete.

There shall be no more than 5 acres of land disturbed at any one time during the course of the project absent prior, specific written permission from NYSDEC.

Once the road, communication and electric, and storm water management systems are complete and approved by the Town of Grafton, the developer will turn the maintenance responsibility of these facilities over to the Homeowners' Association (the "H.O.A."). The developer will be active in the H.O.A. for as long a period of time as there are lots unsold.

There are a number of very carefully thought out restrictive covenants which will apply to all homeowners living in this subdivision. These restrictive covenants are believed by the developer to be consistent with the long term best interests of the project and serve as a further assurance for the environment as well as the long term integrity of the lake. The failure to observe these covenants will subject the offending homeowner to potential legal action. This same theory applies also to contractors who build houses; heavy wheel loads will be generated when houses are

being built. The importation of gravel for homes and sewage systems, concrete trucks, lumber and supply vehicles will be held accountable to be environmentally conscientious and adhere to rules set up by the Town of Grafton for the proper timing of all deliveries to the site.

It will be a joint effort on the part of the active participants in the homeowners' association and the code enforcement officer of the Town of Grafton to assure these violations do not occur and to react accordingly when a violation is observed.

In the construction of the roadway and related items, steps have been taken to reduce the disturbed areas as much as possible. The clear-cutting of the narrowest possible width in the right of way will be employed during the construction of the road. Restoration work and sediment control will be employed in harmony to keep runoff under control at all times. Engineering plans are being finalized that will follow the attached Storm Water & Erosion Control on construction sites: See Exhibit I- Storm Water Quality During Work. III. D.

Prepared by: Harold Berger, P.E.
P.O. Box 513
Clifton, NY 12065
May, 2008

E. Approvals. The developer seeks final subdivision approval from the Town of Grafton Planning Board as well as permit approvals from the Rensselaer County Health Department and a Storm Water permit from NYS DEC, and for the 12' wide boat launch from NYS DEC. The developer has also completed all work on the proposed private road consistent with Town standards as well as with Town design input and oversight. The developer has requested that at the time of final approval this fact be noted on the record and incorporated into the final resolution to allow

the “The Lake at Sylvan Way” Homeowner’s Association to be able to pursue dedication of this private road, should they choose to do so in the future.

III. Environmental Setting.

A. Geology.

1. Soil Types. The soils types of the land are several fold and are shown on the attached NRCS soils map, Plan B. The majority of the property is very stony loam, with no wetlands soils on the site (See Exhibit BB). The Soil Survey of Rensselaer County considers the Buckland soils to be deep (greater than 60 inches), well drained or moderately well drained, formed in glacial till that was derived mainly from sandstone. The Brayton gravelly silt loam soils are also deep, though somewhat poorly drained. The other soil found on the property in the northwest sector is more shallow, though somewhat excessively drained Glover loam series, with graywacke sandstone bedrock found at 18+ inches. Most of the lots and construction will occur in the Buckland soils, with little in the Glover category (See Exhibit K & BB).
2. Soil Characteristics. Over 55 deep hole tests were completed as shown on the attached table,entitled “Deep Test Hole Reports” by Harold Berger, P.E., dated 11/19/07. Because of the generally high water table found on the site, the engineer will design raised bed on-site septic systems. Engineering designs for storm water and road construction also factor in the soils characteristics of the site, the topography and the forested canopy.
3. Topography. The slopes of the road construction will not exceed 6%, as a large proportion of the property is gently sloping. Only lots 3 – 8 have steeper

slopes, though no construction will occur on grades exceeding 15%, except some driveway grading on non-lake frontage lots.

B. Water Resources.

1. Ground Water. Based on the NRCS soils reports, during November to May, groundwater is located at or near the surface (2' +/-) in most of the soils on this site and all of the surrounding areas; therefore raised septic systems will be designed. There are no particular aquifers on the site, though wells drilled into bedrock around the lake generally yield 5 – 10 gallons/minute. There are no existing wells on the property, and each site will require an individual well. Three wells will be drilled for Rensselaer County Health Department approval. (It should be noted that the annual amount of precipitation that falls on these 141 acres is about 160,000,000 gallons; the 27 proposed lots at full buildout will consume about 3,000,000 gallons, or 2%). Water well completion Reports from Rensselaer County Health Department have been obtained, and they indicate that wells in the area produce adequate yields ranging from 8 to 35 gallons, with depth ranging from 205' to 460', reports are attached labeled Exhibit L.
2. Surface Waters. This proposed project abuts the 175 +/- acre Dyken/So. Long Ponds for nearly 6000', with 16 lots proposed along its shore, for an average of nearly 375'/lot of pond frontage. (A map of the Ponds is attached labeled Exhibit G). In addition to meeting DEC's storm water and erosion control regulations, and obtaining a State pollutant discharge elimination system permit, the project will protect the shoreline with a 6000' continuous 100' wide protection buffer (See Exhibit Z & Exhibit AA). This buffer will allow

only up to 50% of the vegetation to be removed from the buffer, with no clear-cutting or stump removal permitted. In addition, only up to one acre/lot of clearing is allowed, thereby protecting over 80% of the existing forest. The minimum distance of the road to the lake is 400' leaving large areas of undisturbed forest as buffers to the lake. It should also be noted that only one 12' wide boat launch will be allowed along the entire 6000' of shoreline, so no driveways running into the lake will occur. There are no streams on the property and only one cove exists in the southwest corner of the property, named the "Otter Cove", which will be conveyed to the Friends of Dyken.

C. Air Resources.

1. Air Quality. During construction of the road, dust control measures will be utilized to minimize dust disturbance to the neighborhood along South Long Pond Road. To prevent future disturbance when homes are eventually constructed, Stonybrook will donate a dust control machine for use along South Long Pond Road and all the other Town maintained gravel roads in Grafton. (Please see Exhibit N regarding the "Water Dog", a 1000 gallon water trailer, with multiple water distribution and spraying features). The developer also proposes to limit the hours of operation for all forms of outdoor construction from 7:30 a.m. to 5:30 p.m. Monday – Friday, and 9:00 a.m. – 4:00 p.m. on Saturday with no Sunday or holiday construction allowed. This will further limit the noise and dust impacts on the neighborhood.

D. Terrestrial and Aquatic Ecology.

1. Vegetation. A review of all of the State DEC literature indicates that there is only one State rare species (not endangered nor threatened) within the larger

vicinity of the project in the southeasternmost corner of Dyken Pond, approximately 2000' from the nearest location of this property across the entire breadth of Dyken Pond. That plant is called *Myriophyllum farwellii* – or Farwell's Pond Weed - and is located in a busy area of the Pond where numerous cottages are located at the southeastern cove of the Pond at the dam outlet. Cottages and docks are located all around this area. The general habitat for this milfoil is very shallow, stagnant, black water of a reservoir/artificial impoundment. Our property's pond frontage does not contain this kind of "black water".

(Please see the attached location map of this weed; and the New York Heritage Report labeled Exhibit O).

A discussion with Stephen Young of DEC's Natural Heritage Program on 5/15/08, indicates that our project should have no impact on this plant. It should be further noted that the 100' wide protective buffer along the 6000' of shoreline, and the only proposed boat launch area of 12' essentially protects almost 100% of the shoreline/aquatic ecology. The DEC storm water plan, the limited clearing protective covenants, no development proposed for the "Otter Cove" region and the 22 acres to the west of the cove all ensure that environmental impacts will be greatly minimized to the aquatic ecology. The predominant tree species on site are mixed northern hardwoods, with some hemlocks and pines mostly concentrated in the 20 acre land preservation area. The forest is still in its immature stage with few timber quality trees greater than 14" diameter. The State has identified this region as part of the Rensselaer County Forest Plateau of approximately 100,000 acres. The

Audubon Society has also listed this region of 100,000 acres as an important bird area of mostly 95% forest. The common forest community types are hemlock-northern hardwood and beech-maple mesic. The State considers them to be significant – not rare, nor endangered, nor threatened, nor vulnerable; and there is no federal listing status. While these forests are considered to have high ecological and conservation value, their legal status in New York is simply “unlisted”. Their “NY State Rank” is “apparently secure” – not imperiled, nor vulnerable; and their “Global Rank” is similar or “demonstrably secure”. (Please see the attached Natural Heritage Report of Rare Species and Ecological Communities labeled Exhibit P).

2. Fish, Shellfish and Wildlife. The 10/22/07 letter attached from the New York Natural Heritage Program (See Exhibit Q) suggests ways to mitigate development’s impacts, all of which have been adopted by the developer:
 - a. Reduction in the number of lots from 37 to 26;
 - b. Minimize the amount of clearing to maintain the forest canopy as intact as possible;
 - c. 20 acre land preservation area with a continuous band of 100’ protective buffers;
 - d. 111 acres will remain as protected forest, and the maximum amount of clearing will be limited to 30 acres, resulting in nearly 80% of the forest will be protected for wildlife & plants as well as from erosion/sedimentation.
 - e. 23 acres will be conveyed to the Friends of Dyken for environmental conservation.

While this letter from Natural Heritage indicates that habitat in these forests could be used by fisher, bobcat, bear, moose, porcupine and birds, it should be noted that many of these animals are also subject to hunting and trapping pressure. With this carefully planned conservation – oriented development, with continuous buffers and extensive protective covenants, hunting will be further limited by NYS Laws limiting discharge of firearms within 500’ of a residence.

In addition to the State Natural Heritage Program, the Audubon Society and local ecologist David Hunt have submitted letters of concern regarding “The Lake at Sylvan Way” community. It should be noted that Audubon New York’s Important Bird Area (IBA) (Exhibit R) is not a regulatory program and serves as an opportunity to establish common ground for conservation on a cooperative basis. In reviewing their description of this 100,000 acre IBA, it is essentially the same as the Rensselaer Forest Plateau, and as such, with the restrictive covenants the developer will impact only .03% (3/100’s of 1 percent) of the area. Also, it should be noted that a 700 acre (The Dyken Center) protected area has already been established nearby and with nearly 80% of the forest being protected on the subject site. Because of these environmental characteristics as noted by David Hunt and others, the developer will minimize the disturbance to the forest and aquatic ecology in the following ways:

- a. Limit clearing to no more than 1 acre/lot resulting in a maximum of 30 acres of disturbance, or roughly .03% of the Rensselaer County Plateau forest, while preserving around 111 acres;

- b. Limiting clearing of the forest understory will preserve around 110 acres of the understory, important for wildlife/bird habitat;
- c. The 100' wide continuous no-cut buffer along the entire boundary of the Dyken Pond Environmental Center and the Akera family land will in essence add significantly to the wildlife value/protection of the Center;
- d. The 100' wide continuous limited-cut buffer along the entire shoreline will greatly protect the shoreline for wildlife/overall ecology;
- e. The prohibition of individual boat launches will protect the shoreline from driveways/erosion channels from running toward/into the lake;
- f. The protective covenant limiting light pollution will enhance the night-time ecology from disturbance;
- g. The protective covenant minimizing use of pesticides & fertilizers.

The IBA recommends permanent protection of the 100,000 acre site via public acquisition and conservation easements, both of which we are actively pursuing. (The Otter Cover area could eventually be a part of the Dyken Center, and the 24 conservation covenants). Also note that the subject parcel is located at the northernmost section near South Long Pond Road, as shown on map attached (Exhibit R), and is in an area already dotted with old cottages and newer homes.

Because this is a rich and diverse bird area, the developer will provide a "Backyard Conservation" booklet to each homeowner, and the Audubon Society listing of all the birds, and the Chapter on "What you can do to help protect IBA's" (all of which are attached – Exhibit S).

With respect to concerns relating to impacts to county-rare and county-vulnerable plants and animals The Planning Board should be aware that the extensive use of restrictive covenants in this project, as well as in limiting impacts to the Otter Cove area and the reconfiguration of the project's private road will serve to minimize these impacts.

3. Wetlands.

- a. As has been shown on various wetlands maps, there are no Federal or State designated wetlands on the 118 acres proposed for "The Lake at Sylvan Way". Additionally, enclosed are a report and maps from Kurt Weiskotten of KW Environmental Services, Ballston Spa, New York (Wetland Specialist) to the developer dated October 18, 2007, providing his professional judgment that he indeed concurs with the original findings that there are no wetland areas within or contiguous to the project site (Exhibit T).

E. Agricultural Resources.

1. Soils. The soil types of the land are several fold and are shown on the attached NRCS soils map, Plan B. The majority of the property is very stony loam, with no wetlands soils on the site (See Exhibit BB). The Soil Survey of Rensselaer County considers the Buckland soils to be deep (greater than 60 inches), well drained or moderately well drained, formed in glacial till that was derived mainly from sandstone. The Brayton gravelly silt loam soils are also deep, though somewhat poorly drained. The other soil found on the property in the northwest sector is more shallow, though somewhat excessively drained Glover loam series, with graywacke sandstone bedrock

found at 18+ inches. Most of the lots and construction will occur in the Buckland soils, with little in the Glover category (See Exhibit K & BB).

F. Human Resources.

1. Transportation Through careful examination of the current Town of Grafton Roadway Guidelines and Construction Specifications (12/2007 – attached) for the creation of 4,000’ plus of new roadway for the project located at “The Lake at Sylvan Way”, it is desired to have a wearing surface of 20’ with 3 foot wide shoulders and open swale drainage. The detailed drawings of the road, slope, cuts & fills, driveways, storm water management plan, revised entrance onto the end of South Long Pond Road, shared aprons, etc. are being completed by Harold Berger, P.E., with the help of Scott Reese, RLA, PLLC and Brian Holbritter, PLS. These drawings have been examined by the Town Highway Superintendent, the Town Engineer, the County Engineer and Creighton Manning Engineers to insure that the design is environmentally and physically sound. The developer is also working closely with the Town Officials, Harold Berger, P.E., and Creighton Manning Engineering, LLP in order to fully assess the impacts of both the design of the new roadway at Sylvan Way, and also to evaluate the durability of existing South Long Pond Road during construction by way of a traffic analysis prepared by Creighton Manning LLP.

The final report from Creighton Manning, LLP (see Exhibit DD) provided the following items of information critical to sustaining the integrity of South Long Pond Road, and minimizing the negative impacts of the construction of the 4,000’ private graveled roadway at “The Lake at Sylvan Way”:

- a. Written text including appropriate graphics to present the traffic volumes.
- b. Results of the traffic analyses conducted for the study according to procedures set forth in the *Highway Capacity Manual* (HCM).
- c. Summary of the expected traffic impacts and the recommended improvements to accommodate the projected traffic flows.
- d. Summary of the existing roadway conditions and recommendations relative to accommodating the proposed project.
- e. Recommendations related to the construction of Sylvan Way.
- f. Anticipated maintenance that may be needed through the construction period of the project.
- g. Technical Appendix for reviewing agencies.

Also, it should be noted that according to the Town of Grafton's Chapter 225-2 Vehicles and Traffic Article I (Spring Season), that the Highway Superintendent has the right to limit the amount of weight carrying vehicles to 10 tons during the spring thaw mud season.

Please note the attached copies of documentation addressing these critical issues as far as traffic concerns and road construction matters:

- Letter from the developer to Allison Hallenbeck-Kirchner and Herb Hasbrouck dated April 7, 2008. (Exhibit J)
- Letter from Harold Berger, P.E., LLC dated December 7, 2007. (Exhibit U)
- "The Lake at Sylvan Way": Environmental Obligations report by Harold Berger, P.E. in May 2008. (Exhibit I)

- Traffic Analyses and Road Evaluation study compiled by Creighton Manning, LLP.
- Vehicle & Traffic (Chapter 225 of the Town law) (Exhibit W)
- Roadway Guidelines, December 20, 2007 Town of Grafton (Exhibit X)

Preliminary mitigation suggestions, subject to the Highway Superintendent's acceptance are as follows:

- a. Dunham Road, as it presently exists, will be off-limits to construction traffic
- b. A stop sign or yield at the intersection of South Long Pond Road with Benker School Way for traffic heading north along South Long Pond Road.
- c. Limiting the construction vehicles weight.
- d. Application of 5" of gravel along South Long Pond Road.
- e. Caution signs at the South Long Pond Road/Benker School intersection, the hill located to the east of the South Long Pond Road/County Rt. 85 intersection, and at the narrow bridge along County Route 85.

G. Land Use.

1. Existing Land Use and Zoning. There is no zoning in the Town.
The existing land use in the area is residential, vacant, and the Dyken Pond Environmental Center.
2. Land Use Plans. The Town of Grafton 12/1990 Master Plan has listed a number of recommendations which are being utilized in "The Lake at Sylvan Way", as follows:
 - a. Two acre minimum lot sizes.
 - b. The cluster of the lakefront lots with 2 acres +/- sites needed for wells and septic.

- c. Development is restricted to areas with slopes less than 15%, and proper erosion control measures are being utilized.
- d. A setback of at least 100' is being utilized along the Ponds.
- e. County Health Department approval is a part of this community, and the Town Building Inspector is expressly empowered to enforce the protective covenants, including the homesite erosion control plans, to the extent that they are consistent with the conditions of project approvals and/or otherwise mandated by law.
- f. The Lake at Sylvan Way, Inc., a private Homeowners' Association is in the process of creation and is being established to preserve the integrity of the community, the protective covenants, watershed protection, and, together with the Health Department, ensure that septic systems meet the public health regulations.
- g. Erosion and sedimentation controls are an essential part of this subdivision application.
- h. Extensive protections in the covenants will insure that nearly 80% of the land will be preserved.

H. Community Service.

- 1. Emergency services
- 2. Fire protection and emergency services
- 3. Utilities
- 4. Sewage treatment facilities and septic.

Concerns regarding sewage disposal systems for “The Lake at Sylvan Way” has been a critical part of the project from its inception months ago. Lot

layout, topographic surveys, soils assessments, wetlands studies, an extensive Phase I environmental site assessment, preliminary soils survey analysis, etc. have all been conducted. Application was originally made on October 27, 2007 to the RCHD for review; and more detailed septic system designs, & lot layout based on the new road location are forthcoming after the engineer meets with the Health Department on site for soils testing.

A discussion from the site engineer follows:

The Lake at Sylvan Way: Sewage Disposal System Design

Soil Tests have been conducted on all 26 lots in this project in locations of proposed sewage disposal systems. The results of this deep hole testing clearly indicates that all sewage systems must be of the raised system variety which employs the use of select fill material over a specified footprint consisting of a basal area and a buffer zone.

The basal area is that portion of the disposal area in which the fill material is full depth, or 4 feet for gravity fed systems and 3 feet for systems that are mechanically dosed. In this case all dosed systems will be fed by pumps.

The basal area size is calculated based upon the design flow of 130 gallons per day per bedroom and the number of bedrooms in the proposed home. In this project, the maximum number of bedrooms will be 4. There are some lots upon which the maximum number of bedrooms allowable will be 3 due to space and configuration limitation of certain lots. The basal area is calculated by dividing the total daily flow by 0.15 gallons per day per square foot.

In the case of the 3 bedroom system the basal area calculation yields 2,600 square feet. The basal area configuration is then determined by the best fit for any particular lot. The most extreme dimensions, for comparison, are 25 feet by 104 feet and 50 feet by 52 feet. There are other combinations that will work, but generally, these two are the most commonly used.

It is within the basal area that the disposal field is placed. The field consists of a number of tile field trenches constructed of pipe and stone, into which the effluent is distributed. The trenches must all be the same length, be installed at 6 feet center to center, be a minimum of 2.5 feet from the edge or top of fill and be keyed into the percolation value of the fill material. The faster the percolation rate of the fill the lower the total lateral footage required. The required range in percolation value of placed fill is between 6 and 30 minutes per inch. This is determined by the engineer prior to lateral installation.

Laterals are fed by a precast concrete chamber called a distribution box. The box is placed at the head of the highest lateral and is equipped with an inlet, baffle, and outlets that distribute the effluent evenly and equally to the receiving laterals in the basal area. Around the basal area is the buffer zone in which the fill material is placed to taper the four or three foot portions back to original grade. The minimum allowable slope in the buffer area is 3 on 1. The minimum width of the buffer is twenty feet. The buffer is required on all four sides of the basal area. On the uphill side, the fill material is placed within the 20 foot buffer and other fill material may be placed over it. The toe of the fill must be at least 20 feet from the house

foundation. The sides of the buffer are always 20 feet or more. The downgradient portion of the buffer must be at least 20 feet, but on slopes can be more than 20 feet. This is determined in Rensselaer County by the application of a graphical formula that extends the point at which the slope intersects with original grade at a rate of 3 to 1. The starting point of the extension is the theoretical projection of a 5 percent transverse slope across the top of the system. For systems that are placed on slopes of greater than 5 percent there is a departure in gradient line. The 5% projection at the lower top of fill line is the starting point of the 3 on 1 projection and the intersecting point is the plane of the toe of fill on the low end of the buffer. Toe to fill is almost always extended for slopes greater than 5 percent. The maximum slope upon which a raised sewage system may be installed is 15 percent.

Referring back to our stated basal area examples, the minimum footprint for the 3 bedroom system examples adding the buffers becomes 144 by 65 feet for the 25 by 104 basal area and 92 by 90 feet for the 50 by 52 feet basal area. This is the footprint size for the system without consideration of the need to extend the low end toe as discussed above.

Disposal areas must be completed by covering the entire disposal field area with a minimum of 6 inches of topsoils and seeding/mulching the area at once. In most cases a swale or curtain drain is installed on the uphill portion of the system to divert surface water from the system.

In the case of this project there are concerns about the control of surface water runoff in the direction of the sewage systems and the presence of a

preponderance of cobbles and boulders in the area of the sewage system footprints on a few of the lots. Lots identified as needing control of storm water and the lowering of ground water have curtain drains located above the system footprint. A curtain drain is a trench 18 to 24 inches wide and about 30 to 36 inches deep. It has stone at the bottom and a slotted or perforated plastic pipe over the stone. It directs water away from the sewage system, controls the level of ground water and, in so doing, protects the sewage system from any interference with unwanted infiltration. The lots that have been identified as having many boulders and cobbles that will prevent the underlying soil from properly filtering the treated sewage effluent prior to introduction back to the ground water tables are to have two feet of existing soil layer removed under the system footprint. That void will be filled with sewage system quality fill material in place of the rocks and cobbles and will be tested prior to the installation of the sewage system fill material. The material will be subjected to the same testing process as the sewage system fill. Percolation testing will be employed to verify the percolation rate, which must be between 6 and 60 minutes for this portion. To further protect the lake, the sewage systems for the lots on or near the lake have been designed to maximize the separation distance from system to the lake. This has been accomplished by making use of pumps for several of the systems. The use of pumps also improves the method of introduction of effluent to the disposal field. It is generally agreed in the industry that dosing is favored in lieu of gravity system feed. The provision of periodic dosing and the allowance of extended rest periods between doses has long

proven to be a more effective way to treat domestic sewage. The distance from system to lake has been maximized and is, on the average, about 200 feet. There is an established 100 foot limited cut zone as a protective covenant. Since it is preferred to have homes as close to the lake as practical, this renders the sewage system location to a minimum of 150 feet to the lake under any circumstances. This amount is derived by adding 30 feet for the house and 20 feet separation distance from the toe of fill to the house to the 100 feet. 100 plus 30 plus 20 equals 150 feet. All sewage system installations will be carefully supervised by the engineer. This is required by the Rensselaer County Health Department, who will also have a representative present at all inspections during construction. Lots that have soil replaced will be examined four times:

1. Percolation testing of replaced soil.
2. Percolation testing of sewage system fill.
3. System installation inspection prior to backfill.
4. Final inspection for grading, topsoiling and seeding/mulching.

Prepared by: Harold Berger, P.E.,
P.O. Box 513, Clifton Park, NY 12065
Phone and fax: 518-373-9860 – May, 2008

The Engineer's initial Report is also included for Analysis:

ENGINEER'S REPORT
IN THE MATTER OF
FEASIBILITY OF SEWAGE SYSTEM DESIGNS FOR

Lands of Gundrum, Under Contract To:
Stonybrook Land, LLC
Town of Grafton
Rensselaer County, New York

Prepared for: Stonybrook Land, LLC
41 Park Street, Room 4
Adams, MA 01220

Prepared by: Harold Berger, P.E.
P.O. Box 513
Clifton Park, NY 12065

Report Date: October, 2007

INTRODUCTION

This project encompasses 122 acres on South Long Pond Road in the Town of Grafton. It is desired to subdivide this property into 37 lots for single family residential use. The project will be classified as a realty subdivision and will be serviced by individual drilled wells and sewage disposal systems. The purpose of this initial study is to obtain specific information regarding the quality of the soil in areas designated for sewage disposal systems to better understand the suitability of the lots to accept sewage from homes and to verify that the sewage systems can be designed to comply with the requirements of the Rensselaer County Health Department and the requirements of Part 75-A of the State Sanitary Code.

THE SITE

For the purpose of this evaluation, the potential locations for all sewage systems was field marked by the project licensed land surveyor. The project excavator then excavated a deep hole at these locations. The holes ranged in depth from 48 to 72 inches and enabled the observation and recording of the soil and other pertinent data for each sewage system location, with the exception of Lot 35.

Engineer's Report cont. page 2
Feasibility of Sewage System Designs for Lands of Gundrum
Prepared by Harold Berger, P.E.
Dated October 2007

The site is rolling and gently sloped from uplands to South Long (Dyken) Pond. The project has approximately 4,500 feet of pond frontage and will have about 4,200 feet of new road. Construction will be phased so that no more than 5 acres of disturbance will occur at any one time and will have a complete storm water and SWPPP plan for approval by the Town. Complete utility and grading drawings will be prepared and the road will be designed as part of the project drawing set, also.

PRELIMINARY SOIL TESTING

A workable lot configuration has been developed based upon the use of USGS topographic information and reasonably accurate boundary data. Current 2 foot topo and boundary information is being obtained. The design of 37 lots does appear to be feasible for this parcel and this program is based upon that design. Generally, there is an ample amount of topsoil present on the lots. There will be a mix of raised sewage systems and shallow trench systems. There will, most likely be no conventional systems.

The primary consideration has to be the design of sewage systems that have a preponderance of boulders and cobbles within two feet of existing grade, with special consideration to those lots on which the boulders and cobbles are present at grade and down. This is an area that is not clearly addressed in Appendix 75-A, and in the related literature that has been developed over recent years by the State Health Department and NYSDEC. It appears not to be a common problem in the design of individual sewage systems, but it is very common in Grafton and other parts of Rensselaer County. The concern is that effluent from raised systems discharged back to grade in four feet of basal area does not receive the normal amount of detention offered in the usual 12 inches minimum of topsoil that has a percolation value of less than 60 minutes to the inch. The following is offered as a remedy for this situation, which will be found to exist on several of the lots in this project.

THE REMEDY FOR ROCKY SOIL

The problem of inadequate treatment of sewage effluent in raised sewage systems due to soil that contains large percentages of rock in the form of boulders and cobbles needs to be addressed in this project. It is the single design consideration that is considered significant and that can have an adverse impact on the ability to design sewage systems that are known to be totally effective when properly constructed and maintained. The objective is to provide proper vertical separation and filtration/treatment of effluent from raised system and to eliminate the possibility of short-circuiting of effluent being recharged into the ground water supply.

Given the desired results, it does seem appropriate and necessary to remove the rock laden material to a depth not to be less than two feet, vertically, from the complete footprint of the raised sewage system, in these cases. Once that rock/soil is removed a cavity of two

Engineer's Report cont. page 3
Feasibility of Sewage System Designs for Lands of Gundrum
Prepared by Harold Berger, P.E.
Dated October 2007

feet deep by, say 90 feet by 92 feet for a three bedroom home, will be created. The cavity can then be filled with soil with a controlled percolation rate. The recommendation of this report is that the soil used should be the same as the fill to be used for the raised sewage system. This will add a fill volume of about 600 to 650 cubic yards to the total fill volume. It will assure that there is a least two feet of percable soil under the raised system and the proper treatment of the effluent will occur prior to the discharge of the effluent back into the ground water table. The placed fill should be inspected and tested prior to the replacement of the basal area fill to assure that it has a proper percolation value. Upon successful testing, the actual system fill may then be placed. Over time this part of the fill will compact and the rate of percolation may be somewhat reduced, similar to the way topsoil behaves in a similar environment.

There are about seven lots that may need to be considered for this design approach. The test holes that were completed are preliminary but give a clear indication of the design circumstances to be encountered. The table appended hereto provides a summary of these findings.

I. Demography.

1. Population Characteristics- Density. “The Lake at Sylvan Way” is a 26 lot private community subdivision on 118 +/- acres of land. In August of 1961, the approved “Lake Renee” subdivision encompassed 21 lots at an average density of 0.3 acres in size, including approved soils tests. The developer understands that environmental preservation and sustainable growth are key components of “smart growth” communities, which was the developer’s reason behind the scaling back of our original 37 lot plan to 26 lots. We also reduced the environmental impacts by setting aside a 20 acre land preservation area, annexing a 23.25 acre parcel to the previous owners, allowing no development on the Cove in South Long Pond, not developing the 3 acre cul-de-sac area, agreeing to convey the 23 acre Otter Cove parcel to the Friends of Dyken, establishing a 60’ to 120’ protective buffer between the proposed Sylvan Way and Gundrum’s land preservation area.
Taking into account the total acreage which is 141 acres (including the 20 acre land preservation area, and 3 acre annexation), and based upon our proposed 26 lot subdivision, the average density is 5.22 acres/lot with appropriate clusters of 2 +/- acre lots with water frontage. Additionally, for just the 118 acres as a benchmark, the average density per lot based upon 27 lots would be 4.37 acres/lot. The developer feels that this is an appropriate amount of land based on a number of the current lot sizes in close proximity along the shores of South Long Pond and Dyken Pond. It will also be

adequate for the need to include on-site septic and wells given the appropriate separation distances involved.

As for water frontage density, the project's 16 waterfront lots average frontage on the Ponds is over 300'. Many of the surrounding lots and other parcels on the Ponds are much less than this average. Please see the attached tax maps (Exhibit Y) showing the lots on the Ponds. Based upon research into the current densities in the Town of Grafton, we feel that 26 lots at an average density of 5.22 or 4.37 acres (whichever way to assess that computation) will not have a negative impact based upon some of the numbers/density of parcels on particular roads in close proximity. See attached tax maps and parcel report. The report shows that there currently are a total of 70 parcels that use South Long Pond Road, and we will add an additional 27. Along County Route 85 travelling toward Rte. 2 from South Long Pond, there are 60 parcels. On the Ponds, the number of parcels are 40 along South Long Pond and 62 along Dyken Pond, as well as the public carry-in access from the Dyken Pond Center. "The Lake at Sylvan Way" will increase the number of parcels with motorized boat use by 16, and carry-in by 11.

These 141 acres cannot be further subdivided or developed per deed restrictions and protective covenants, so the density will remain at over 5 acres/residence.

Parcel Report

ROAD	# of Parcels
South Long Pond	21
Deer Run & Chipmunk Way	12
Benker School Way	37
	Total = 70
County Rte. 85	60
POND	
South Long Pond	40
Dyken Pond	62
	Total = 102
Taconic Lake Pond waterfront (Example)	55

J. Cultural Resources.

1. Visual Resources

Even though a number of homes/cottages already exist along the shorefront of the ponds, in order to minimize the visual impact of the development, the following protective covenants will be enforced for “The Lake at Sylvan Way”:

1. Only earth-tone colors will be allowed for the outside of homes.
2. A 100’ limited clearing buffer will be enforced along all of the 6000’ of water frontage. No clear cutting will be allowed in this buffer.
3. No individual boat launches will be allowed.
4. The west side of Lot 13 is not proposed for development.

5. No more than 1 acre/lot is allowed for clearing.
6. The forest canopy/understory is expressly protected.
7. No further subdivision is allowed.
8. Light pollution is also restricted.

2. Historic and archaeological resources

By examination of the Office of Parks, Recreation, and Historic Preservation's map, the land encompassing "The Lake at Sylvan Way" is not designated as an Archaeological Sensitive Area on the State or National Register (see attached map).

3. Noise – construction

Because the intent of "The Lake at Sylvan Way" is ideally to create an enjoyable, natural community where humans responsibly live inside a natural setting, noise should be regulated. The developer will limit the hours of outdoor construction, with a day of absolute freedom from construction noise on Sundays; Monday – Friday, from 7:30 a.m. to 5:30 p.m., and Saturday from 8:00 a.m. to 2:00 p.m.

IV. Significant Environmental Impacts

A. Positive Declaration. On April 21, 2008 a SEQR Positive Declaration was issued by the Town of Grafton Planning Board.

The positive declaration recited the following impacts as the basis:

1. Construction will continue for more than a year and will involve more than one phase.

Mitigation employed: This project will not be constructed in phases, rather it is anticipated that homes will be constructed by property owners as lots are sold,

therefore on a gradual basis. This gradual basis rather than an immediate substantial period of construction as would be encountered with a substantial commercial development will serve to minimize the impacts on County Rt. 85 as well as South Long Pond Road. The developer has also agreed to provide the Town with 2,500+/- yards of item #4 gravel for South Long Pond Road. Also being provided is a “Water Dog” comprehensive road watering device for the use of the Town on Town roads in its discretion.

2. Construction will occur on lands adjacent to South Long Pond and Dyken Pond with water and air quality at issue.

Mitigation employed: As discussed elsewhere in this DEIS, the developer is providing state of the art storm water measures which will greatly mitigate if not eliminate in its entirety any such impacts.

3. The proposed action will affect the aesthetic resources of the adjoining ponds and will reduce open space.

Mitigation employed: The developer has required a minimum of 100’ set back from the pond and has limited clearing to a maximum of one acre including the driveway. The developer has limited the development to a single boat launch and has restricted property owners of the non-waterfront lots to non-motorized watercraft or an electric motor.

4. The proposed change in density of land use is significant and may affect the character of community.

Mitigation employed: The developer has agreed to convey a 23 acre parcel to the Friends of Dyken a not for profit conservation organization. The developers proposed subdivision results in parcels which are approximately 5 acres in size.

This density is markedly less than the original approved 21 lot subdivision on this tract. The density of this development is also significantly less than many, if not most of, the homes on Dyken and South Long Ponds.

5. The proposed action will increase traffic on County Route 85 and cause a large impact on the existing transportation system.

Mitigation employed: This project will not be constructed in phases, rather it is anticipated that homes will be constructed by property owners as lots are sold, therefore on a gradual basis. This gradual basis rather than an immediate substantial period of construction as would be encountered with a substantial commercial development will serve to minimize the impacts on County Rt. 85 as well as South Long Pond Road. The developer has also agreed to provide the Town with 2,500+/- yards of item #4 gravel for South Long Pond Road. Also being provided is a "Water Dog" comprehensive road watering device for the use of the Town on Town roads in its discretion.

6. The proposed action will substantially affect existing drainage patterns.

Mitigation employed: This project has made substantial investment in engineering design to address any potential concerns relating to drainage patterns. Additionally, as discussed elsewhere in this DEIS, the developer is providing state of the art stormwater measures which will greatly mitigate if not eliminate in its entirety any such impacts.

7. The proposed action will substantially affect demands on emergency services.

Mitigation employed: The developer has agreed to make a portion of this site helicopter clear to allow helicopters to land in for emergencies. The developer has also agreed to allow the Town of Grafton to use the projects boat launch for

emergencies. Additionally, the developer is constructing a dry hydrant to address fire safety needs of this project and potentially those of any surrounding properties.

B. Rensselaer County Highway Department. By memo dated April 16, 2008,

Fred Howard of the RC Highway Department identified the following items:

1. Road Grading Challenges for the private road.

Mitigation employed: The developer has invested substantial sums in engineering and land surveying to address all issues relating to grading. The developer has also worked very closely with the Town Highway Superintendent in establishing the road configuration and grading and has also conferred with the RC Highway Department.

2. Evaluate Existing Town Road.

Mitigation employed: The developer retained Creighton Manning Engineering, which issued a report dated July 14, 2008 which evaluated the traffic impacts of the proposed development.

3. Challenges of Construction of the new road.

Mitigation employed: The developer has invested substantial sums in engineering and land surveying to address all issues relating to grading and construction of this road. The road was also reconfigured at the suggestion of the Town Highway Superintendent with whom he developer has worked closely on and has also conferred with the RC Highway Department.

4. Single means of Access.

Mitigation employed: The developer has worked with the Town Highway superintendent to design safe and ready access to this project.

C. Lot 13.

Lot 13 was originally 26.5 Acres.

Mitigation employed. The developer has agreed to convey 23 acres of this parcel to Friends of Dyken for conservation purposes. This leaves a 3.5acre subdivided lot.

D. Letters from Neighbors.

1. David Hunt Letter. In addition to the State Natural Heritage Program, the Audubon Society and local ecologist David Hunt have submitted letters of concern regarding the Lake at Sylvan Way community.

It should be noted that Audubon New York's Important Bird Area (IBA) (Exhibit R) is not a regulatory program and serves as an opportunity to establish common ground for conservation on a cooperative basis. In reviewing their description of this 100,000 acre IBA, it is essentially the same as the Rensselaer Forest Plateau, and as such, with our protective covenants we will impact only .03% (3/100's of 1 percent) of the area. Also, it should be noted that a 700 acre (The Dyken Center) protected area has already been established nearby, and we will protect nearly 80% of the forest on our site.

Because of these environmental characteristics as noted by David Hunt and others, Stonybrook will minimize the disturbance to the forest and aquatic ecology in the following ways:

- a. Limit clearing to no more than 1 acre/lot resulting in a maximum of 30 acres of disturbance, or roughly .03% of the Rensselaer County Plateau forest, while preserving around 111 acres;
- b. Limiting clearing of the forest understory will preserve around 110 acres of the understory, important for wildlife/bird habitat;

- c. The 100' wide continuous no-cut buffer along the entire boundary of the Dyken Pond Environmental Center and the Akera family land will in essence add significantly to the wildlife value/protection of the Center;
- d. The 100' wide continuous limited-cut buffer along the entire shoreline will greatly protect the shoreline for wildlife/overall ecology;
- e. The prohibition of individual boat launches will protect the shoreline from driveways/erosion channels from running toward/into the lake;
- f. The protective covenant limiting light pollution will enhance the night-time ecology from disturbance;
- g. The protective covenant minimizing use of pesticides & fertilizers.

The IBA recommends permanent protection of the 100,000 acre site via public acquisition and conservation easements, both of which we are actively pursuing. (The Otter Cove area could eventually be a part of the Dyken Center, and the 24 conservation covenants). Also note that our parcel is located at the northernmost section near South Long Pond Road, as shown on map attached (Exhibit R), and is in an area already dotted with old cottages and newer homes.

Because this is a rich and diverse bird area we will provide a "Backyard Conservation" booklet to each homeowner, and the Audubon Society listing of all the birds, and the Chapter on "What you can do to help protect IBA's" (all of which are attached – Exhibit S).

In reviewing David Hunt's information submitted to the Planning Board it should be emphasized that the many protective covenants, and in limiting impacts to the Otter Cove area will minimize impacts to the county-rare and county-vulnerable plants and animals that he mentions. Regarding Mr. Hunt's personal Rensselaer County Biodiversity Greenprint Project it should be noted that his project is concerned with county-wide impacts. With all due

respect I cannot answer every concern from everyone regarding different layers of status, from global to national to statewide to county examination. The first 3 have been addressed, while the latter is stated as important by Mr. Hunt. For instance, he asks “Is the disappearance of a native plant or animal species from the county that has been present here for centuries a significant impact?” An answer to that question can be “How does one know that it has been present for centuries?” – Or, “How will I be responsible by affecting only an infinitely small portion of the County, or the fact Dyken Pond did not exist years ago – as it is artificially created, or that almost all of this forest was once cut into fields as indicated by the lack of a mature forest”.

As Mr. Hunt points out in one of his letters, “The majority of important biodiversity features are on or near Lot #13. If Lot #13 (which spans the western half of Otter Cove) is to be left undeveloped, then the impacts on the six important biodiversity features (“Part of Mr. Hunt’s Biodiversity Project) would likely be much less significant. If the large southwestern part of Lot #13 is to be developed and/or a road is to be built encroaching on the northwestern corner of Otter Cove, then the impacts on the six important biodiversity features would be significant and I request that a full environmental impact statement be completed to address those impacts”. It is precisely because of these concerns and the real difficulty in putting a driveway along the Cove, that I am proposing the eastern section of Lot #13 to be the building area.

2. Professor Atsushi Akera. The developer has been working on this Plan, and these covenants for over 8 months, sometimes with Professor Atsushi Akera, Abutter. Throughout the 8-month planning process for The Lake at Sylvan Way, Stonybrook has had numerous discussions with the Community at large and with Atsushi, regarding different ways to mitigate the adverse environmental impacts of “The Lake at Sylvan Way”. We have had a pleasant working relationship, and are in agreement on a number of methods to help create a “green development”, which is not necessarily an oxymoron. While we cannot please everyone all of the time, we have agreed to the following suggestions by Professor Akera:

- a. Expansion of the no-clear buffer zone from 25’ to 100’ (50’ in the narrow stretch) around the entire 12,000’ perimeter;
- b. Improved storm water runoff plans that take advantage of natural filtration and maintenance of existing water courses;
- c. Restrictions on the construction dates/times;
- d. Agreement to augment the protections of the understory, forest canopy, and forest floor in order to provide a safe haven for birds and other animals.

Also, the 24 protective covenants have been developed through discussions and concerns of the abutters. (The 20 acre land preservation area, the 2.5 acre greenspace in the cul-de-sac, and the agreement to convey the 23.5 acres on the East side of Otter Cove are all actions taken as a result of listening to the concerns of the neighbors and from environmentalists).

As this community evolves and new homeowners become stewards of the land, it will be our expectation that they will be responsible & conservation-minded. Our intent is to market this property as a “green community”, complete with an environmental education booklet, and a one year membership donation to the “Friends of Dyken”. The purpose obviously is to find customers/homeowners who share concerns about living in harmony with nature. Many of these customers/homeowners will be seasonal users and will certainly appreciate the proximity to the Dyken Center, and the pristine quality of the Ponds.

We are including herein Mr. Akera’s list of the “Agreements in Principle Between the Community and Stonybrook Land, LLC”, as part of his 4/12/08 letter to the Grafton Planning Board, labeled “Appendix A”.

V. Mitigation Measures to Minimize Environmental Impact.

A. Boat Traffic Issue.

There have been concerns regarding the issue of boat traffic on South Long Pond and Dyken Pond given the potential addition of 27 lots. The developer understands their concerns and is working towards ways to mitigate the overall volume of traffic and increase boating awareness for future residents.

The developer has adopted 24 Protective Covenants to ensure a limited negative environmental impact on the land and water bodies encompassed in our project. Specifically the developer has addressed the issue of boat traffic and hazardous vessels with the implementation of Protective Covenants targeted to mitigate potentially adverse effects on the ponds. Examples of these affirmative protections are as follows:

Protective Covenant #19 reads: “For lots 1-12 water access is allowed through the 25’ access for common boat launch. Only canoes, kayaks, & electric motorized boats shall be allowed”.

Protective Covenant #22 reads: “Jet skis and other high-speed water crafts are especially discouraged so as to minimize the overall impact on the ponds”.

The developer is also in the process of granting an easement to the Rensselaer County Sheriff’s Department in order to make the project’s private boat launch available for the policing of waters and enforcement of NYS Boater’s Guide (enclosed). The developer believes that this would significantly deter irresponsible boating, while maintaining the serenity of the ponds.

As part of the education process to minimize deleterious affects to the pond, the developer will point out dangerous or environmentally fragile areas such as Otter Cove and request that motorized traffic steer clear of them.

The developer also spoke to Don Abrams, the head of Marine Patrol for Rensselaer County Sheriff’s Department regarding the policing of waters encompassing South Long Pond and Dyken Pond. Mr. Abrams indicated that his office does oversee the waters on a limited basis because of their lack of resources available, as well as because of the limited number of incidents on South Long Pond and Dyken Pond with respect to hazardous boating activities. We asked him if he would be interested in accessing the water via our private boat launch, and he declined.

The developer has worked in good faith to mitigate any adverse environmental impacts of “The Lake at Sylvan Way”. In the course of these efforts a good working relationship with interested parties has been established. See Appendix A “Agreements in Principle Between the Community and Stonybrook Land, LLC”, as

part of his 4/12/08 letter to the Grafton Planning Board The developer believes a better project has evolved as a result of this process which has lead to a semblance of a “green development”:

1. Expansion of the no-clear buffer zone from 25’ to 100’ (50’ in the narrow stretch) around the entire 12,000’ perimeter;
2. Improved storm water runoff plans that take advantage of natural filtration and maintenance of existing water courses;
3. Restrictions on the construction dates/times;
4. Agreement to augment the protections of the understory, forest canopy, and forest floor in order to provide a safe haven for birds and other animals.

Also, the 24 protective covenants have been developed through discussions and concerns of the Abutters. The 20 acre land preservation area, the 2.5 acre greenspace in the cul-de-sac, and the agreement to convey the 23.5 acres on the East side of Otter Cove are all actions taken as a result of listening to the concerns of the neighbors and from environmentalists.

As this community evolves and new homeowners become stewards of the land, it is the developer’s expectation that the homeowners will be responsible & conservation-minded. The developer’s intent is to market this property as a “green community”, complete with an environmental education booklet, and a one year membership donation to the “Friends of Dyken”. The developer believes that lot owners attracted to this project will possess an interest in living in harmony with nature and will appreciate the proximity to the Dyken Center, and the pristine quality of the Ponds.

Other considerations that the Board should be apprised of are the numerous State and Federal laws that already exist irrespective of SEQR that already protect the environmental resources of the property, including the April, 2008 SPEDES General Permit for Storm Water Discharges from Construction Activity attached as Exhibit A – (10 Pages), Public Health Law, 201, Wastewater Treatment Standards for Individual Household Systems as Exhibit B (37 pages-Exhibit B), Federal Army Corps. of Engineers Wetlands/Navigable Waters regulations, State DEC Wetlands/Ponds/Lakes protections, Realty Subdivision Laws for subdivisions with 5 or more lots less than 5 acres, New York Department of State Homeowners Association Laws for private roads and common lands, SWPPP laws for storm water protection, to name a few, and the Town of Grafton’s subdivision regulations and new road regulations.

OTHER

We’ve extensively researched the products and practices available to construct a low impact development, and some of these are as follows. (Again, as part of the environmental education process, these will be provided to the homeowners).

1. Flat-Back Rain Barrel: channels roof run-off into a rain barrel in order to water plants or garden. www.yardiac.com
2. Incinolet (Electric Incinerating Toilets): No septic required, incinerates waste into clean ash, only electricity required to run. (120 or 240 volts). www.incinolet.com
3. Sod or Vegetative Roof with Waterproof Membranes: Creates a thermal barrier between the elements and inside of house/cabin. Can utilize native plants appropriate for your climate to create a low-maintenance

eco-roof.

4. "Attracting Those Beautiful Birds" tips for creating a bird-watching paradise in your own yard.
5. "Sparkling Lakes & Rivers": 6 Easy Ways to Protect Yours.
6. "For Your Lake's Sake": Naturalizing Shorelines and Lakescaping Movement.

Also enclosed is the 10/17/07 Phase I Environmental Site Assessment by CPI Environmental Services, Inc. indicating that there are no negative environmental conditions associated with the property, labeled Exhibit (V E.).

VI. Rensselaer County Department of Health.

The RC DOH testing and approval is pending. This writing shall serve to confirm that the developer hereby agrees to accept as the final number of approved lots the number of lots as are approved by the Rensselaer County Department of Health.