

FURNACE DOCK SUBDIVISION

FINAL

ENVIRONMENTAL IMPACT STATEMENT

Furnace Dock Road
TOWN OF CORTLANDT, WESTCHESTER COUNTY, NEW YORK
Tax Map Number: Section 55.19, Block 1, Lot 1

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Lead Agency Acceptance Date: March 7, 2006
Date of Public Hearing: April 4, 2006

March 7, 2006

Previously submitted January 23, 2006, July 21, 2005, December 10, 2004

**FURNACE DOCK SUBDIVISION
Final Environmental Impact Statement**

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by Ralph G. Mastromonaco, PE, PC, last revised September 28, 2005

17 Lot Alternate Loop Road Plan

by Ralph G. Mastromonaco, PE, PC, last revised March 15, 2006

Zoning Compliance Chart

by Ralph G. Mastromonaco, PE, PC

1.0 SUMMARY

This document is a Final Environmental Impact Statement ("FEIS") prepared in accordance with the New York State Environmental Quality Review Act ("SEQRA") and its implementing regulations, 6 NYCRR Part 617. The FEIS consists of this volume, including appendices, and accompanying maps, and the Draft Environmental Impact Statement ("DEIS"), which is hereby incorporated by reference into this FEIS.

The SEQRA documents have been prepared in support of the application of Furnace Dock, Inc., (the "Applicant") to develop a realty subdivision on 42.435 acres of land, now proposed as 18 lots with several open space lots, known as "Furnace Dock Subdivision". The project is located on the north side of Furnace Dock Road approximately one-quarter mile north of NYS Route 9A (Albany Post Road) in the Town of Cortlandt, Westchester County, New York. Figure 1-1 at the end of this section depicts the proposed subdivision layout. The lead agency for this action is the Town of Cortlandt Planning Board. SEQRA prescribes that the lead agency is responsible for the adequacy and accuracy of the FEIS. At the end of the SEQRA process the Planning Board will adopt a Findings Statement which may or may not agree with the responses expressed in this FEIS.

The Applicant is requesting preliminary subdivision approval based on the findings of the lead agency that result from the SEQRA process. Subsequent to preliminary approval, a fully detailed set of site development drawings will be provided to the permitting agencies for review. For final approval, all conditions of the preliminary approval must be satisfied. Other approvals that are necessary for the development of this subdivision plan are identified in the DEIS Project Description.

The applicant prepared the DEIS for this application based on a written DEIS Scope accepted by the lead agency on October 10, 2002. The lead agency reviewed the DEIS, dated September 3, 2003, for adequacy with respect to its scope and content for the purpose of public review, and issued a Notice of Completion and Public Hearing on September 3, 2003. The lead agency held a public hearing on the DEIS, beginning October 7, 2003, and adjourned to November 5, 2003, at which time the hearing was closed. The lead agency received written comments during the public comment period, which extended for an additional fifteen (15) days following the close of the public hearing. Complete copies of all written comments received by the lead agency are included in FEIS Appendix B. Transcripts of the public hearing are included in FEIS Appendix C.

Public and agency comments received by the lead agency on the DEIS, together with responses to all substantive comments as required by SEQRA, are provided in this FEIS in comment/response format and organized by subject matter. In some cases, an author's comment may be summarized or paraphrased to clarify its context, and some responses for comments that have been previously addressed in this document refer to the prior response. In Appendices B and C, a reference to the location of the response that addresses each substantive comment is provided in the right hand margin.

A set of preliminary site plan drawings accompany this document, as revised in response to comments received on the DEIS submission. The plan revisions are outlined below. Additionally, a preliminary site plan design of a loop road alternative accompanies this document, with further explanatory description below.

This FEIS document includes additional information regarding archaeological investigations at the site (Appendix D) and plans for the preservation of historic resources described in an Avoidance Plan and Site Interpretive Plan that have been accepted by OPRHP (Appendix E), and a rock excavation specification (Appendix F). Documentation received from NYS Office of Parks, Recreation, and Historic Preservation regarding acceptance of additional archaeological investigations and plans is included in Appendix A.

The applicant retained the services of Dr. Michael Klemens to assist in review of wetland and wildlife issues and to obtain his recommendations. Dr. Klemens' review included a site visit and several reviews of the project plans. The current plan reflects various revisions made at the recommendation of Dr. Klemens regarding small animal circulation (e.g., the proposed wildlife crossing culvert), the use of mountable curbs to avoid trapping small animals on the roadway, the provision of multiple culverts in the Furnace Brook bridge, and provision of permanently restricted areas to preserve native habitat. These recommendations and related comments on the current plan with regard to ecological resources are outlined in a letter by Dr. Klemens included in FEIS Appendix A.

This FEIS and its attachments have been prepared with the assistance of Ralph G. Mastromonaco, PE, PC, the project engineer, Linda Whitehead, of McCullough, Goldberger & Staudt, LLP, project attorney; City/Scape: Cultural Resource Consultants; and Tim Miller Associates, Inc., the planning consultant to the applicant, based on input and guidance provided by the Cortlandt Planning Board, town staff and town advisors.

1.1 Plan Revisions

The applicant has significantly modified the proposed subdivision plan since the DEIS public hearing in response to comments on the application. These revisions have resulted in reductions to the number of lots proposed, reduced the areas of potential disturbance by the project, and increased the amount of existing woods to be preserved in the project. These plan changes are listed below:

- Reduced number of proposed residential lots from 24 to 18 lots.
- Reduced area of disturbance on all lots; from 15.0 to 12.0 acres on the overall site, particularly in areas of steep slopes (1.6 acres less than in the DEIS plan).
- Refined proposed house locations to minimize disturbances to wetland buffers and a 1.6 acre reduction in steep slopes disturbance from the DEIS plan.
- Delineated conservation easement areas on portions of each house lot containing portions of the wetlands, wetland buffers, and steep slopes on each lot, thereby expanding the permanent open space areas on the site.
- Enlarged the open space lot that encompasses the old mill foundation. This lot will be offered for dedication to the Town for the purpose of preservation of the historic site and for public education and will include a conservation easement to further protect its natural resources.
- Prepared an Avoidance Plan for protecting the historic site during and after project construction.

- Prepared a Site Interpretive Plan identifying a concept for developing an interpretive trail with informational placards about the historic activities at the site based on documentation of historic activities at the site.
- Received acceptance of the Avoidance Plan and Site Interpretive Plan by the NYS Office of Parks, Recreation, and Historic Preservation.
- Reduced steep slope disturbances and length of Road "B".
- Created landscaped islands within the roadway turnarounds.
- Relocated the proposed stormwater basin ("water quality basin 1") out of the wetland buffer.
- Revised wetland mitigation area to reduce buffer disturbance and provide 2:1 replacement.
- Added a special culvert design that entails a box culvert with a natural substrate base and "skylights" in the center of the site, as recommended by Dr. Michael Klemens, to provide unencumbered small animal passage in the wetland corridor.

The applicant is willing to contribute its fair share toward the following off-site improvements based on the proportionate impacts to public roads and utilities from the approved project:

- Contribute funds towards the cost of a new water storage tank to be constructed in the project area to address pressure and storage capacity deficiencies in this area.
- Contribute funds towards the cost of future signalization of the Furnace Dock Road/Route 9A intersection.
- Improve sight lines and traffic safety controls including additional signage on Furnace Dock Road in the vicinity of the proposed subdivision.
- Contribute to traffic improvements at the Mount Airy Road/Furnace Dock Road intersection.
- Contribute funds towards the cost of an extension of the water main along Mount Airy Road near Furnace Dock Road.

Biodiversity and the Proposed Plan

Dr. Michael Klemens conducted an in-field review of the site conditions and provided input on the project design in relation habitat connections and preservation of wetland functions, and substantiated the wetland and wetland buffer protection measures that are now integrated into the project design. Particular elements of the current plan reflect specific comments of Dr. Klemens with regard to preserving biodiversity and limiting fragmentation of wildlife habitat, especially as relate to reptiles and amphibians which may inhabit or frequent the wetland area in the center of the site. These elements are listed below:

- Maximizes protection of the central vernal pool.
- Maximizes protection of a 100' vernal pool envelope (except for the road crossing that cannot be avoided).

- Expands the central wetland area.
- Provides for amphibian movement under the road.
- Provisions to exclude amphibian travel across the road (“exclusion rims”) and directs amphibians to the road underpasses.
- Appropriate design of amphibian underpasses per Dr. Klemens’ requirements for size and details, including square sides, openings for light, and exclusion rims.
- Minimizes steep slope disturbances (areas favored by amphibians).
- Loop road plan also provides a one-acre habitat island.
- Avoids use of hydro-dynamic separators (such as Vortex units) in the stormwater system that are hazards for amphibians.
- Proposes low impact infiltration devices, such as rain gardens, grassy swales, and drywells for roof water treatment.

Like the DEIS proposal, the current plan would include low impact development practices to reduce dependence on constructed stormwater basins. Additionally, the developer will provide each homeowner with an information package describing all restrictions and obligations of the conservation easements, along with management guidelines about the low impact devices, and advocating use of bio-rational pesticides (e.g., natural oils and soaps) to control insects in the landscape.

Length of Road

Concern about the length of the subdivision roadway (a cul-de-sac) proposed for access to the new lots was raised during the DEIS review. While the proposed site access has been designed in substantial conformance with current engineering standards and Town of Cortlandt road specifications applicable to the project and the site conditions, the single exception is the road length. Access to the developable portions of the property from Furnace Dock Road with a road meeting Town standards (for sight distances, grades, and horizontal alignment) necessitates a crossing of Furnace Brook and some 480 feet of road to reach the first driveway on the opposite side of the Brook. The proposed bridge crossing has been designed to accommodate potential flood conditions of Furnace Brook and is designed to accommodate all road vehicles. The subdivision road is proposed to be built to the Town’s standard width with mountable curbs throughout and stabilized shoulder sections at Stations 3+50 and 11+00 to allow extra room for emergency vehicles to pass. The proposed cul-de-sac roads are designed with teardrop-shaped landscaped islands within the turnarounds to minimize pavement surfaces while providing adequate turnaround space for road maintenance vehicles.

The applicant believes the existing limitations of the site (in large part a result of the irregular configuration of the property) present exceptional circumstances that necessitate a longer cul-de-sac road to access the developable portions of the property. The project site lacks any other road frontage for access into the parcel other than from Furnace Dock Road. The locations of existing steep slopes and wetlands are scattered in various parts of the project site, however the proposed subdivision layout has been designed to avoid the majority of these sensitive areas to the greatest extent practicable. Since the stream corridor crosses its entire frontage (with exception of the southwestern corner where road access would not meet Town standards), a stream crossing is unavoidable to gain access to developable land. This property

is particularly narrow and deep with the largest area of developable land located toward the rear of the site. The applicant believes the current proposed plan improves dramatically on the DEIS plan. The current plan has been designed to reduce the overall number of homes on the property, decrease the density of homes at the interior end of the road, and modify the road configuration to address concerns regarding the length of the roadway.

Given the unique features of this site, the applicant believes that the Planning Board will consider this an exceptional situation. Road lengths of greater than 500 feet are allowed by the Town of Cortlandt Code (Chapter 265-17.F) given the existence of exceptional circumstances. In fact, a number of dead end roads have been approved and built in the Town of Cortlandt that exceed 500 feet in length. A list of 47 existing roads is tabulated at the end of this section, including ten streets that exceed 2000 feet. There have been no documented problems with emergency access on any of these roads.

It is noted that only two roads (Kent Drive and Flanders Lane) shown on the list of roads were approved by the Planning Board since 1990. It is also noted that granting of prior approvals for dead end roads that exceeded 500 feet does not justify the same action in all applications. Pursuant to Chapter 265-13.B of the Subdivision Regulations, the Planning Board may vary, subject to appropriate conditions, such requirements of the foregoing regulations as, in its judgment of the special circumstances and conditions relating to a particular plat, are not requisite in the interest of the public health, safety and general welfare.

Additionally, since the property has no other road frontage for a second means of access, the applicant has proposed a right-of-way which could provide future secondary emergency access via an existing driveway to Route 9A.

Lot Numbers

Due to the expansion of the open space, the lot numbers of the subdivision have changed from the DEIS plan to the current FEIS plan, as listed below. References in the comments received on the DEIS refer to the prior lot number designations.

DEIS Plan	FEIS Plan
Lot 1	---
Lot 2	Lot 1
Lot 3	Lot 2
Lot 4	Lot 3
Lot 5	Lot 4
Lot 6	Lot 5
Lot 7	Lot 6
Lot 8	--
Lot 9	Lot 7
Lot 10	--
Lot 11	Lot 8
Lot 12	Lot 9
Lot 13	Lot 10
Lot 14	Lot 11
Lot 15	--
Lot 16	Lot 12
Lot 17	--
Lot 18	Lot 13
Lot 19	Lot 14
Lot 20	Lot 15
Lot 21	--
Lot 22	Lot 16
Lot 23	Lot 17
Lot 24	Lot 18

1.2 Alternative Loop Road Plan

An alternative to the proposed plan has been developed by the applicant that incorporates a loop road configuration in response to comments regarding the length of the public access roads in the DEIS plan. Like the proposed plan, the subdivision road would be built to the Town's standard width with mountable curbs throughout and stabilized shoulder sections at Stations 3+50 and 11+00 to allow extra room for emergency vehicles to pass.

An initial 18-lot loop road plan was reviewed by Mr. Stephen Coleman, the Town's wetland consultant and was amended in response to comments received from Mr. Coleman with regard to natural connections between wetlands. This 17-lot Alternative Loop Road Plan is presented in Chapter 9.0 of this FEIS in response to several DEIS comments and is evaluated herein to allow comparisons with the current proposed plan. The plan is depicted in FEIS Figure 9-1.

Like the proposed subdivision plan, the alternative loop road plan would disturb approximately 0.22 acres of wetlands (in two road crossing areas) and approximately 1.46 acres of wetlands buffer for road construction. The wetlands mitigation proposal, which would result in the creation of approximately twice the acreage of wetlands as would be disturbed, is also a component of the loop road plan. Like the proposed plan, this plan would require a wetland permit to be granted by the Planning Board for disturbances within wetlands and wetland buffers.

Particular elements of the loop road plan reflect specific recommendations of Mr. Coleman with regard to preserving wildlife corridors and limiting fragmentation of regional habitat. These elements are listed below. This plan would include wetland mitigation as in the proposed plan. The loop road plan however, by its nature, would create a habitat island that is separated from the natural corridors by the roadway.

- Provides physical land connections of natural, open space between the brook and interior wetlands, including corridors within conservation easements along both the eastern and western property lines, by reconfiguring various lots.
- Includes permanently protected natural corridors on or behind individual lots with permanent demarcation of the open space boundaries by stone cairn monuments every 50 feet (rather than stone walls) to allow easy wildlife movement. Each monument will be approximately 3 feet high and labeled with a permanent marking indicating the conservation easement.
- Eliminates one lot between Lots 6 and 10 and reconfigures these lots to place the houses closer to the road, thus allowing an uninterrupted corridor and connection between open space / wetland areas in the center and far interior of the site and reducing upland habitat disturbance.
- Expanded conservation easement areas on Lots 4, 5 and 6 with the easement line located a minimum dimension of 50 feet from the edge of existing and created wetlands.
- Provides two compact areas of development while preserving open space on the remaining portions of the site for wildlife.
- Provides low impact development practices, including rain gardens and infiltration trenches, to reduce dependence on constructed stormwater basins.

1.3 Adherence to the Master Plan

The Town of Cortlandt Master Plan, updated July 9, 2004, identifies specific objectives with regard to open space that the applicant believes are addressed in the proposed plan:

OBJECTIVE - Complete and adopt an Open Space Plan.

As outlined in the Master Plan, the Open Space Plan should include, among others, the following goals:

1. Identify small parcels of land (less than 5 acres) which may offer strategic connections to link open space areas. This is now possible through the use of detailed land use and environmental maps and data bases as available through the Town of Cortlandt's Geographic Information System (GIS).
2. Preserve historic and archaeological resources that protect and perpetuate the historic character of the Town.
3. Encourage private property owners to provide for conservation easements to protect environmentally sensitive lands and open space.

4. Encourage cluster open space design elements, where appropriate to further protect environmentally sensitive areas and preserve open space.

Each of these goals has been met by the Furnace Dock proposed project.

Deed restrictions or conservation easements have been included on adjoining parcels in order to provide continuous open space, including the dedicated Open Space lots in conjunction with all of the proposed house lots. Open space provided as part of this plan also provides continuous open space with the adjacent Con Edison property.

The historic iron furnace and grist mill operation are the subject of the interpretive trail located in the Open Space lot. Construction of this trail includes installation of a small parking lot, trails circulating the historic site, in addition to interpretive signs and benches. These measures illustrate the importance of this historic and archeological resource.

While the proposed subdivision design is not a cluster development authorized by the Town Board as required by the Town of Cortlandt Zoning Code § 307-19, the overall design of the Furnace Dock subdivision is a clustered open space design, which avoids environmentally sensitive lands to the greatest extent practical.

OBJECTIVE - Acquire open space throughout the Town through a variety of mechanisms, including: land donations, partnerships, support of land trust efforts, fee simple acquisition, conservation easements and cluster development.

The Furnace Dock subdivision meets these criteria through dedication of the Open Space lots, and through deed restrictions or conservation easements.

OBJECTIVE - Protect open space with appropriate land use regulations.

The Furnace Dock subdivision meets this criterion through the open space design to protect environmentally sensitive areas and preserve open space.

OBJECTIVE - Improve access and monitoring for Open Space areas.

Construction of the interpretive trail, including parking areas, will allow for public access to the largest Open Space lot that contains the historic site. Access to all of the open space areas is made possible either by direct road frontage or an access easement that will facilitate monitoring of the areas.

Table 1-1			
Dead End Roads in Town of Cortlandt Longer than 500 Feet			
Name	Location	Approximate Length in Miles	Approximate Length in Feet
Hollis Lane	Off Mount Airy Road	0.31	1900
Hale Hollow Road	Off Mount Airy Road	0.30	1800
Woody Brook Lane	Off Mount Airy Road	0.34	2040
Dream Lake Road	Off Mount Airy Road	0.24	1480
Joesph Wallace Drive	Off Mount Airy Road	0.25	1490
Chester Court (fr Harrison Ct)	Off Washington Street	0.39	2400
Inwood Lane	Off Furnace Dock Road	0.39	2380
Oak Lane	Off Furnace Dock Road	0.16	1000
Hillside Drive	Off Furnace Dock Road	0.21	1260
Woodlake Drive	Off Colabaugh Road	0.19	1160
Rockledge Drive	Off Mount Airy Road	0.19	1180
Valerie Lane	Off Jack Wood Road	0.35	2150
Mountain Side Trail	Off Watch Hill Road	0.25	1550
John Cava Lane	Off Watch Hill Road	0.26	1560
ADA Lane	Off Watch Hill Road	0.18	1070
John Alexendra Drive	Off Watch Hill Road	0.20	1190
Antonio Court	Off Washington Street	0.21	1300
Veronica Court	Off Furnace Wood Road	0.18	1070
Amanda Court	Off Furnace Wood Road	0.16	960
Rocky Ridge	Off Watch Hill Road	0.13	800
Roberta Drive	Off Watch Hill Road	0.32	1965
Flanders Lane	Off Watch Hill Road	0.43	2270
Lake Road	Off Lakeview Ave W	0.12	750
Peter A Beet Drive	Off Lakeview Ave W	0.17	1010
Maple Moor Lane	Off Maple Avenue	0.24	1470
Maple Court	Off Maple Avenue	0.13	780
Powder Horn Drive	Off Maple Avenue	0.22	1335
Dickerson Road	Off Furnace Dock Road	0.32	1970
William Puckery Drive	Off Furnace Dock Road	0.35	2100
Rosalind Drive	Off Cross Road	0.12	740
Mountain View Drive	Off Corton Avenue	0.24	1460
Kent Drive	Off Maple Avenue	0.37	2234
South Gate Drive	Off Croton Avenue	0.12	750
Nathalie Court	Off Croton Avenue	0.13	810
Hoyle Drive	Maple Avenue	0.10	620
Buttonwood Ave	Off US Route 202/ Compound Road	0.49	2980
Tamarack Drive	Off US Route 202/ Compound Road	0.39	2350
North Ridge Road	Off US Route 202/ Compound Road	0.30	1820
Chardonnary Road	Off US Route 202/ Compound Road	0.74	4500
Granite Road	Off Buttonwood Road	0.19	1160
Fairgreen Court	Off Maple Avenue	0.12	630
Betha Drive	Off Spring Valley Road	0.28	1480
Henning Drive	Off Montrose Point Road	0.28	1710
Bonny Hollow Lane	Off Bonny Hollow Road	0.20	1200
Glenwood Drive	Off Kings Ferry Road	0.19	1160
College Hill Road	Off Montrose Station Road	0.21	1260
Travis Lane	Off Montrose Station Road	0.20	1210

Source: Ralph G. Mastromonaco, PE, PC 2004.



TOTAL AREA:
1848451 s.f.
42.435 acres

KEY

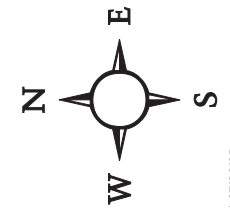
- Wetland
- Conservation Easement/Open Space
- Undisturbed Woods
- Lawn/Landscaped
- Furnace Brook

SCALE IN FEET

Figure 1-1: Proposed Subdivision Plan
Furnace Dock
Town of Cortlandt, Westchester County, New York
Source: Ralph G. Mastromonaco, P.E., P.C., 06/27/05
Scale: Graphic



Figure 1-2: Proposed Plan / Slope Disturbance
Furnace Dock
Town of Cortlandt, Westchester County, New York
Source: Ralph Mastromonaco, P.E., P.C. 6/27/05
Scale: Graphic



2.0 PROJECT DESCRIPTION COMMENTS AND RESPONSES

Comment 2-1 (Letter #1, Jeanne Romeu, October 13, 2003): Since the applicant stated these areas of open space at the rear of lots 1-8 and 11-19 are anticipated, then the DEIS report stating the acreage of open space is erroneous and bogus (see page 3.4-17). I respectfully ask that the Board not accept this response from the Applicant. This answer indicates to me that the developer has not addressed this concern, nor has any intention of placing restrictions on individual lots so they can maximize their sales. A homeowner having a view of water or a stream is considered a luxury and is considered prime land - please don't think a homeowner will not tear down trees on their property to view it. I live in a "Hudson River" town, and anyone can see how much a homeowner feels just to have a "view".

Response 2-1: *The open space lots will be restricted from future development and offered for dedication to the Town or an entity designated by the Town to provide for control and management of these lands by a third party to insure they are preserved as undeveloped open space. The open space lots will therefore be owned by either the Town or an entity designated by the Town, or if not accepted by the Town, by the homeowners association. Where a wetland mitigation area is located on the open space lot, the management of that area would also be under control of such third party entity.*

The applicant will also restrict large portions of individual lots from further development to provide larger areas of restricted open space, particularly in areas of steep slopes and wetlands and buffers. These areas will be specifically outlined and designated on the filed subdivision map, with notes referencing the specific restrictions.

Two alternative mechanisms are being proposed for recording and enforcement of the restrictions in addition to placing them on the filed map. The first alternative is that the applicant will place deed restrictions on the portions of the lots restricting the area from future development and requiring the area to be maintained in accordance with specified management practices, including prohibitions on tree removal and the use of chemicals. The deed restrictions can be recorded on their own or be part of a recorded Declaration of Easements, Covenants and Restrictions. The recorded restriction will provide enforcement powers to a homeowners association and to the Town, such that if an owner acts in violation of a restriction or management practices, action can be taken by the association or the Town to remediate any damage and charge back the homeowner for such cost. The homeowners association and the Town will both also be given the power to obtain injunctive relief in Court. Alternatively, conservation easements could be placed on the restricted portions of each of the lots, which easements could run to the benefit of the Town or a conservation entity such as a land trust, giving them enforcement and oversight powers over the restricted areas.

By placing the restrictions on the filed map and in recorded documents, the owner's obligations and restrictions will be clearly set forth in the chain of title. In addition, the developer will provide each initial homeowner with an information package describing all restrictions and obligations of the homeowner.

A portion of every lot on the proposed plan has a conservation easement.

Comment 2-2 (Letter #1, Jeanne Romeu, October 13, 2003): The report says the privately owned homes "will provide permanent protection of these significant historic resources", but the

applicant's response in the memo addressing the open space issue from Clark Associates states the protection of open space is only "anticipated", therefore, permanent protection is not guaranteed.

Response 2-2: *The historic house and mill site will exist on a separate lot that will be dedicated open space. The open space lot will encompass the stone foundation remains of buildings and facilities in their immediate vicinity associated with the operation of the furnace/mill site. The proposed project plan includes installation of a small parking area adjacent to the subdivision road, wood chip or gravel pedestrian trails circulating the historic site, and interpretive signage and benches.*

The remains of the "industrial area" on the property, which have negligible remaining features of historic value, were documented by the project archeologist in a Stage 2 Archaeological Investigation report that was done under the auspices of the NY Office of Parks, Recreation and Historic Preservation (OPRHP). OPRHP requested further on-site investigations for specific locations, which were conducted in March and April of 2004 and documented in a Supplemental Stage 2 Archaeological Investigation report. The extensive archaeological investigations at the site ascertained that the remains of the "industrial area" on the property did not represent a significant historic feature. The applicant prepared an Avoidance Plan that outlines the measures for protection of the historic iron furnace and grist mill sites during construction of the project and permanent protection following construction. An "area of potential effect" or "APE", was delineated as part of the Avoidance Plan to define the limits of site disturbance. In a letter dated August 26, 2004, OPRHP determined that the project will have no adverse impact on historic resources. (See FEIS Appendix A.)

The land in the proposed open space lots will receive permanent protection, as described in Response 2-1. Documentation of the historical activities on the site, including the results of the professional archeologist's investigation of the "industrial area", will be filed with permanent State and County historical records for the benefit of future generations.

Comment 2-3 (Letter #1, Jeanne Romeu, October 13, 2003): The applicant has also stated they will "offer for dedication to the Town" (p. 2-2) the proposed 2,604' long, 24' wide road they will be building through this development (not make it private). That is very generous of them as then it will be the Town's responsibility - not the homeowners - to maintain, and since this will be a one way in, one way out development, the only ones using this road will be the homeowners and their guests. Again, where's the benefit?

Response 2-3: *The subdivision roads will be offered for dedication to the Town similar to practically all subdivision projects in the county and consistent with Town Law and policy. New homeowners will pay taxes to the Town, a substantial portion of which will be directed to the Town Highway Department.*

Comment 2-4 (Letter #2, Jeanne Romeu, October 25, 2003): I believe since the applicant has stated these open spaces are anticipated, the acreage on the report indicating open space left undeveloped is false. The applicant would not want any restrictions on their properties which hinder the potential sales of individual lots. Ever more, once these lots are sold, an individual homeowner having the possibility of a water view - stream pond, whatever - will down any trees necessary to have it, or to put in a pool, etc.

Response 2-4: *The open space acreage proposed for this project includes restricted, undeveloped areas. The conservation easements or deed restrictions will prohibit disturbance of wooded areas on private house lots. Land on individual lots not included within restricted areas may be cleared by future homeowners within limitations of the Town's regulations.*

The applicant's revised project plan delineates sizable areas of undisturbed open space at the rear of lots 5, 6, 7, 8, 9, 11, 14, 15, 16, 17 and 18 that will be placed into deed restrictions or conservation easements. The site acreage in restricted areas on house lots will total 6.4 acres. These areas in conjunction with the sizable open space lots in the project, 16.1 acres, will provide guaranteed undisturbed buffers between adjacent residences, woodlands, and wetlands. Refer to Response 2-1 for additional description of these guarantees. Easement boundaries on private lots will be marked by permanent physical markers such as planting of shrub hedges or by reconstructing stone walls from existing walls to be disturbed.

Comment 2-5 (Letter #2, Jeanne Romeu, October 25, 2003): Furthermore, they state the historic and archeological sites (see p. 1-21 of the DEIS) "will be located on privately owned house lots will provide permanent protection of these significant historic resources without adverse and unnecessary disturbance". Here again, since there are no open space easements, this, too, is false as home owners will have the freedom to build on or clear their property as they wish. The applicant has already stated they will destroy the industrial staging area for lots #3 and 4.

Response 2-5: *See Response 2-4 and 2-2. The significant historic remains will be permanently preserved in an open space lot in addition to becoming accessible to the general public as an interpretive area.*

Comment 2-6 (Letter #3, Catherine Marsh, November 5, 2003): The plan also includes a perforated pipe with crushed stone surrounds. This pipe is located 183 feet directly uphill from my well. Please provide clarification on the purpose and the implications of this pipe on the quality of sole source of water.

Response 2-6: *The pipe structure referred to has been deleted from the current plan due to the shortening of Road B and thus any concern regarding its proximity to the well is no longer applicable. There is one water supply well that exists on the nearby residential property opposite proposed Lot 13. The well is located approximately 125 feet southwest of the common property line in the vicinity of the existing driveway. There is no drainage from pavement surfaces within the Furnace Dock Subdivision that are directed toward this well.*

Comment 2-7 (Letter #3, Catherine Marsh, November 5, 2003): The stone wall running NE-SW on Lot 18 is not shown on the map and is not included in the list of stone walls to be removed. However, a proposed sewer line appears to be located in its current location.

Response 2-7: *The existing stone wall along the property line and on the rear lot lines of proposed Lots 13, 14 and 15 is shown on the project grading plans. This wall will remain untouched by the project development. The construction of the sewer line in this*

vicinity will require careful excavation so as not to disturb this site feature. If construction does damage the wall, it will be rebuilt in kind with the dislodged stones.

It is noted that there are approximately 4,130 lineal feet of existing stone walls on the subject site. Approximately 970 lineal feet will be removed during construction of the project and approximately 3,160 lineal feet will be preserved in their present position. As noted in the DEIS, the stones and boulders from walls that are disturbed by the project development are proposed to be used in the construction of the project entrance road feature, as well as for tree wells, low retaining walls, and other house lot features, to preserve and enhance character of the site and its environs.

Comment 2-8 (Letter #3, Catherine Marsh, November 5, 2003): The [wetland] buffers are located in the yards of many homes. The developer cannot hold the future home owners of the "9.74 acres of undisturbed acreage in the backyards" to continue to maintain what is claimed "to mitigate potential fragmentation of existing wildlife habitat in the area after the construction of the project," (Executive Summary 1-2). Conversions of buffers into lawns does not protect the buffer. It does not support biodiversity. Landscaping and the use of herbicides and pesticides are left at the homeowners discretion.

Response 2-8: *The buffers on individual house lots described in the DEIS correspond to the applicant's development plan, which depicts specific limits to the area of disturbance on the lots for house and utility construction. The limit of disturbance lines shown on the project plans are subject to strict enforcement by the Town during the construction of this project. With the exception of areas within the proposed restricted areas and open space lots, the wooded land within 100 feet of the wetland (referred to as buffers) that is proposed to remain as woods may be subject to clearing and use in the future by individual homeowners, if permitted by the Town within the limitations of the Town's regulations. Such land will remain within 100 feet of the wetland and thus continue to provide a buffer to the wetland. The buffers include land of all slope categories and are largely included within the proposed conservation easements. Each of the building lots on the current development plan includes, on the outside boundary of the lot, a conservation easement within which prohibitions on lawns or other disturbances of the natural conditions will be enforceable. Refer to Responses 2-1 and 2-4.*

Comment 2-9 (Letter #3, Catherine Marsh, November 5, 2003): Will the remaining open space only be available to the subdivision residents?

Response 2-9: *Open space lots, the interpretive trails, and associated parking will be under the control of the Town, if the Town accepts the applicant's offer for dedication. As Town land, it would be available to any Town resident for passive use, subject to any use restrictions imposed by the Town. Alternatively, the open space lots will be owned by the homeowner's association. All of the open space lots will be protected by conservation easements.*

The proposed plan provides an access easement through Lot 9 from the road to Open Space Parcel C that would provide pedestrian access.

Comment 2-10 (DEIS Public Hearing, Jeanne Romeu, October 7, 2003): I know there will be buffer zones, but I'm not sure that on private property there isn't a guarantee that those buffer zones will be respected or maintained.

Response 2-10: Refer to Response 2-8.

Comment 2-11 (DEIS Public Hearing, Catherine Marsh, October 7, 2003): The proposed road is 2,000 linear feet. I believe the Town regulations call for 500 feet as the maximum for a dead end road. I would like the Board to address the safety and security issues of one road, one access, one egress for this development. They also mention in the DEIS about a possible connection to a private drive. I was not able on the map to locate where that private drive is, and considering it might be mine I would like to see what that is. If someone would please point that out, I would appreciate that. Has the owner of that property been contacted about that as a possibility, or is that just something that exists on paper?

Response 2-11: *The proposed subdivision road has been designed in accordance with the Town's standard cross section with regard to road width and surfacing, which is demonstrated to adequately serve as a two way thoroughfare for normal as well as emergency access. In addition, the road design will incorporate stabilized shoulders at two locations and mountable curbs over its entire length that will allow for vehicles to circulate past a roadway obstruction, if needed in the event of an emergency. The stabilized road shoulders would consist of a 50-foot long by 12-foot wide strip of concrete grass pavers along the shoulder of Road 'A' at stations 3+50 and 11+00. These surfaces could be plowed when the road is plowed. It is anticipated that, after transfer of the roadway to the Town, the Town Department of Public Works will maintain passable road conditions during and after snow events.*

A number of dead end roads have been approved and built in the Town of Cortlandt that exceed 500 feet in length. A list of 45 such roads is tabulated at the end of FEIS Section 1.0, including nine streets that exceed 2000 feet. Road lengths of greater than 500 feet are allowed by the Town of Cortlandt Code (Chapter 265-17.F) given the existence of exceptional circumstances. The applicant believes the existing limitations of the site (particularly the lack of any other point of access into the parcel, the location of existing slopes, and the configuration of the property) present exceptional circumstances that necessitate a longer cul-de-sac road to access the developable portions of the property. The current proposed plan has been designed to reduce the overall number of homes in the development, decrease the density of homes at the interior end of the road, and modify the road configuration to address concerns regarding the length of the roadway. Also refer to Response 8-3.

A right-of-way is shown on the project plans at about road station 13+50 that connects the proposed subdivision road right-of-way with the adjoining parcel of land to the west. Within approximately 80 feet of the property line is an existing driveway that services several single family residences, with an outlet onto Route 9A. A physical connection between the subdivision road and the driveway is possible, and could provide a secondary means of emergency access for the Furnace Dock subdivision and a secondary means of emergency access for the existing residences on this long driveway.

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The applicant has discussed such a connection with the adjacent land owner, who has ownership of the driveway access along with several other land owners. The owner indicated no objection to such a connection but recognized no benefit for him to pursue such a plan, which would require further agreement from other property owners having access rights to the driveway. At the present time, the applicant has no plan to further pursue the physical connection without direction from the Planning Board that this is a desired plan, and the future road connection may not occur for many years after the completion of the proposed road, if at all. However, with the exception of Furnace Dock Road, all land surrounding the project site is privately owned and is developed so that there are no other opportunities for a road connection onto adjoining land possible at the present time. The proposed connection is proposed should the residents of the proposed project and the residents presently using the driveway to Route 9A determine in the future that such a connection would provide a mutual benefit specifically with regard to safety and accessibility.

Comment 2-12 (DEIS Public Hearing, Peter Smith, October 7, 2003): I can shed some light on the private drive because I'm one of the owners that uses that drive. The drive is owned collectively by six homeowners. In order to gain access through the drive you would need to effectively get the consent of the six homeowners who adjoin the drive.

My question is: what's the point of this road? It hasn't been determined that you have access on it. Why is it in the DEIS? But it is not going to be something we can really say is going to improve the functioning of the cul-de-sac or anything at this point because you don't have the right of way.

Response 2-12: *The proposed right-of-way on the applicant's land would provide for a future connection of the Furnace Dock subdivision road to the driveway to the west and an outlet onto Route 9A, which is collectively owned by several homeowners. The right-of-way to the adjoining parcel is proposed on the applicant's plan as a possible future means of gaining secondary emergency access for both the Furnace Dock subdivision and the existing residences on the driveway. Construction of a physical connection would require consent of the affected land owners.*

Comment 2-13 (DEIS Public Hearing, Thomas Bianchi, October 7, 2003): Page 1-22 indicates that there are some historical monuments at the site: A gristmill foundation, and a house foundation. How is that going to be protected as the site is developed and then afterwards? I'm also thinking that maybe some kind of a historical marker may be appropriate for this location since it is a pretty significant part of the town and early roots seem to generate from this area with the boundary, et cetera, to look at that being placed there.

Response 2-13: *The proposed plan places the historic house and mill sites within a dedicated open space lot. The open space lot will encompass the stone foundation remains of buildings and facilities in their immediate vicinity associated with the operation of the furnace/mill site. Refer to Response 2-2 for further description.*

Comment 2-14 (DEIS Public Hearing, Steven Kessler, October 7, 2003): I would like to be clear what additional studies we are going to be receiving as part of the FEIS. I believe there was a Phase II Archeological Study. Someone earlier mentioned a seasonal study of the biodiversity aspects of the site.

Response 2-14: *A Stage 2 and Supplemental Stage 2 Archaeological Investigation report has been completed and submitted to the NYS OPRHP. FEIS Appendix D includes the summary abstracts from these two reports. With regard to ecological resources, a Phase I Biodiversity Study was completed by the Town's consultant, Mr. Stephen Coleman, which recommended follow up herpetological and breeding bird surveys. In July 2003, an herpetological and breeding bird survey report was completed, which concluded that the site lacks significant biological diversity and that there is no further need for additional habitat studies. These ecological reports are included in DEIS Appendix L.*

Comment 2-15 (Letter #5, Arthur Rich, November 14, 2003): Destruction of habitat: By not clustering homes, the developer's plan maximizes the destruction of the natural habitat. The only land the developer is willing to not use is the wetlands, which, unless drained, could not be developed. The development requires using the buffers as backyards in order to meet the R40 required lot size.

Response 2-15: *The proposed subdivision plan conforms to applicable zoning, lot and bulk regulations. Wetlands and wetland buffers may be located on individual lots and conform to Town regulations, as occurs in many instances throughout the Town. The plan, moreover, allows that 3.8 acres of wooded wetlands (95 percent of the wetlands on the site) will remain undisturbed by construction, 0.45 acre of wetland expansion is proposed, and 22.5 acres (53 percent) of the site will be dedicated to permanent open space preservation. Significant open space is provided adjacent to Furnace Brook. Disturbances to wetlands, wetland buffers, and steep slopes require Town permits, which the applicant has requested for this project. Given the irregular configuration of this property, and the fact that it has road frontage on only one end, the DEIS shows how development of the parcel for single family residential use as allowed by current zoning necessitates disturbance to wetlands to some extent (0.22 acres of the 4.04 acres of on-site wetlands). The project is not expected to alter any wetland or watercourse located on properties adjacent to the site. The current plan provides many pockets of existing vegetation between house lots to preserve the character of the site as opposed to clearing and grading for a denser cluster development.*

For comparison, a cluster alternative plan with the number of house lots allowed by the Town's zoning is presented in the DEIS (shown in DEIS Figure 4-1). That plan shows more lots than the current conventional plan that is proposed, however it conforms to the Town's zoning regulations applicable to a cluster plan and provides a reasonable comparison of development potential on this property. Various comparative numbers are listed in the table below as relate to the DEIS plan, the cluster alternative, the current proposed plan, and an alternative loop road plan (the latter discussed in detail in FEIS Section 9.0). The comparison of impacts shows varying benefits between the proposed plan and the cluster plan with respect to environmental impacts. The cluster plan entails some 13.0 acres of clearing and grading disturbance, and 3,100 total lineal feet of roadway, as compared with 12.0 acres of disturbance, and 2,400 total lineal feet of roadway in the proposed plan. The cluster plan would disturb some 4.4 acres of steep slopes as compared with 3.3 acres in the proposed plan, but the cluster plan would preserve some 24.4 acres of dedicated open space as compared with 16.1 acres in the proposed plan. The cluster plan contains 4.0 acres of impervious surfaces and 10.6 acres of lawns and landscaped areas versus 3.2 acres of impervious surfaces and 8.8

acres of lawn/landscaping in the proposed plan. It is noted that no cluster plan showing a reduced lot count of 17 or 18 lots has been developed so that there are no precise numbers available for such a plan in the Cluster Alternative column of the table below. However, a cluster plan for 17 or 18 lots would reduce the numbers presented regarding developed area, natural resource impacts and community resources, and increase the areas of open space. Such numbers would be expected to be similar to the 17 Lot Alternative Loop Road Plan, where the homes are laid out in two compact areas of development similar to a cluster plan.

Table 2-1 Alternative Impact Comparisons				
Area of Concern	DEIS 24-Lot Plan	DEIS Cluster Alternative	FEIS 18-Lot Plan	FEIS Alternative Loop Plan
Developed Area				
Residential Units	24	26	18	17
Impervious Surfaces (acres)	3.4	4.0	3.2	3.0
Lawn/ Landscaping (acres)	11.6	10.6	8.8	7.8
Open Space Resources (acres)				
Wetlands, incl. Water Surfaces *	4.3	4.3	4.2	4.2
Woods (uplands)	23.0	29.6	26.1	27.4
Dedicated Open Space Parcels	14.8	24.4	16.1	20.6
Natural Resource Impacts (acres)				
Total Construction Disturbance	15.0	13.0	12.0	10.7
Wetland Disturbance	0.25	0.27	0.22	0.22
Wetland Buffer Disturbance	2.3	2.6	1.6	1.5
Steep Slope Disturbance	4.9	4.4	3.3	3.1
Community Resources				
Population	87	95	66	62
Peak Traffic AM / PM (trips/hour)	26 / 30	28 / 32	21 / 23	21 / 22
Water Demand/Sewage Flow (gpd)	8,800	9,500	6,600	6,233
School-age Children	21	23	16	15
Costs to School District	\$165,200	\$181,720	\$132,160	\$123,900
Revenues to School District	\$191,006	\$206,923	\$143,254	\$135,296
Source: Tim Miller Associates, Inc. * Includes wetland creation areas.				

Comment 2-16 (Letter #6, Gertrude Bush, November 14, 2003): The proposed 2000 foot road is quadruple the length allowed by Town regulation for a single access road. The road travels through wetlands and will require extensive blasting to avoid Town of Cortlandt steep slope restrictions.

Response 2-16: *According to Section 265-17(F) of the Cortlandt Town Code, dead end streets that exceed 500 feet in length require consideration as a special exception by the Planning Board. In this instance, the constraining conditions of this particular site -- the irregular configuration of the property, the existing topographic features of this site (wetlands, slopes, and the stream corridor that crosses its entire frontage), and the fact that all land surrounding this property has been developed -- a dead end street design appears to be the only option for access. Thus the applicant has argued that this is an exceptional situation that, in combination with the very low density of the site proposal, is a reasonable approach to site development. As described in Response 2-11 and in FEIS Section 1.0, the road design will incorporate stabilized shoulders and mountable curbs to allow for vehicles to circulate past a roadway obstruction, if needed in the event of an emergency. As described in Responses 2-11 and 2-12, the applicant also proposes a potential secondary means of access (emergency access) via a right-of-way to provide for a possible future connection of the subdivision road to Route 9A via an existing driveway. Such a connection would require an agreement from all of the property owners having access rights to the driveway, and may not occur in the foreseeable future.*

Given the site conditions, the applicant requests Town permits to allow small disturbances to wetlands, subsurface rock and steep slopes that will be necessary to construct the subdivision road, as described in the DEIS. A specially designed culvert is to be constructed to create a wildlife crossing at the central wetland. The project can not entirely avoid steep slopes disturbance but will comply with the regulations to the greatest extent practicable.

Comment 2-17 (Letter #7, Catherine Marsh, November 13, 2003): In response to expressed concerns regarding the buffer area, the developers suggested a revision to the DEIS. I strongly disagree with the stated solution involving restricted covenants on the homeowners wherein the homeowners association would be responsible for monitoring and enforcement of governing regulations. This can only be termed a "quick fix" by a developer whose interest in the land will disappear as soon as the last home is sold. Their proposed arrangement does not ensure the long-term preservation of the buffers. While restrictions can be made regarding obvious things such as construction of building, they will not protect against degradation of the buffers from their natural purposes to standard suburban backyards. The far corners of these backyards will become like most backyards - areas for storage, wood piles, dumping areas for grass clippings or for children to play - and the buffer will cease to exist. Further degradation will occur as homeowners landscape the area with the help of herbicides, pesticides, fertilizers and nonnative plants. The homeowners association cannot enforce restrictions. It is questionable if they would even want to enforce such restrictions as, by definition, the members will be the very homeowners on whom the restrictions will need to be applied. Even assuming the best intentions of the homeowners association, how would the association monitor the individual practices of each homeowner? Would they be required to do regular water quality assessment of the wetlands and the brook? How would they determine which homeowners were responsible? What actions could they take to remediate?

Response 2-17: *Each lot will include a portion of land protected by conservation easements. Easement boundaries on private lots will be marked by permanent physical markers such as planting of shrub hedges or by reconstructing stone walls from existing walls to be disturbed. The declaration of easements, covenants and restrictions will*

include a provision whereby if the lot owner fails to maintain the easement area in accordance with the specified management practices or violates the restrictions, and the homeowner's association fails to take action to remediate a situation, the Town will have the right to enforce the restrictions or perform the necessary management and to recoup the cost of such management from the lot owner. Refer to Response 2-1.

Comment 2-18 (DEIS Public Hearing, Jeanne Romeu, November 5, 2003): Looking at the DEIS in your office and looking at the proposed lots where they are located, this particular map doesn't show the wetlands that exist, at least by the properties. I do have copies here of the proposed footprints of those proposed lots with wetlands and the buffer space. It indicates that there's about a two - there's open space designated areas around the wetlands. The footprints of the housing lots are in the open space. What I would like to know is since they're saying that these areas here will remain wooded areas, these lots continue as private property beyond the houses themselves and I would like to know if - since it exists and it goes deep inside the wetland buffer space, if these protected woods will be assigned easements?

Response 2-18: *The current subdivision plan shows the proposed areas of open space preservation easements, which include portions of the wooded buffer areas on the rear of a number of lots. Refer to Responses 2-1 and 2-4 regarding the protections proposed for these areas.*

Comment 2-19 (DEIS Public Hearing, Robert Foley, November 5, 2003): On the historical, Figure 3.1-2, I know you're preserving the grist mill foundation, but not the industrial complex area which would be lots 3 and 4, I believe. If I am not mistaken, I guess the grist mill would be beyond lots 1 and 2. I would like to see the industrial area, if possible, also preserved.

Response 2-19: *Historic resources on the site were documented by the project archeologist in accordance with the standards and policies of the NYS OPRHP. Based on that review, a portion of the project site is proposed to be permanently preserved where there are foundation remains of buildings and features associated with the furnace/mill site. An historic interpretive area with a small parking area adjacent to the subdivision road, wood chip or gravel pedestrian trails circulating the historic site, and interpretive signage and benches will also be provided. The "industrial area" has been determined to not represent a significant historic feature. This area extends over Lots 2 and 3 in the current plan (Lots 3 and 4 in the DEIS plan). (Omission of the "industrial area" from the FEIS drawings was done for graphic clarity.) The proposed plan has been approved by OPRHP. (Refer to Response 2-2.) The applicant has met with a member of the Town historical society to review the project plans and will continue to work with the Town in preserving the historic resources of the site.*

Comment 2-20 (DEIS Public Hearing, Susan Todd, November 5, 2003): I had a question about the open space areas being owned by a homeowners association. I don't think that that's a good strategy. I think it should be owned either by the Town or managed by a land trust.

Response 2-20: *Refer to Response 2-1 for a complete description of the proposed open space protections.*

Comment 2-21 (DEIS Public Hearing, Susan Todd, November 5, 2003): You talked about the reviving or rehabilitating the Baltic Estates sewer treatment plant; what does that mean? What does that mean to rehabilitate that? What is involved?

Response 2-21: *Rehabilitation of Baltic Estates sewage treatment plant was never proposed. The additional flows from the proposed project are well within the design capacity of the existing plant. (As shown in DEIS Appendix G: Furnace Dock subdivision will increase sewer plant flow by 5.52%, with available capacity at nearly 34.6% of its permitted flow.) Rehabilitation of the Baltic Estates sewage pumping station is proposed and will entail installation of new pumps, rehabilitation of the power supply, and installation of a new emergency generator.*

Comment 2-22 (DEIS Public Hearing, Susan Todd, November 5, 2003): I had a question about the water main, the eight-inch water main. At first I had in my notes, does that go through the brook, but then I hear it goes through the bridge, through an earthen berm in the bridge. I need more explanation of what that is. Earthen berm, earthen fill, which makes me think that can get washed away very easily.

Response 2-22: *The proposed bridge structure will consist of a 15-foot-wide concrete box culvert that will span the existing stream bed, and two 10-foot-wide box culverts on either side of the main culvert, all of which will be designed to accommodate storm flows in the stream channel and facilitate movement of wildlife. As described in DEIS Appendix J, the bridge culverts are designed to safely convey storm flows in excess of those developed by Hurricane Floyd, the largest storm on record. Storm flows from the 100-year storm would pass beneath the bridge at mid-culvert depth. The water main for the project will be placed above the culvert and within the earthen backfill over the culvert. With the earth fill above the storm flow levels, erosion will be avoided.*

The proposed culvert is 34 feet wide. The necessary four feet of cover for the water main will be provided.

Comment 2-23 (DEIS Public Hearing, Susan Todd, November 5, 2003): Air noise; 69 to 90 decibels. Our code specifies nothing above 65 in residential areas. So how are you going to keep this construction from being too loud?

Response 2-23: *The Town Code specifies a maximum decibel level of 65 dBA occurring over an extended period of time. While it is expected that there will be occasional periods of noticeable construction noise, it is not expected that these will involve extended periods of time and thus will not exceed the Town's requirement. Specifically, Section 197-16 of the Town Code prohibits any construction related activity that is audible to the human ear beyond the property line between the hours of 7:00 p.m. and 7:00 a.m., Monday through Saturday, and all day Sunday and national holidays, with notable exceptions.*

Comment 2-24 (DEIS Public Hearing, Susan Todd, November 5, 2003): I think the iron industrial complex is being destroyed, that exists now on lots 2 and 3. We should definitely consider setting that area aside for open space and for the history of our town. I also don't think that you really preserved the grist mill, it's just in the wetland buffer. I think all those sites should be dedicated to the town and maybe our town historical committee can look at this and let us know whether it could be something that could be open to the public in some way or become a place people can visit and learn about early pre-Revolutionary ware, iron making.

Response 2-24: *See Responses 2-2 and 2-19.*

Comment 2-25 (DEIS Public Hearing, Loretta Taylor, November 5, 2003): I support a much shortened cul-de-sac. I think that all of us feel that the 500 foot limit means something and that it doesn't make sense for us to approve a subdivision that is dependent on houses with 2,000 to 3,000 foot long roads, and I would much favor a subdivision that is more clustered in the front, as some of your alternatives are, and I also would like to see it have street lighting, sidewalks and sidewalks to the A&P hamlet.

Response 2-25: *A number of dead end roads have been approved and built in the Town of Cortlandt that exceed 500 feet in length (refer to the table of existing road lengths of dead end roads in the Town of Cortlandt at end of FEIS Section 1.0). The proposed road will conform in all other respects to Town standards. Given the irregular configuration of the subject site, the fact that all land surrounding this property has been developed, and the existence of Furnace Brook along the entire frontage, the proposed street design appears to be the only option for access into the parcel that allows utilization to the substantial lands in both the front and rear of the property. The applicant believes this to be an exceptional situation (as provided for in §265-17(F) of the Town Code), that, in combination with the very low density of the site proposal, is a reasonable approach to site development. As described in Responses 2-11 and 2-12, the applicant also proposes a potential secondary means of access (emergency access) via a right-of-way to provide for a possible future connection of the subdivision road to Route 9A via an existing driveway. See also Response 2-16.*

The A&P hamlet is one-third mile from the subject site. The likelihood of pedestrian visits to the A&P from Furnace Dock subdivision is very low. Experience has demonstrated that most people are unwilling to walk this distance to shop and then carry their purchases on a return walk to their home. The applicant does not therefore propose off-site sidewalk improvements. Regarding on-site street lighting and sidewalks, these improvements are not appropriate for the generally rural setting.

Comment 2-26 (DEIS Public Hearing, Loretta Taylor, November 5, 2003): Cumulative Issues: In this case with the Furnace Dock application there are a lot of issues; drainage, the roadways, the fact that it's single access, the fact that there is a bridge crossing the stream and wetlands, the fact that there are sight distance problems at that particular location, the need to protect wetland buffer with easements, which the applicant will at this point consider.

There are certain concerns for public safety when we have these very very long roads and something happens. I mean, there was a point in our lives here that we kind of think well, it could happen, but it's not likely. I don't think many of us feel all that sure anymore. Things can and do happen.

So you would have to be worried as a board that the subdivision that we're creating would be built in a way that would keep safety for the residents in mind, and I do have some concerns about the length of some of the roads that are being requested through these applications.

There are maintenance issues that have to do with the open space, who manages it. And most of us who live with restrictions that are sometimes imposed by homeowner's associations understand that these things are pretty much voluntary. I mean, the association has a certain amount of power, but people do go off doing things that they should not do. I don't know that a homeowner's association can actually manage all of the things that some of the applicant thinks that they can manage.

There are steep slopes here as well. A whole list of things adding up to cumulative issues that we have to look at, and I for one am becoming less inclined to sort of go with the flow. There are things here that really need some looking at, and I think that I would like to impose the applicant to rethink the project a bit, maybe scale it down, the entrance and the crossing. You know, there are a number of other issues that I could bring up, but I'm not quite sure that I feel comfortable with this project as it is.

Response 2-26: *The project plan includes various measures that minimize or avoid adverse cumulative impacts to the greatest extent practicable, including the following:*

a.) The treatment of stormwater drainage can affect water resources such as wetlands, wetland buffers and streams. The subdivision includes a variety of accepted stormwater management measures that minimize the changes in stormwater runoff characteristics and thereby minimize adverse affects on the water resources. Runoff will be captured from pavement surfaces and treated prior to discharge to the receiving waters. The treatment is designed to trap sediments and possible pollutants within the on-site management facilities as well as control discharge rates to pre-development levels. This is accepted design practice to minimize effects to water resources.

b.) A single, broad span roadway access has been proposed as a way to minimize potential effects to the stream, wetlands, and slopes. Alternatively, access into the property would otherwise require multiple crossings or a culvert style crossing which would result in greater land disturbance in and around the stream and wetland. The roadway design minimizes the stream impact by limiting the number of crossings to one, by providing a construction technique that will span the stream channel without direct disturbance to the stream, and by providing a permanent means for wildlife to circulate along the stream corridor through wet and dry culverts. The proposed single roadway design allows for minimal disturbance to wetland buffer areas and provides for re-establishment of buffer vegetation along the road embankments. The single access roadway also minimizes effects on slopes by avoiding direct disturbances to the steeper slopes on the property to the greatest extent practicable.

c.) The road access has been proposed in a way that will minimize potential concerns regarding public safety and sight distances. A single point of access from Furnace Dock Road at a point of greatest visibility for traffic on the Town road allows for the greatest safety and efficient circulation into and past the project site. An area of sight line clearing is proposed on the plan to provide for public safety at the site access that meets or exceeds the Town's standards. The proposed subdivision road will meet the Town's established standard cross section for road width and surfacing, which will adequately serve as a two way thoroughfare for normal as well as emergency access. The road design will incorporate stabilized shoulders in several sections and mountable curbs over its length that will allow for vehicles to circulate past a roadway obstruction, if needed in the event of an emergency. Provision in the project for a future secondary road access into the center of the site maximizes safety for both the future residents in this development and the existing homes using the driveway to which this project could connect. It is noted that the future secondary road development is contingent on resolution of access agreements since the adjacent property is currently developed with private access to a public road (Route 9A).

d.) Development of a residential subdivision can have potential effects on wetland buffers and other open space areas. To minimize such affects, the subdivision includes open space preservation measures over extensive portions of the project site. These measures include the designation of permanent open space lots that will incorporate most of the Furnace Brook corridor and stream/wetland buffers that are on the property, totaling some 16.1 acres or 38 percent of the site. Permanent open space lots or areas restricted as open space will also include the central wetland, the northerly wetland, and most of their buffers that are within the property boundaries. Open space protections for this project include provisions for deed restrictions or conservation easements on individual lots where areas of wooded steep slopes and pocket wetlands exist, thereby protecting an additional 6.4 acres. Management of the open space will be provided for in the documents creating these restrictions, thereby establishing a long term means for maintaining the open space in perpetuity.

Comment 2-27 (DEIS Public Hearing, John Bernard, November 5, 2003): The road is too long for the Town of Cortlandt code, which requires a cul-de-sac road, single entry, to be 500 feet or less. The conservation easements at the back of the lots being part of the lots really is unacceptable and those back lot borders should be moved over towards the houses and as the rules suggest, a conservation easement should be part of a homeowner's association which would be at least a little bit easier to control. And the second point on conservation easements, I'm not sure of the town's ability to enforce conservation easements over time. I would request the staff to request of the town board a clarification of just how that enforcement action is done, how that's accomplished, because oftentimes we're suggesting conservation easements and yet there is not mechanism that I'm aware of that maintains them.

Response 2-27: *See response to comment 2-25.*

The house lots in this project conform to the Town's subdivision bulk standards. Deed restrictions or conservation easements are proposed on portions of each of the eighteen individual lots. If deed restrictions are utilized, the declaration of easements, covenants and restrictions will include a provision whereby if the lot owner fails to maintain the easement area in accordance with the specified management practices and restrictions, and the homeowner's association fails to take action to remediate a situation, the Town will have the right to enforce the restrictions or perform the necessary management and to recoup the cost of such management from the lot owner. Refer to Response 2-1 for additional description of the easement restrictions.

While specific inspections for homeowner compliance of easement restrictions are not expected, the Town maintains the right to inspect and enforce restrictions either within homeowner lots or within designated open space areas when non-compliant activities are reported or observed.

Comment 2-28 (DEIS Public Hearing, Arthur Rich, November 5, 2003): There is mention of a gas line that they are planning to bring in, but nowhere can I find where they are going to do that. I can't find anything that shows where the gas line is going to be, how it's going to be installed, no specifications at all.

Response 2-28: *As stated in DEIS Section 3.7.10, natural gas service is available in Scenic Drive, provided by Con Edison, which would be adequate to provide service to*

the proposed project. The gas main may be extended to the project under Furnace Dock Road and the new subdivision road to provide service to homes in the project.

Comment 2-29 (DEIS Public Hearing, John Bernard, November 5, 2003): On the entryway, right now the entry road to the property, you just have a right-of-way on that road or none of that existing dirt entry is on your property? Say you didn't have approval from the DEC or whoever to cross the stream, you would still have an entry to the property?

Response 2-29: *The project site has approximately 340' of road frontage west of Furnace Brook. The existing dirt driveway provides access from this area of frontage onto the site without crossing Furnace Brook but is only 8 feet in width.*

Comment 2-30 (Letter #9, Ed Vergano and Ken Verschoor, November 20, 2003): It is recommended that the industrial complex be preserved as part of the proposed open space as recommended by the NYS OPRHP May 30, 2003 letter which, among others, recommends that the entire industrial complex be avoided and that an APE Area of Potential Effect be defined so that testing can be undertaken for the remaining areas where impacts may occur during construction.

Response 2-30: *Refer to Responses 2-2 and 2-19. The preservation plan approved by OPRHP includes a portion of the project site to be permanently preserved where there are foundation remains of buildings and features associated with the furnace/mill site. This portion will be entirely within a proposed open space parcel. The "industrial area" is located on proposed Lots 2 and 3. The extensive archaeological investigations at the site ascertained that the remains of the "industrial area" did not represent a significant historic feature to be preserved.*

Comment 2-31 (Letter #10, Bob Milano, January 3, 2004): It is also my understanding that a larger number of the lots are considered wetlands and therefore should require Wetland Buffer zones. That perhaps as much as 40% of the property falls under Steep Slope rulings and that the proposed road is 2000+ feet whereas there is a Town Code restriction of 500 feet for a road leading into a cul-de-sac.

I understand that the property owner has certain rights and reasonable expectations of what they can do with their property. Those rights, however, have to be balanced against the better good, especially if certain proposed actions by the property owner would damage other nearby properties, down stream water sources or the environment and wildlife in general. Such damages, if they occur are almost certainly irreversible and permanent. I think the owner should also be aware that there are other ways to make a profit off their land. They can sell their land to environmentally conscious groups such as The Nature Conservancy, The Saw Mill River Audubon Society, perhaps the Westchester Land Trust or other land trust organization. Also, through the use of conservation easements they could reap large tax advantages. By agreeing to permanently forego the development of 24 houses on this property and preserving it as it is, they stand to get a tremendous tax benefit through a conservation easement.

Response 2-31: *The purpose of the SEQR review process is to balance the proposed development project against the various potential impacts to the environment. A land owner always has the option to sell its land to an interested buyer. In this case the applicant is not aware of any such interested party and continues to pursue its application for subdivision approval in accordance with the Town's regulations.*

Comment 2-32 (Letter #11, Kathleen A. Burleson, January 19, 2004): Highway vehicles vary up to 32.5 tons empty, both roads and box culverts must be weight rated to accept this tonnage at a minimum.

***Response 2-32:** The project roads have been designed in accordance with the Town of Cortlandt road standards. The culvert structure is designed in accordance with the H-20 loading standard for trucks (36,000 lbs. per axle), which is the engineering standard used for Town and State roads. No weight restrictions will be necessary for the proposed bridge crossing.*

Comment 2-33 (Letter #11, Kathleen A. Burleson, January 19, 2004): The proposed site plan designates Road A and Road B. We request that the site plan be revised for one continuous road with a loop at the interior end of the site rather than two cul-de-sacs. This would avoid the necessity of Town vehicles backing up while servicing the homeowners.

***Response 2-33:** The proposed cul-de-sacs will have 80-foot diameter turnaround areas, designed in a tear drop configuration at the request of the Town Engineer, which are sufficient to accommodate a large truck including fire apparatus and municipal service vehicles. This design should eliminate the need for municipal service vehicles to back up. An alternative loop road design, with 17 residential lots, is presented and evaluated in FEIS Section 9.0. The alternative plan would also eliminate any need for municipal service vehicles to back up during normal performance of their duties.*

Comment 2-34 (Letter #11, Kathleen A. Burleson, January 19, 2004): In the current site plan, the driveway for lot #8 needs to be re-located to the opposite property line due to the need for snow storage.

***Response 2-34:** Snow storage areas are indicated on the current project plans at the proposed parking area, the proposed right of way stub and in snow easements at the intersection of Road 'A' and Road 'B' and at the cul-de-sacs.*

Comment 2-35 (Letter #13, Mike Sellazzo, January 14, 2004): The only two concerns that we have are the weight limit on the bridge over the stream and the sight distance exiting the development. I could not find the weight rating for the proposed bridge but we would need a minimum of 25 tons, which would allow our trucks on the road half loaded. If the rating could be 33 tons it would allow any of our vehicles on the road at anytime during its route. Also the sight distance looking east is only 100 feet, which does not allow much stopping distance for vehicles when our truck is exiting. The sight distance looking west is 400 feet and should be sufficient.

***Response 2-35:** The project roads have been designed in accordance with the Town of Cortlandt road standards. The culvert structure is designed in accordance with the H-20 loading standard for trucks (36,000 lbs. per axle), which is the engineering standard used for Town and State roads. No weight restrictions will be necessary for the proposed bridge crossing.*

A sight distance easement is proposed on the area adjacent to the proposed subdivision road that, when implemented, will provide 400 feet of sight distance looking east. Alterations within the sight easement will be limited to clearing of trees and tall vegetation to allow a clear line of sight. Vegetation removal will be limited to cutting

without removal of stumps or grading of earth. Ground disturbance, if any, will be stabilized with grass seed and mulch after clearing.

Comment 2-36 (Letter #14, James J. Sullivan/Chas. H. Sells, Inc., August 18, 2003):

(Substantive Comment #3) The applicant states in a footnote to Table 2-1 of the DEIS the following: "Post-dev't woods area excludes 0.55 acres utilized for wetlands creation.... Numbers may not total due to rounding." The values for "Total/Created" and "Woods (upland)/Post-Dev't" appear to be off by 0.55 acres. The applicant should revise DEIS Table 2-1 to indicate how the footnote applies to this apparent discrepancy, which is clearly independent of the errors associated with rounding.

Response 2-36: *Since the project plan has been revised since the DEIS, the referenced table (DEIS Table 2-1) which describes changes in surface cover is revised below to reflect the current 18-lot plan:*

Table 2-2 Changes in Surface Cover (Acres) Furnace Dock Subdivision				
<i>Cover Type</i>	<i>Existing</i>	<i>Disturbed</i>	<i>Created</i>	<i>Post-Dev't.</i>
Woods (upland)	38.36	11.77	-0.45*	26.14
Wetlands and Water	4.04	0.22	+0.45*	4.27
Impervious Pav't. & Bldgs.	0.03	0.00	3.15	3.18
Lawns & Landscaping	0.00	0.00	8.84	8.84
Totals	42.43	11.99	11.99	42.43
Source: Ralph Mastromonaco, PE, PC; Tim Miller Associates, Inc.				
Notes:				
* New wetland created in existing upland woods area.				
Post-dev't. lawn areas include stormwater basins and utility easements to be maintained as meadow.				

Comment 2-37 (Letter #14, James J. Sullivan/Chas. H. Sells, Inc., August 18, 2003):

(Substantive Comment #8) The applicant should revise the following sentence on DEIS page 3.2-3 for clarity: "A review of the Groundwater Resources map contained within the 1990 Town of Cortlandt Master Plan (See Figure 3.2-1A) shows that the project site is not located in a 'Fractured Bedrock Area Favorable for Groundwater Development'."

Response 2-37: *Comment noted. DEIS Figure 3.2-1A shows that the project site is not located in a fractured bedrock area favorable for groundwater development.*

Comment 2-38 (Letter #14, James J. Sullivan/Chas. H. Sells, Inc., August 18, 2003):

(Substantive Comment #30) ... In addition to the narrative description for Design Point 2 offered within the text of the DEIS, the applicant should also provide Flow results for this Design Point in DEIS Table 3.2-6 (Design Point Peak Discharges - Existing Condition) and 3.2-9 (Design Point Peak Discharges - Existing and Proposed Conditions).

Response 2-38: *Design Point 2 is a point located in the interior of the site selected for use by the project engineer in determining details of the stormwater management system. As such, existing flow at this location is not used in the drainage analysis and therefore it is not calculated nor is that number of value to the project analysis.*

3.0 SOILS AND GEOLOGY COMMENTS AND RESPONSES

Comment 3-1 (Letter #3, Catherine Marsh, November 5, 2003): The DEIS does not contain a list of areas to be blasted. Instead, in Section 5.0 the developer states "a project blasting program will be designed prior to commencement of blasting activities in order to identify the particular needs of this project...". The rock located in the turnaround at the end of Road B would appear to be a target for blasting. My house, built on a concrete slab and containing several large plate glass windows, is less than 100 yards from this rock. Can the developer or this Board assure me that there will be no adverse effect to my home or property?

Response 3-1: *For the purposes of assessment of possible environmental impacts, areas of rock removal (possibly by blasting) for this project have been identified by the project engineer in DEIS Figure 3.1-6, based on analysis of expected earth excavation for the roads, utilities and house lots. These areas of potential rock removal occur where bedrock is known to be shallow and earth cuts are planned below the depth of soil overburden. During initial stages of project construction, soil excavation or other investigation will be conducted to confirm the actual depths to bedrock in the construction area. Where rock excavation is necessary, alternative excavation methods will be evaluated for use, such as cutting, ripping, or chipping, in lieu of blasting. Given the extensive costs and time delays associated with blasting operations, blasting would be selected as the method of removal only as the final alternative.*

The Town of Cortlandt regulates blasting activities through the issuance of a blasting permit according to §161 of the Town Code. Blasters must be properly insured prior to issuance of a permit. Such activities must also be planned and conducted in accordance with State regulations. If blasting is determined to be necessary by the construction contractor, the applicant has committed to the rock removal procedures specified in FEIS Appendix F, Rock Excavation Specification, which includes provisions set forth in the Town Code. All blasting at the site would be conducted in a manner to minimize or avoid potential impacts to subsurface geology, neighboring properties and buildings.

Comment 3-2 (Letter #3, Catherine Marsh, November 5, 2003): Executive Summary 1.2.2 Water Resources "None of the nearby residential properties obtain water from wells." This is untrue. My property is adjacent to Subdivision 18 and 19. My well is less than 95 yards from the rock located in the Road B turnaround. Other large rocks are less than 63 yards from my well. Without a blasting plan how can this Board determine the impact on either my home or my water supply? Considering the developer either did not know that I had a well or chose to ignore this fact, how can they indicate there will be no impact?

Response 3-2: *It is acknowledged that one water supply well exists on the nearby residential property opposite proposed Lot 13. The well is located approximately 125 feet southwest of the common property line in the vicinity of the existing driveway.*

Since blasting operations are designed and carried out in a manner intended to fracture rock near the surface for the purpose of specific construction, there is little potential for impact to the groundwater aquifer supplying water to local private wells should blasting be conducted. (Refer to Response 3-1.) If blasting is determined to be necessary by the construction contractor, any demonstrated impacts to any area private well resulting from the controlled blasting conducted during construction will be remedied by the applicant. The applicant will monitor wells within 500 feet of the blasting site during

blasting operations and will re-drill any affected well or tie the affected property into the municipal water line. It is noted that adherence to blasting specifications limiting peak particle velocity to less than 2 inches per second at 100 feet from the source, as provided in the blasting specification, has been consistently found to avoid structural damage outside the blasting site area (US Bureau of Mines). Refer to the blasting mitigation procedures specified in FEIS Appendix F.

Comment 3-3 (Letter #3, Catherine Marsh, November 5, 2003): The developer indicates that "35% of the site must be graded to accommodate the proposed development." This appears to be a very high percent of the property. It also appears that it can only be accomplished by blasting and major grading. However, clarification is needed regarding exactly what would be graded and by what means. They indicate that the houses would be built on the most level portions of the property, yet refer to grading for homes and surrounding water gardens.

Response 3-3: *The grading plan submitted to the Planning Board, as well as various figures in the DEIS, depict the areas of grading proposed for construction of this project. Grading would be accomplished by the use of bulldozers, excavators and other earth moving equipment to achieve the finished grades called for on the plan. The DEIS demonstrates that the majority of earth moving and construction activities would occur outside of areas of steep slope.*

A revised subdivision layout and grading plan have been designed by the project engineer that have reduced the total area of site disturbance and the area of steep slope disturbance. The areas of slopes disturbance in this revised plan are tabulated in FEIS Table 3-1 at the end of this section in comparison to the DEIS plan and the alternative loop road plan. Compared to the DEIS plan, the revised 18-lot plan has reduced the total area of site disturbance by 20% to 12.0 acres, reduced the area of wetland disturbance to 0.22 acres, and the area of steep slope disturbance by 33% to 3.3 acres (refer to FEIS Table 2-1). Additional changes made to the proposed site plan by the applicant include: reduced number of proposed residential lots from 24 to 18 lots; refined proposed house locations to reduce disturbances to wetland buffers from 2.3 acres to 1.6 acres; reduced the lawns and landscaped areas from 11.6 to 8.8 acres; delineated conservation easement areas on portions of each house lot; increased the areas of preserved existing woodland from 23.0 acres to 26.0 acres; enlarged the dedicated open space lots by 1.3 acres; and shortened Road "B" to reduce steep slope disturbances.

Comment 3-4 (DEIS Public Hearing, Catherine Marsh, October 7, 2003): The other issue I have a concern about is the blasting that is proposed on the site. My house, we use well water. I am concerned about the blasting's impact. My property is quite close to the stone wall where the sewer line will be coming down. There are a lot of large trees there. There are also rocks. I am concerned what would blasting do to my house which is built on a slab, as well as my well where I get my water from.

Response 3-4: *Refer to Responses 3-1 and 3-2.*

Comment 3-5 (Letter #6, Gertrude Bush, November 14, 2003): The plan calls for an unspecified but, according to the plans, massive amount of blasting to both outcropped rock and bedrock in order to turn this natural landscape into another poorly planned suburban development. This blasting has the potential to damage my home and that of my neighbors. It may also change the quality and quantity of water in the area.

Response 3-5: Refer to Responses 3-1 and 3-2. DEIS Figure 3.1-6 shows discreet areas where blasting may be necessary primarily for road construction in locations that are internal to the site and total 0.61 acres of the 42-acre site.

Comment 3-6 (Letter #7, Catherine Marsh, November 13, 2003): The proposed subdivision will require, by the developer's own statement, extensive grading and an unspecified amount of blasting to remove rocks. The DEIS does not specify which rocks will require blasting. The submitted plans depict only the visible outcropping of large rock formations. Presumably, many of these will be blasted. However, as brought out at the hearing, bedrock is located near the soil surface. It is therefore probable that blasting will also be required for construction of homes, driveways, drain fields, catch basins, and sewer lines.

Such massive alteration of the land will affect the geology, hydrology, and the supply of well water to nearby residences. In addition to our property which is immediately adjacent to the proposed project, there are other homeowners on Spice Hill who are dependent upon wells for their water. Since the DEIS incorrectly states there are not wells in the vicinity, it would be prudent to survey all surrounding properties regarding this issue and potential negative impacts.

Response 3-6: The grading necessary to accomplish the proposed subdivision will likely be similar to that which occurred to build existing roads and homes in adjoining neighborhoods. If blasting is determined to be necessary by the construction contractor, the applicant proposes a blasting protocol that provides for pre-blasting inspections of all off-site foundations or other sensitive structures located within 500 feet of the blasting site, if authorized by the property owners. Refer to Responses 3-1, 3-2 and FEIS Appendix F.

Comment 3-7 (DEIS Public Hearing, Robert Foley, November 5, 2003): The main thing I see in reading through this is the amount of disturbance and the percentage figures. I won't go through them all, but it concerns me, and I believe someone just mentioned that 35 percent of the site being sloped, some 15 acres, the amount of grading you have to do, even if you cut the fill, and you're saying in the documents that the 32,000 cubic yards would be kept on site, nothing would be brought in and out. I hope that's true. I think the slopes are a big problem.

Response 3-7: The project site contains approximately 19.5 acres of slopes greater than 15%, or 45.9 percent of the site. The area of proposed steep slopes disturbance has been limited in the revised grading plan to approximately 3.3 acres, or 7.8 percent of the project site. This is a 1.6 acre reduction from the DEIS plan. Due to the topography of the site, this disturbance is unavoidable to construct the proposed plan. The applicant has stated in the DEIS that the proposed disturbance and mitigation would conform to the Town requirements for conservation of steep slopes (§259 of the Code). The applicant proposes to implement an erosion control plan in accordance with New York State guidelines to minimize potential adverse impacts associated with steep slope disturbance. As part of the proposed plan, certain areas of the project would create slopes of 15% and greater, which, when stabilized, would provide additional mitigation for the slope disturbance.

The proposed construction would conform to the Town of Cortlandt requirements for disturbance to areas on steep slopes (Town Code Section 259-6), as listed in detail in DEIS Section 3.1.5. The proposed project plan has been developed to minimize direct effects to the on-site wetlands in conformance with Code Section 179. As a measure to

provide further permanent protection to the on-site wetland areas, the current proposal places the majority of the wetlands within dedicated open space that will remain undisturbed. The proposed wetland creation provides for a net increase in total wetland area on the project site.

Comment 3-8 (DEIS Public Hearing, Robert Foley, November 5, 2003): On the wetlands and the referenced erosion, the amount of slope disturbance in your plan, you are increasing, as you have said, the impact's boundary, and I know you will have to follow the soil erosion and sediment control plans, but I have the concerns about that with the amount of slopes.

Response 3-8: Refer to Response 3-7.

Comment 3-9 (DEIS Public Hearing, Susan Todd, November 5, 2003): Forty-six percent of this site is 15 percent slope or greater, that's a lot. The potential blasting, I counted just on the map, 15 acres of potential blasting to do that subdivision and there is no plan. I think that that's important that we know more about how much blasting is going to need to be done. It seems the bedrock in the geology and soils in 3.1.1, the bedrock is about 4 to 6 feet from the surface. So I would imagine there would be an awful lot of blasting.

Response 3-9: Areas of potential rock removal have been identified by the project engineer in DEIS Figure 3.1-6, based on analysis of expected earth excavation for the roads, utilities and house lots. The subject site is not viewed as particularly unique or unusual with respect to the construction practices necessary to accomplish the project. Similar sites have been successfully developed throughout the town. Where rock excavation is necessary, alternative excavation methods will be evaluated for use, such as cutting, ripping, or chipping, in lieu of blasting. Refer to Response 3-1.

Comment 3-10 (Letter #8, Lisa Moir, November 25, 2003): I am not sure if anyone has brought up the issue of the Millennium Pipeline. The current proposed route is marked to cross the Furnace Brook Lake adjacent to the Con Ed towers. The right of way will be significant, and the demolition to complete that project and bury the 36 inch pipe under the lake will be tremendous. Obviously, there will be blasting - although no one knows how much. In addition, the proposed housing development is said to need blasting as well. To blast after the pipeline is in . . . could be risky. And the area around the houses will endure blasting should the pipeline come after.

Response 3-10: If blasting is determined to be necessary by the construction contractor at Furnace Dock Subdivision, the applicant has committed to the blasting procedures specified in FEIS Appendix F, which is designed to minimize or avoid potential impacts to subsurface geology, neighboring properties and buildings. The DEIS identifies the impacts associated with blasting, if it is needed, among the short term construction effects. The closest potential blasting sites within the subdivision are at least 500 feet from the Con Ed right-of-way.

It is expected that the length of time in which rock excavation would be required on the Pipeline would also be relatively short and precautions against damaging existing property would be necessary if the Pipeline is built after development of the subdivision.

According to the Millennium Pipeline web site, "wherever possible, Millennium plans to use a mechanical rock-trenching machine to excavate its construction trench along the ConEd Offset/Taconic Alternative in Westchester County. In those areas where the

trenching machine can be used, no trench blasting will be required. Where the rock trencher cannot be used, a process may be used to fracture rock [by blasting within the trench]... Rock removal will be accomplished with a backhoe or other mechanical means.” (www.millenniumpipeline.com/qanda36.htm)

Table 3-1 Steep Slopes Disturbance Furnace Dock Subdivision								
Slope Class	Pre-Development		24-Lot DEIS Plan		18-Lot FEIS Plan		17-Lot Alternate Loop Road Plan	
	Area (acres)	Percent of site	Area of Disturbance on Slopes (Acres)	Percent of Disturbance on Slopes	Area of Disturbance on Slopes (Acres)	Percent of Disturbance on Slopes	Area of Disturbance on Slopes (Acres)	Percent of Disturbance on Slopes
0 - 10%	14.4	33.9%	6.2	41.3%	5.7	47.5%	5.0	47.1%
10 - 15%	8.6	20.2%	3.9	26.0%	3.0	25.0%	2.6	24.1%
15 - 20%	6.6	15.5%	2.4	16.0%	1.7	13.8%	1.5	14.0%
>20%	12.9	30.4%	2.5	16.7%	1.6	13.7%	1.6	14.8%
TOTAL	42.5	100.0%	15.0	100.0%	12.0	100.0%	10.7	100.0%
Disturbance on Slopes Over 15%	---	---	4.9	32.7%	3.3	27.4%	3.1	28.9%

Source: Ralph G. Mastromonaco P.E., P.C., Consulting Engineers.

4.0 WATER RESOURCES COMMENTS AND RESPONSES

Comment 4-1 (Letter #1, Jeanne Romeu, October 13, 2003): Building Site: This odd-shaped parcel shows development on every conceivable piece of land, except where there's actual ponds ("Proposed Stormwater Management Facilities", Figure 3.2-8), including private lots that will go through areas of designated wetlands according to the Map: Vegetation Community Types, Figure 3.4-1; such as lots #11, 10, 8, 7, 6, 22, 23 (maybe more); and the proposed public road going through (over?) part of the southern wetland area "B", as well as over the Furnace Brook Stream. I'm not an engineer, but building homes in a wetland area doesn't seem like a good plan as it will most definitely put them in jeopardy of certain flooding during heavy rains, hurricanes and nor'easters.

Response 4-1: *Given the configuration of the parcel of land and of the wetland areas on the parcel, some individual lots will encompass portions of wetland areas. This is not unusual in the town. Some 22.5 acres of the project (53 percent of the site) will be included in conservation easements, of which 16.1 acres (38 percent of the site) will occur in permanent open space lots. No buildings are proposed in delineated wetland areas or buffers. The house site selected on each lot is outside flood plains and upgradient from lowland areas to avoid flooding. The proposed stream crossing will occur with a bridge designed to allow stormwater flows without obstruction of the channel during large storms.*

The proposed stormwater drainage system is designed to control flooding from 2-year through 100-year storm events by maintaining and reducing peak flows through detention and/or infiltration of large portions of the stormwater runoff. The runoff from certain house rooftops is proposed to be diverted to dry wells, and the runoff from portions of the roadway is proposed to be diverted to subsurface detention/water quality galleys, thus infiltrating a portion of the stormwater that is collected from impervious surfaces. A water quality basin located in the southern portion of the project site captures, detains, and treats the water quality volume of runoff from the roadway in that portion of the project. A conceptual plan showing the locations of these proposed stormwater management features was prepared for the DEIS plan (DEIS Figure 3.2-8) for the purposes of the SEQR review. A Stormwater Pollution Prevention Plan that reflects the final project layout and design will be prepared prior to final project approval that will delineate the actual locations of the proposed drainage system features that will address stormwater management in this project.

Comment 4-2 (Letter #1, Jeanne Romeu, October 13, 2003): The property is unsuitable for building the kind of proposed construction that is being planned. I believe the homes will be in jeopardy of flooding and/or sinking as this is a designated wetland/watershed area. The water presently flowing through the property will be disturbed, thereby causing unforeseen problems for the Town, homeowners, environment, as well as the habitat that will be destroyed, not to mention the potential adverse effects on the marsh downstream by Oscawana Park.

Response 4-2: *The applicant has successfully developed homes on land similar to the subject property. No homes are proposed in areas subject to flooding or in existing wetland soils. Designated areas of wetland, which can be prone to high water levels and generally lack bearing soils, have been avoided in the proposed plan with the exception of the subdivision road where the applicant believes there is no reasonable alternative for project access. In locations where road construction is necessary within areas of*

soils that are found to be unsuitable for road construction, incompatible soil material will be removed and replaced with appropriate fill to provide durable pavement surfaces. Alternatively, should removal of such soils not be feasible, use of geotextile fabric manufactured for this purpose may be implemented for structural support. Suitable conditions will need to be achieved to conform to the Typical Road Section shown on Detail Sheet 14 of the plan set submitted with the FEIS, which specifies compaction of the subbase with a 10-ton roller.

The detailed stormwater management plan that is an integral part of the project design accounts for both water quality treatment and water quantity controls intended to avoid adverse affects on downstream waters.

Comment 4-3 (Letter #3, Catherine Marsh, November 5, 2003): Water Resources, Table 3.2-9, Data for Design Point 2 is missing from the Table.

Response 4-3: *Design Point 2 is an internal design point used for design of internal drainage features and therefore was intentionally omitted from the DEIS table. Any change in flow at this point does not affect any flows actually leaving the property and therefore does not represent an impact of the project. Peak flow rates at design points at the property line will not increase by the project.*

Comment 4-4 (Letter #3, Catherine Marsh, November 5, 2003): Section 3.4.3 Potential Impacts. The DEIS indicates that "Furnace Dock Lake is located upgradient of the subject site. Nearly all stormwater runoff from the developed portions of the Furnace Dock site would drain away from this surface water feature." However, their drawing shows Furnace Dock Lake at a level of approximately 148'. The eastern property lines of lots 3,4,5,6,7,8,9 vary from 150' to 200', a level that would ensure stormwater drainage, including herbicides and pesticides used on the proposed lawns, would flow to Furnace Dock Lake and ultimately Brook.

Response 4-4: *Sections 179-3 and 179-4 of the Town Code restrict activities within regulated areas, defined as "That area which consists of a wetland, water body or watercourse and its associated buffer area." These restrictions prohibit the direct or indirect use of herbicides, pesticides, and fertilizers, including during the normal maintenance of lawns and gardens, within regulated areas unless a permit is obtained pursuant to § 179-5 of the Code.*

As shown in DEIS Figure 3.2-7, Proposed Watershed Map, nearly all stormwater runoff from the developed portions of the site drain away from Furnace Brook Lake. A portion of Lot 6 and most of Lot 7 (on the current FEIS plan) actually drain toward Furnace Brook Lake, and very small portions of Conservation Easement A, outside of the area of development, also drain toward Furnace Brook Lake. The developed area on Lots 6 and 7 where a future homeowner may apply herbicides and pesticides is relatively small with significant existing woodland cover separating it from Furnace Brook Lake. This area is outside of any wetland buffer. The intervening forest, which includes conservation easement land that will remain undisturbed and in its natural condition, can be expected to mitigate the effect of such chemicals through natural processes should they be contained in runoff. Additionally, the detailed stormwater management plan that is an integral part of the project design provides for water quality treatment of runoff from other developed portions of the project to avoid adverse affects on downstream waters.

It is noted that in the Alternative Loop Road Plan, the areas of the site that drain toward Furnace Brook Lake would be undisturbed by construction and would remain within conservation easements established to protect from any future land disturbance. Additionally, the Loop Road Plan includes expanded conservation easement areas on Lots 4, 5 and 6 with the easement line located a minimum dimension of 50 feet from the edge of existing and created wetlands. Like the proposed plan, the loop road plan would require a wetland permit to be granted by the Planning Board for disturbances within wetlands and wetland buffers.

While enforcement of restrictions on homeowners is difficult to ensure, the applicant proposes to provide each new homeowner with an information package describing all restrictions and obligations of the conservation easements, along with management guidelines about the low impact devices, and advocating use of bio-rational pesticides (e.g., natural oils and soaps) to control insects in the landscape. Restrictions on chemical use will also be incorporated into the conservation easement documents.

Additionally, conservation easement boundaries on private lots will be marked by permanent physical markers consisting of a stone cairn with concrete marker every 50 feet along the easement line.

Comment 4-5 (DEIS Public Hearing, Nancy Byrne, October 7, 2003): My property borders Wetland A, and Design Point 1, which is identified in the report as a stream which exits the northwest portion of the project site. Watershed No. 1 is directly adjacent to my property. The culvert is on the property line between my backyard and the Furnace Dock, Inc. property. An easement from the culvert to another culvert near the road goes through my side yard. According to the existing topography map my property is at the lowest point on the map. My main concern after reading the report is that there appears to be a conflict between some of the information that appears in the report and the report's conclusions regarding flooding in the area. In the water impact section of the report it concludes that "no water quality concerns are expected" because Wetlands A will not be touched, and the wetland buffer zone will only be slightly disturbed; that there is "no water quantity info available," and "the wetland and surrounding areas is generally in a natural condition."

Later in the report it states that "proposed stormwater management plan will maintain storm water runoff rates for the 2 to 100-year storm events to the pre-development levels. Therefore, no downstream flooding related impacts are expected to result from the proposed development."

The report also states however that "areas within the A Zone are located within the 100 year flood zone and are considered to have the potential for flooding.: Design Point 1 is in the A Zone. The hydrographs at Design Point 1 show existing 100 year water exceeded the new proposed runoff water rate. This is particularly disturbing because according to the map Z Zone goes right up to the back of my garage and along the sidewalk.

The report further states that Design Point 1's existing peak water flow for a 100-year storm is 62. The plan's proposed peak flow is 61. The slight decrease, in and of itself, doesn't concern me. What does concern me is the fact that this conclusion is based on the assumption that Design Point 1 can indeed properly handle the water from a 100-year storm.

The two feet of water in my basement, the submerged side yard where the easement is located, the water rising above the culvert wall into my backyard all from Tropical Storm Floyd tells me that Design Point 1 cannot handle or properly accommodate the 100-year storm water

flow. In fact, Design Point 1 can't even accommodate the water properly from a tropical storm such as Allison, which again resulted in my basement being flooded and the water rising above the culvert wall into my backyard.

Based on the findings I read I am baffled as to how the report summarizes the findings to say "no downstream flooding related impacts are expected to result from the proposed development."

I am very concerned about potential flooding in this area, especially as it has happened twice before to me.

Response 4-5: *Design Point 1 is located in a flood zone, which periodically floods in large storms, as reported by the commentor. This is an existing condition that is accounted for in the project engineer's calculations. The stormwater detention and infiltration features of the proposed project are designed to internally mitigate any increase in peak flow that the project development would otherwise generate before stormwater leaves the project site at Design Point 1. As shown in DEIS Figure 3.2-8, proposed stormwater management facilities include infiltration trenches at each house site to collect and infiltrate impervious surface runoff that is not otherwise treated. The small portions of Lots 7, 8, 9, 10, 11 and 12 that are within the watershed of Design Point 1 and that will be developed will make an insignificant contribution to the overall flow at Design Point 1. Therefore, the DEIS statement, "no downstream flooding related impacts are expected to result from the proposed development", is correct.*

The commentor properly cites the DEIS report that states that Design Point 1's existing peak water flow for a 100-year storm is 62 and the plan's proposed peak flow is 61. However, this conclusion is not based on the assumption that Design Point 1 can properly handle the water from a 100-year storm as evidenced by the commentor's experiences (although Tropical Storm Floyd was reportedly larger than a 100-year storm). There are certain existing restrictions to drainage flow in the area of Watch Hill Road so that flooding on the Byrne property will continue to occur with or without the proposed project unless improvements can be made to the existing drainage facilities in the area downgradient from the project site.

Comment 4-6 (DEIS Public Hearing, Lisa Moyer, October 7, 2003): My concerns are the health of the lake and the brook that runs from the lake. I didn't read the DEIS, so I apologize for not having a lot of information. It is my understanding that that brook within a mile or so runs into the Hudson River at Lake Oscawana Nature Preserve. The DEC has the blue sign that denotes the Hudson River estuary program. That is a significant nature preserve, and they are preserving the marsh land. The brook that actually runs right there -- runs into that marsh land.

My concern is that a mile up the road, the lake and that brook are being disturbed by all this runoff, and the health of that marsh can only be as healthy as the brook that runs a mile above it. I am concerned about what is their stormwater plan, and how are they addressing that issue that one mile down the road it is protected by DEC.

Response 4-6: *The stormwater management plan designed for this project is required to provide both water quality treatment and water quantity controls in conformance with NYSDEC regulations and the conditions of the stormwater discharge (SPDES) General Permit GP-02-01 that will be necessary to build the project. Adherence to the General*

Permit requirements for this development project will minimize or avoid adverse affects on downstream waters and groundwater as required by NYSDEC.

A State Pollutant Discharge Elimination System (SPDES) General Permit (GP-02-01) is issued by the NYSDEC for regulating stormwater discharges associated with construction activity. To comply with the General Permit, a construction phase Erosion and Sediment Control plan must be developed and implemented in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control. This includes the selection of erosion and sediment control practices (either structural, vegetative or biotechnical) that will be employed on the project site as well as preparation of a construction sequence schedule for the planned management practices. Construction activities such as this project also require the development of a Stormwater Pollution Prevention Plan (SWPPP) that includes Water Quality and Quantity Control components for the post-development portion of a project. These Water Quality and Quantity Control components of the SWPPP must be developed in conformance with the current NYS Stormwater Management Design Manual and may include permanent stormwater management practices that will be installed and maintained on a site.

As further explained in Response 4-4, nearly all stormwater runoff from the developed portions of the site drain away from Furnace Brook Lake, thus no significant effects on water quality in Furnace Dock Lake would be expected. Likewise, given the level of treatment required by NYSDEC for the project under the General Permit for all runoff leaving the project site and ultimately flowing in Furnace Brook, no significant effects on water quality in Furnace Brook would be expected.

Comment 4-7 (Letter #5, Arthur Rich, November 14, 2003): The wetlands and the buffers will, at the least, be negatively impacted. At worst, they will be destroyed by the downhill stormwater runoff containing lawn herbicides, pesticides and fertilizers.

Response 4-7: *The project plan minimizes direct disturbances to wetlands and wetland buffers by avoiding such disturbance as much as possible, although some wetlands and buffers will be lost due to construction for the proposed roads. The plan provides that for any areas where wetland buffers are being temporarily disturbed by construction such as for drainage and utility lines, the hydrology and vegetation will be restored and stabilized so that those buffers will continue to provide protection to the adjoining wetlands. Buffer restoration and stabilization will include fine grading to restore runoff patterns, seeding and mulching to stabilize the soil, and monitoring and management of the seeded area to ensure success of the buffer restoration. Disturbed areas proposed for utility easements will be allowed to revert to meadow with no use of maintenance chemicals. Refer to DEIS Table 3.2-7 for a review of anticipated wetland impacts and the Town of Cortlandt wetland permit criteria, that further describes efforts to minimize or avoid wetland and buffer impacts.*

In many cases, wetland buffers fall entirely within the open space areas or areas protected through deed restrictions or conservation easements. On lots where encroachment into the buffer is possible by the future homeowner, conservation easements are proposed that will limit such encroachment to a defined area, thereby preserving a minimum naturally vegetated area of the buffer between the wetland and the lawn area of the house lot. The project plan shows the following minimum vegetated

buffers that will be protected by restrictions or easements: 75 feet on Lot 4, 50 feet on Lots 5, 6 and 7, 45 feet on Lots 8 and 17, 60 feet on Lot 15, and 40 feet on Lot 16. These measurements are taken at the points of minimum dimension between the wetland boundary and the conservation easement line on the respective lots.

Conservation easement boundaries on individual lots will be marked in the field by permanent physical markers consisting of a stone cairn with concrete marker every 50 feet along the easement line. Restrictions on chemical use will be incorporated into the conservation easement documents and in an information package provided by the developer to each new homeowner (see Response 4-4).

Comment 4-8 (Letter #7, Catherine Marsh, November 13, 2003): I also predict that West Nile and other mosquito or tick born diseases will prompt nearby homeowners to use insecticides on their property, including the buffers, and the wetlands.

Response 4-8: *It is not expected that incidental homeowner use of insecticides will result in significant effects on the wetlands or wetland buffers. Sections 179-3 and 179-4 of the Town Code restrict activities within regulated areas, defined as "That area which consists of a wetland, water body or watercourse and its associated buffer area." These restrictions prohibit the direct or indirect use of herbicides, pesticides, and fertilizers, including during the normal maintenance of lawns and gardens, within regulated areas unless a permit is obtained pursuant to § 179-5 of the Code. Restrictions on such use will also be incorporated into the conservation easement documents and in an information package provided by the developer to each new homeowner (see Response 4-4).*

Comment 4-9 (DEIS Public Hearing, Robert Foley, November 5, 2003): The DEIS says that there are no wells on nearby properties, yet this resident has a well. That has to be corrected.

Response 4-9: *It is acknowledged that one water supply well exists on the nearby residential property opposite proposed Lot 13. The well is located approximately 125 feet southwest of the common property line in the vicinity of the existing driveway. Protective measures relative to project construction are described in Response 3-2.*

Comment 4-10 (DEIS Public Hearing, Robert Foley, November 5, 2003): In the storm water plan, it wasn't entirely clear to me. You're suggesting the Town is to maintain the basin and two infiltration trenches, yet all the other dry wells are going to be maintained privately. I don't see how that is a really workable storm water plan for the subdivision.

Response 4-10: *The stormwater management facilities accommodating runoff from the roads will be offered for dedication to the Town. Ownership and responsibility for maintenance of the stormwater systems will remain the project developer's until these facilities are accepted by the Town. Thereafter, operation and maintenance of facilities that are located either in the dedicated road rights-of-way or in utility easements will be the responsibility of the Town, as is typical in almost all major subdivisions in the town. Such facilities include the proposed water quality basin and two subsurface detention galleys. The project plans show the right-of-way lines and easement lines within which these facilities are located to allow Town access and control. The Town may require a drainage district for the future residents to pay for the maintenance and upkeep of the proposed drainage systems. Maintenance of dry wells and infiltration devices on*

individual house lots, which will accept runoff from the lot improvements, will be the responsibility of the individual property owners upon sale of the lot. Generally, these underground devices rarely require maintenance.

An alternative for maintenance of the water quality basin and two subsurface detention galleys is a maintenance agreement between the homeowners.

Comment 4-11 (DEIS Public Hearing, Robert Foley, November 5, 2003): You said that you could not test for coliform bacteria in the stream. Why not, that's a test you can buy over the counter.

Response 4-11: *The Scope for the DEIS lists analysis of fecal coliform bacteria as part of a pollutant loading analysis for the project. This requirement was based on the former permitting requirements of NYSDEC that necessitated calculating pollutant loading for particular chemical constituents in runoff from a project as part of its SPDES permit review (although the NYSDEC's guidance Reducing the Impacts of Stormwater Runoff from New Development indicated a lack of data to support its method for estimating fecal coliform). This methodology was abandoned with the adoption of the new, more sophisticated stormwater requirements that rely on implementation of practical and specific stormwater management measures that have proven to be effective in meeting the Phase II objectives of the Clean Water Act. The new requirements are presented in the New York State Stormwater Management Design Manual.*

This project is designed to comply with all Phase II requirements for stormwater management and a SPDES permit will be required from NYSDEC based on its conformance with the Design Manual.

The Scope does not call for testing for or measuring coliform bacteria in the stream.

Comment 4-12 (Letter #10, Bob Milano, January 3, 2004): The property has a robust stream running through it which empties into the marshland of Oscawana, which in turn empties into the Hudson River. It is also my understanding that there are fresh water wells of neighboring houses located adjacent to the property line of the property in question. Obviously the wholesale destruction of trees, erosion of soil and use of pesticides for lawns, etc., that accompany a large housing development will have a negative effect on the surface water and the water resident in the water table.

Response 4-12: *The stormwater management plan designed for this project is required to provide both water quality treatment and water quantity controls in conformance with NYSDEC regulations and the conditions of the stormwater discharge (SPDES) General Permit GP-02-01 that will be necessary to build the project. Adherence to these requirements will minimize or avoid adverse affects on downstream waters and groundwater. Low density development of this nature has occurred throughout the region without adversely impacting groundwater quality. Moreover, there will be no discharge of domestic sewage on the subject site, further limiting impacts to the groundwater conditioning. A tree preservation plan will avoid wholesale destruction of trees on the property.*

5.0 ECOLOGY COMMENTS AND RESPONSES

Note that lot numbers indicated on the current subdivision plan differ from numbers referred to in the comments on the DEIS plan. A comparative table is provided in FEIS Section 1.0.

Comment 5-1 (Letter #1, Jeanne Romeu, October 13, 2003): Wildlife: The DEIS report on p. 3.4-6 mentions the Furnace Dock site is surrounded by a "highly" urbanized landscape", and therefore "the diversity and abundance of animal species is likely limited". If you read this paragraph, you will notice ambiguous words such as "animal species is likely limited", "contiguous blocks of habitat or several unique habitat types are probably uncommon", "The most abundant species are likely those which utilize relatively smaller patches of habit." This section of the report proves assumption was reported, not investigative nor raw scientific data or effort. How? First, p. 3.4-10 states "Due to the linear nature of the site and the limited number of access points, a truly random sampling design could not be used effectively." Secondly, this is proved by the reported sightings of animals. There is an extremely healthy and diverse population of all kinds of species, many of which were not reported because I do walk by this areas and I see many different species of birds, and reptiles, including turtles all the time - none of which were reported in this report. How could you have wetland areas, such as streams, lakes and ponds, and not see turtles or salamanders?

***Response 5-1:** The DEIS contains the results of the wildlife studies conducted by the applicant's environmental consultants and the Town's biodiversity consultant. These studies provide detailed information about the ecological resources on the project site and surrounding area available or discovered during the periods of investigation for the DEIS and scientifically characterize the site's biodiversity conditions. The herpetological survey conducted by Steve Coleman, this Town's consultant, identified eight species of amphibians and reptiles, and concluded that the biodiversity for this site was "very low for the size of this parcel".*

Comment 5-2 (Letter #1, Jeanne Romeu, October 13, 2003): The bird sighting list only shows 11 species that were seen at the site. On any given day, I have at least 14 different species at my bird feeder (I live across the road from the site), so there must be scores of many different species in that site. The table "Known or Expected Birds and Their Habitat Associations" on page 3.4-13 doesn't even list some species of birds that I get at my feeder or that I see walking by, such as red-bellied woodpeckers, cowbirds, Baltimore orioles, and cedar waxwings.

The DEIS described a "highly urbanized landscape which surrounds the property". The report downplayed the significant wooded areas nearby to justify the minimalized numbers of species and wildlife present. Here, again, this report grossly underreports the hundreds of wooded acres right nearby and adjacent to the site, such as Furnace Brook Lake, Wildlife Sanctuary of approximately 150 acres across Furnace Dock Road; nearby Graff Wildlife Sanctuary of over 40 acres, and then you have Oscawana Park owned by Westchester County; not to mention the abundance of wooded areas surrounding this site along Furnace Dock Road, and nearby W. Mt. Airy. That is why there is more diverse and wildlife in this area.

***Response 5-2:** As the commentor notes, there are extended areas of wildlife habitat areas in the general vicinity of the project site that support a diversity of wildlife species, while the existing development (the DEIS misnomer "highly urbanized landscape") in the project vicinity interrupts continuous blocks of natural habitat. The developed characteristic of the local landscape results in species being present that include those*

that utilize smaller patches of habitat and are tolerant of nearby human activity. Based on the wildlife surveys conducted on the project site by the applicant's environmental consultants and the Town's biodiversity consultant, the existing habitat at the project site was found to support a limited diversity of wildlife species. This has generally been confirmed by Planning Board visits to the subject site. There is a difference between the conditions that exist naturally on the property and that which exists at a "feeding station," where an abundant concentrated food source can be found. It is not reasonable to assume a correlation between the two.

Comment 5-3 (Letter #1, Jeanne Romeu, October 13, 2003): Tree Decimation: Somewhere in the report an estimated 670± trees will be decimated. I'm not sure if this count is only pertaining to trees over 12" in diameter, but I wanted to compare that a proposed building of a 3-car garage with driveway in a wooded area nearby may destroy approx. 50-60 trees, overall - all different diameters (my estimate). The Furnace Dock Road project with the projected homes, lawns, roads, driveways, etc. will probably destroy thousands of trees of all sizes and widths.

Response 5-3: *The DEIS Tree Survey identifies existing trees over 12" trunk diameter on the project site pursuant to the adopted DEIS scope. The DEIS identifies approximately 647 of these trees to be removed for the development as proposed. There will undoubtedly be additional smaller trees removed for the project.*

The Tree Plan for this project has not been finalized to show the limit of construction disturbance and the exact identification of trees to remain and trees to be removed, pending the selection of the Planning Board's preferred plan. The number of trees to be removed to implement either the 18 lot plan or the 17 lot alternative is expected to be less than the number identified in the DEIS due to the reduction in disturbed area. The Tree Plan will be completed for submission as part of the final site plan package and will be used in the field for staking the limit of disturbance line before construction can commence.

Comment 5-4 (Letter #2, Jeanne Romeu, October 25, 2003): I have looked at the DEIS in the Planning office, and am quite concerned at the number of lots which will be built on wetland buffer open space which is in an area, I believe, the Town of Cortlandt has recognized in their biodiversity report as a sensitive ecosystem. If you please refer to the DEIS Report Map Figure 3.2-8 "Proposed Stormwater Management Facilities", you'll see the wetland area and buffer spaces, with the footprints of the proposed lots. House lot numbers 1, 5, 6, 7, 8, 10, 11, 20, 21, 22 and 23 show the homes built right up against the wetland buffer zone open space, and lots #12, 15, 16, 19, 21 encroaching on it.

Response 5-4: *There are no houses or driveways in the current 18-lot plan proposed for this project located in a wetland or wetland buffer. Additionally, revisions to the plan provide that lawn areas for all lots will not encroach into regulated 100' wetland buffers. There are, however, portions of Lots 5 and 6 that will have temporary buffer disturbance for utility construction that will be restored with grassy vegetation. The proposed road and utility lines will cross Furnace Brook and its adjacent wetland and buffer, and the road will eliminate a portion of wetland and its buffer at the center of the site. A number of house lots include area of wetland buffer within their boundaries, although all of these lots also include conservation easements to provide permanent protection to all or portions of the buffer. The easement boundaries on private lots will be marked by permanent physical markers.*

Several lots include portions of wetland (10% of the on-site wetland area is on house lots). This is a fairly common condition in the town. As this is an open space plan designed to preserve the most sensitive natural resources of the property, the majority of the on-site wetlands and buffer is situated within dedicated open space lots.

Inspection of the large scale plans shows that none of the proposed houses will encroach on wetlands or 100' regulated buffers and grading associated with the houses will not encroach into 100' regulated wetland buffers. Wetland buffer areas disturbed by construction and not proposed as road surfaces are to be restored and stabilized with vegetative cover.

It is noted that the Alternative Loop Road Plan includes expanded conservation easement areas with the easement line located a minimum dimension of 50 feet from the edge of existing and created wetlands. The Loop Road Plan also provides permanent protection for areas of upland outside of the wetland buffers that will connect the wetland areas as wildlife corridors. Like the proposed plan, the loop road plan would require a wetland permit to be granted by the Planning Board for disturbances within wetlands and wetland buffers.

Comment 5-5 (Letter #3, Catherine Marsh, October 13, 2003): According to the plans the sewer line will include a 20-foot wide swath.

- It will be within 81 feet of my well.
- It will cross, and unavoidably alter, Wetland C, a wetland which is described in the DEIS as "forested with well developed tree cover".
- It will be located immediately adjacent to an existing stone wall for approximately 310 feet along my property line. All trees will have to be removed for the construction and storm water runoff will further damage the wetland.
- Soil will be compacted by trucks and other heavy equipment necessary for the project under the canopy of trees located on my property. The health of these trees will be adversely affected by this compaction.

Response 5-5: *With redesign of the subdivision plan, the sewer line formerly proposed at the rear of Lots 13, 14 and 15 is no longer proposed.*

Comment 5-6 (DEIS Public Hearing, Arthur Rich, October 7, 2003): My understanding is that the biodiversity study is required to be done for all four seasons, and I don't see any mention of that in the paperwork. It is hard to believe that in an area that has as much wetlands as this there is only one type of snake that they could find, and it's a gardener snake. A little tiny one. There's no mention of the foxes, coyotes, and owls that we see regularly. I question the study in a serious way, not to mention the deer which we all know about.

The New York State Department of Environmental Conservation has criteria for determining significance to a proposed Type 1 or unlisted action. They say that removal or destruction of large quantities of vegetation or fauna, substantial interference to the movement of any resident or migration of fish or wildlife species impact a significant habitat area. It's hard to believe that there wouldn't be a significant impact in that 54 or whatever it is acres considering the layout that they are showing here. I don't see how they can get around this state requirement. There is no mention of it.

Response 5-6: *A Phase I Biodiversity Study was completed by the Town's consultant, Mr. Stephen Coleman, which recommended follow up herpetological and breeding bird surveys. In July 2003, an herpetological and breeding bird survey report was completed, which concluded that there is no further need for additional habitat studies. These ecological reports are included in DEIS Appendix L. All of the above listed species are identified in Chapter 3.4 of the DEIS.*

In accordance with the New York State Environmental Quality Review Act (SEQRA), the proposed development was issued a "Positive Declaration" by the Town of Cortlandt Planning Board, the SEQRA lead agency for this action, which indicates the project has the potential to create one or more significant adverse impacts on ecological resources and, thus, a Draft Environmental Impact Statement must be prepared. A Draft Environmental Impact Statement was adopted by the lead agency and published for public review and comment in full accordance with the SEQRA regulations. This Final Environmental Impact Statement document provides the public comments and responses to those comments.

Comment 5-7 (DEIS Public Hearing, Susan Todd, October 7, 2003): I would like to say something about the biodiversity study that Steve Coleman did. He's an excellent professional I believe. I think what he came back with sort of startled him as well. He didn't find the kind of high quality biodiversity on the site at present that you might expect bordering on the lake and everything. What Steve did recommend, which I think is not really successfully done in this plan, is connections between the different habitats. I see right here three open spaces that are very disconnected from each other which doesn't please me. I believe the only way to get more connections in this area is to really reduce the lot count considerably.

Response 5-7: *The three largest proposed open space lots in the project are connected to significant area of existing open space to the north and east, including Furnace Brook Lake and the ConEd utility corridor. This wooded connection should not be ignored because the undeveloped land is protected from future development by existing town wetland and buffer regulations and the utility use can be expected to remain open space available for wildlife movement.*

While road access into the property necessitates crossing Furnace Brook near the front of the property, a specially-designed culvert structure is proposed that will preserve the wildlife corridor in and near the brook. Additionally, since the road access necessitates a wetland crossing in the center of the site, another specialized culvert structure is proposed at about road Station 11+80 that will also allow a wildlife corridor for small animals between the wetland and land west of the subdivision road.

In addition to the 16.1 acres of proposed open space areas to be dedicated to the Town, the project also proposes 6.4 acres of land that is contiguous to the open space lots and is protected by deed restrictions or conservation easements on private lots that expand the protections afforded to the wetlands and wetland buffers.

Comment 5-8 (DEIS Public Hearing, Thomas Bianchi, October 7, 2003): Page 1-17. Under wetlands it indicates that the applicant proposes to create a total of 0.55 acres of wetlands on the project site. I know there has been a lot of debate as to whether or not creating wetlands is an effective route to ameliorate the action or not. I have a concern with creating wetlands to replace ones that are destroyed.

Response 5-8: *The consultants to the applicant have successfully created wetlands in the Town of Cortlandt (e.g. Cortlandt Town Center and Hollowbrook Golf Course) as*

well as at many other locations in the region. Consistent with other wetland creation mitigation projects approved by the Town, the replacement wetlands would be monitored by the Town and maintained by the applicant at its expense for a period of five years to ensure that the wetlands are successfully established and function as designed. Wetland mitigation is proposed that would replace the impacted wetland area at a two-to-one ratio. FEIS Figure 5-2 presents grading and planting details for the proposed wetland areas, including a list of plants to be naturalized, elevations and square footage for each planting zone.

As described in the DEIS, Wetland B occupies a slight depressional basin. Cover from upper canopy tree species is less than in Wetland A, with the center area of this community largely open to near-full sun. Surface water intermittently creates a small ponded area in this wetland system with maximum water depth of around 6 inches in early spring. However, conditions dry out by late summer as was observed during the fall site visits. Based on its vegetative community and hydrology, major portions of this wetland can best be classified as a shallow emergent marsh. Common winterberry (*Ilex verticillata*) and blueberry (*Vaccinium corymbosum*) shrubs, as well as the herbs sensitive fern (*Onoclea sensibilis*) and royal fern (*Osmunda regalis*), line the periphery of this wetland.

The proposed wetland mitigation plan is intended to expand the size of Wetland B by 0.45 acres, as a 2:1 replacement for wetlands lost to construction of the access road. This will be accomplished by excavating areas adjacent to the delineated wetland so that topography, hydrology and soil conditions replicate those of the adjacent wetland. Plant materials have been chosen that are common to the site and are adaptable to the expected site conditions.

As mentioned above, the majority of Wetland B is open canopy with some standing water and emergent vegetation. The mitigation plan uses herbaceous vegetation species which are known to exist in the transitional zone between the open canopy and shadier woods adjacent to the wetland. Species include sensitive and cinnamon fern, skunk cabbage, softstem bulrush and tussock sedge. Then to complete the transition to the wooded margin, medium and large shrubs are proposed, including viburnum species, highbush blueberry, and dogwood species. A diverse wetland herb seed mix will also be broadcast over the area to ensure diversity of species and development of a plant community that is suited to the ultimate site conditions.

The applicant proposes to monitor the success of the mitigation area for a period of up to five years to ensure that the necessary hydrology is maintained as expected and the plant community reaches defined standards and goals. These goals and the procedure for monitoring of the wetland mitigation area are described in Appendix G, Wetland Mitigation Specification.

The proximity of the mitigation areas to the proposed residences is shown in FEIS Figure 5-1. This figure also shows the limits of a 100-foot buffer as it extends from the boundary of the proposed mitigation areas. As this line does not represent a current regulatory buffer because the wetland creation areas have neither been approved nor constructed, it is not shown on the engineer's site plan.

The expansion of Wetland B will provide additional stormwater storage and flood control, as well as additional available habitat for wetland dependent species. The primary potential impact to wetland function as a result of the proposed wetland crossings is the disruption of surface water flow through the wetland areas, particularly

at the crossing of Wetland A at Furnace Brook. This impact has been mitigated with the bridge design proposed by the applicant, which includes a 16-foot three-sided box culvert spanning the stream channel, and two 10-foot culverts to either side that will convey high intensity storm flows and also allow wildlife passage along the stream corridor. The proposed mitigation area at Wetland B does not directly replace the drainage function of the disturbed wetland areas, but in the applicant's opinion this impact is offset by the design of the stream crossing and the expansion of Wetland B. The proposed mitigation results in a net increase in on-site wetland area and enhancement of habitat function associated with Wetland B.

Comment 5-9 (DEIS Public Hearing, Robert Foley, November 5, 2003): Back to the bridge, if you reconfigured an entrance road utilizing the existing bridge, I believe that a certain percentage of the wetlands would not be disturbed, I think it's about a quarter acre, that Furnace Brook storm water basin area. That would be improved in my opinion. You did eliminate lot 11, as I indicated earlier from the wetland A area. Page 1-4, wetlands B and C, [would be disturbed for] sewer line construction connection. Buffers, again, all concerned about disturbances.

Response 5-9: Access to the site at or adjacent to the existing bridge was determined by the project engineer to be unsafe due to inadequate sight distance on Furnace Dock Road. Access at the location of the existing driveway into the parcel was studied and would directly impact at least 0.93 acres of land in or within 100 feet of the streambank wetland (0.13 acres of wetlands and 0.80 acres of buffer), as compared to 0.60 acres of land in or within 100 feet of the streambank wetland (0.25 acres of wetlands and 0.35 acres of buffer). In addition, placement of the roadway parallel to the stream along the alignment of the existing driveway would create indirect impacts of some 360 lineal feet of impervious surface directly above the stream, as compared to the 48 foot bridge span proposed for the stream crossing. Utilizing the existing access would clearly have a greater impact on the stream than the proposed access.

In the proposed plan, installation of sewer lines will cause temporary disturbances to wetland buffers in two locations. These areas are proposed to be restored with grass cover once the installation is complete and are expected to revert to meadow, thereby restoring the functional benefits of the wetland buffer.

Comment 5-10 (DEIS Public Hearing, Robert Foley, November 5, 2003): Some of the backyards and lawn areas become the buffers. I think there's about two and a quarter acres that go within the hundred foot town regulated wetland buffer areas, roads, driveways, lawns, et cetera.

With the floodplains about half acre, about a half acre would be possibly disturbed even if you had a two-year-old flood plain according to your document. That means you have a road crossing, I believe. With the new impervious surfaces I think the 3.4 acres approximately on the whole site (inaudible) new surfacing.

Response 5-10: The site contains 4.0 acres of wetland and approximately 15.0 acres of land within the 100 foot regulated area. In order to gain access to the site at a safe location as proposed, the access road will disturb 0.6 acres of wetland and wetland buffer.

Grading for the houses and driveways on residential lots shown on the current proposed plan will disturb none of the wetland buffer and no area of wetland. Portions of the utility

easement that crosses Lots 5 and 6 require temporary disturbances within a wetland buffer.

Restricted areas will permanently protect 94 percent of the existing wetland and over 90 percent of the wetland buffer.

Upon completion, with 0.45 acres of added wetland (all of which will be in restricted areas), the site will have 0.23 acres more wetland area than it does at present, along with some 18 additional acres of protected upland open space.

As noted in the DEIS, the proposed bridge is located above the 100 year flood elevation and is designed to safely convey flows in excess of the 100 year storm to avoid potential flooding concerns. Therefore, no significant adverse flood plain impacts are anticipated from the project. The revised plan would slightly reduce impervious surfaces on the site from the DEIS plan.

Comment 5-11 (DEIS Public Hearing, Susan Todd, November 5, 2003): At one point you say that impacting wetland B isn't such a problem because it's just a little appendage of it sticking out and filling that won't hurt, but then you also go on to say that it's important only when there's enough water to inundate it and then it starts to fill at that point, which to me is like saying your hand is not important to your arm because it does serve you at important times when you need it.

Response 5-11: *The subdivision as proposed necessitates filling of a narrow appendage of Wetland B, and as mitigation, proposes expanding Wetland B at other locations at a ratio of greater than two to one. It is expected that these changes will not denigrate the functions of Wetland B in any way given that the plant community structure is to be maintained and the wet area will be expanded in kind by shallow excavation and adjustments to grades to allow additional area to become wet. The results of the mitigation plan will be documented until the wetlands are effectively established during the long-term monitoring program proposed for the project. (Refer to FEIS Appendix G for the Wetland Mitigation Specification.) FEIS Figure 5-2 presents grading and planting details for the proposed wetland areas, including a list of plants to be naturalized, elevations and square footage for each planting zone.*

Comment 5-12 (DEIS Public Hearing, Susan Todd, November 5, 2003): I think the major wetlands impact that I object to is the Furnace Brook, 14.6 percent of the on-site wetlands in that corridor will be disturbed and I find that is too much. This is a FEMA flood plain area, flood plain disturbance is very common in that area and I've seen that stream myself, way high. You're proposing putting not only the bridge but a storm water basin within the buffer of that wetlands area and I object to that and wish that you could find another place or both.

I agree with everyone else that has been talking about moving the bridge and combining it with the existing bridge. The separate crossing I think does not justify the impact.

Response 5-12: *The existing bridge location has inadequate sight distance for traffic on Furnace Dock Road. Use of the existing access would also result in significant disturbance over a larger area adjacent to the stream. The project as proposed would impact a total of 0.22 acres of wetlands. Mitigation is proposed that would replace the impacted wetland at a greater than two to one ratio. The proposed bridge is located above the 100 year flood elevation and is designed to safely convey flows in excess of the 100 year storm to avoid potential flooding concerns. No significant adverse flood plain impacts are anticipated from the project. A stormwater basin is proposed near the*

bridge location since the proposed stormwater drainage system is a gravity system and this is a low point on the property that can treat the runoff from the road. The proposed design will capture and treat of this runoff in conformance with NYSDEC stormwater regulations prior to any discharge to surface waters.

Comment 5-13 (DEIS Public Hearing, Susan Todd, November 5, 2003): The ecological resources section you talk about the clearing of the trees to improve sight distance for the bridge that you're proposing and that I think is - when I looked at the map - there's a lot of trees that you're suggesting removing all in the buffer of the brook.

Response 5-13: *The proposed easement along Furnace Dock Road would require removal of trees to provide safe sight lines at the project entrance. Due to the configuration of Furnace Dock Road, there is no other access point along the site frontage that would avoid tree clearing for this purpose. The trees will be removed while leaving low tree stumps in place to avoid erosion in the stream buffer. All tree stumps will be chipped down to the surrounding ground level so as not to be unsightly. Erosion control measures will be installed for this work and all soils exposed will be seeded and mulched to protect the stream buffer.*

Comment 5-14 (DEIS Public Hearing, Susan Todd, November 5, 2003): There's no mitigation proposed for 2.27 acres of disturbed wetland buffer. That for me does not qualify as mitigation.

Response 5-14: *In the current proposed plan, 1.56 acres of wetland buffer would be disturbed (31% less than the DEIS plan). Of the 1.56, only the portion that would be converted to roadway or bridge abutments would be permanently impacted (some 0.37 acres). The applicant has proposed to convey 16.1 acres of open space land to the Town, as well as create conservation easements on 6.4 additional acres of the project site (totaling 53 percent of the site). These are permanent protective measures intended to prevent further intrusions into wetland buffers. In addition, the applicant proposes to use native plants for landscaping of the disturbed areas within the easements to further mitigate the buffer disturbance. Much of the buffer disturbance is only temporary and therefore the buffer function will remain.*

Comment 5-15 (DEIS Public Hearing, Susan Todd, November 5, 2003): 3.2.4, created wetlands are going to be owned by lots 6, 7 and 8, and that to me raises a lot of maintenance issues. Those are privately owned lots. People can do whatever they want relative to the Town wetland code. Maybe they don't want to have the plants that you're suggesting would be in those wetlands. I think those should be part of the community owned lot or in the land trust.

Response 5-15: *Private ownership of wetland areas is common, and property owners are responsible for adhering to the various federal, state and local laws that regulate use of such areas. The proposed wetland mitigation (FEIS Figures 5-1 and 5-2) is an expansion of an existing wetland area (Wetland "B") and is within areas to be conservation easements. As part of the project plan, the applicant would maintain the proposed mitigation area for five years to ensure that it is fully established and functioning as designed. Beyond that period, further maintenance should not be required as it will function as a natural system. A conservation easement is proposed to protect the created wetlands. The encumbrances created by the conservation easement and created wetland boundaries will be described on the deed and shown on the approved plat. In addition, permanent markers will be placed at the site to mark the conservation easement boundaries to facilitate monitoring of the wetland mitigation area*

by the homeowners association and the Town. The easement boundaries on private lots will be marked by permanent physical markers.

Comment 5-16 (DEIS Public Hearing, Susan Todd, November 5, 2003): You found high pH in Furnace Dock and in conductivity values suggesting the possibly of anthropogenic pollution, which I guess means human pollution, and they found a pipe outflow from under Furnace Dock Road. I would like to go out and look at that pipe. It's pretty clear that there is something going on in that pipe. I would like more description of the macro-invertebrates that may be found in the stream. There are a lot of caddis flies, mayflies and hellgrammites. I don't know enough to know whether that's significant. To me that would seem that the stream is fairly healthy despite this pollution.

Response 5-16: *There is an existing pipe outlet at the stream. This discharges water from unknown sources along Furnace Dock Road. While this outlet may affect stream water quality to some extent (such a determination was not a subject of the DEIS studies), the populations of macro invertebrates identified within Furnace Brook are positive indications of the ecological health and water quality of Furnace Brook.*

Many stream invertebrates are insect larvae. While such macro invertebrates as dragonflies, mayflies, black flies, stoneflies, and caddis flies spend the adult stage of their lives on land and in the air, all of these insects spend the larval and some the pupal stage of their lives totally underwater. They have special adaptations, including gills, as larvae to help them live underwater. Other stream macro invertebrates live their entire life underwater. These include crustaceans such as crayfish, scuds, and sowbugs; arachnids such as water mites; mollusks such as snails, clams, and mussels; and worms such as leeches, flatworms, and aquatic earthworms.

Certain macro invertebrates are sensitive to pollution and can survive only in clean or slightly polluted water. Others can live in clean water or water with a moderate level of pollution. Still others are tolerant of pollution and can live in any water condition, even heavily polluted water. A clean, healthy stream ecosystem will have many sensitive organisms as well as somewhat sensitive and tolerant ones. The unpolluted stream ecosystem will likely exhibit biodiversity, meaning a great variety of organisms will be found. A stream in fair condition with some pollution will have more tolerant organisms but also some somewhat sensitive and a few sensitive species. A polluted stream ecosystem will have mostly tolerant organisms and a few somewhat sensitive ones. The polluted stream will not exhibit much biodiversity, because fewer organisms are able to survive in its poor conditions.

As indicated in the table below, many of the macro invertebrates identified within Furnace Brook are sensitive to pollution, which are positive indications of the ecological health and water quality of Furnace Brook.

Table 5-1 Information about Macro Invertebrates Found in Furnace Brook					
Common Name	Taxon	Sensitivity to Pollution	What it eats	Life cycle Notes	Importance in Ecosystem
True fly	Diptera (Chironomidae)	Variable	Highly Variable	- Variable life span. - In water as egg, larva, and pupa. - Adults live on land/air.	- Eaten by fish, amphibians, and birds.
Aquatic worms	Annelida	Tolerant	Omnivore	- Lives a few weeks. - Spends whole life in water.	- Eaten by fish.
Sow bug	Isopoda	Somewhat Tolerant	Omnivore	- Variable life span. - In water as egg, larva, and pupa. - Adults live on land/air.	- Eaten by invertebrates and vertebrates.
Caddisflies	Trichoptera (Hydropsychidae)	Sensitive	Omnivore	- Lives 0.5- 2 years - In water as egg, larva, and pupa. - Adults lives on land/air. - Female lays up to 800 eggs.	- Adults eaten by birds. - Larva eaten by carnivorous stream macro invertebrates. - Their shredding helps break things down and makes small pieces for smaller animals.
Mayflies	Ephemeroptera	Sensitive	Herbivore & Detritivore	- Lives 1 year - In water as egg, larva, and pupa. - Adults live on land/air.	- Eaten by fish and carnivorous stream macro invertebrates.
Hellgrammites	Megaloptera (Corydalidae)	Sensitive	Carnivore	- Lives 1-3 year - In water as egg and larva. - Pupa and adults live on land.	- Eaten by fish and crayfish.
Crayfish	Decapoda	Somewhat Sensitive	Omnivore	- Lives 2-8 years. - Spends whole life in water.	- Eaten by fish, snakes, raccoons and people.
Water beetle	Coleoptera	Variable	Carnivore	- Variable	- Eaten by fish, amphibians, and birds.
Leech	Annelida	Tolerant	Carnivore	- Lives up to 15 years. - Spends whole life in water. - Hibernates in mud in winter.	- Eaten by fish, newts, salamanders, snakes and birds.
Stoneflies	Plecoptera (Perlidae)	Sensitive	Carnivore	- Lives 1- 3 years. - In water as egg, larva, and pupa. - Adults live on land/air.	- Eaten by ducks, fish and carnivorous stream macro invertebrates.

Comment 5-17 (Letter #9, Ed Vergano and Ken Verschoor, November 20, 2003): It is recommended that the proposed lots be redesigned to remove proposed lawn areas and other disturbance from wetland buffer areas on the subject property.

***Response 5-17:** The applicant has designed the project plan to minimize direct impacts to wetland buffers by reducing lawn areas, while depicting the tree clearing and site disturbance that the applicant expects to be necessary to construct each lot. The extent of grading disturbance necessary to construct the improvements on each lot and the new lawns established to stabilize the disturbed area is depicted on the engineer's plans by a tree line symbol and encompasses the area of disturbance impact represented in this FEIS. In the current proposed plan, 1.56 acres of wetland buffer would be disturbed (31% less than the DEIS plan), of which 0.37 acres would be permanently displaced by paving. The plan provides that any areas where wetland buffers are being disturbed by construction other than pavement will be restored with permanent vegetation and stabilized so that those buffers will continue to provide protection to the adjoining wetlands. House Lots 4, 5, 6, 15 and 16 and open space lots A, B and D will have grassed areas located within a wetland buffer, all instances of which are associated with the roadway corridor or utility facility. There are no house lots shown on the revised plan with lawns associated with the houses located within a buffer. Another revision to the DEIS plan is that the proposed stormwater basin has been relocated outside of the stream buffer. On lots where encroachment into the buffer is possible by the future homeowner, conservation easements are proposed that will limit such encroachment to a defined area, thereby preserving a minimum naturally vegetated area of the 100' regulated buffer between the wetland and the lawn area of the house lot. Refer to Responses 4-7 and 5-4.*

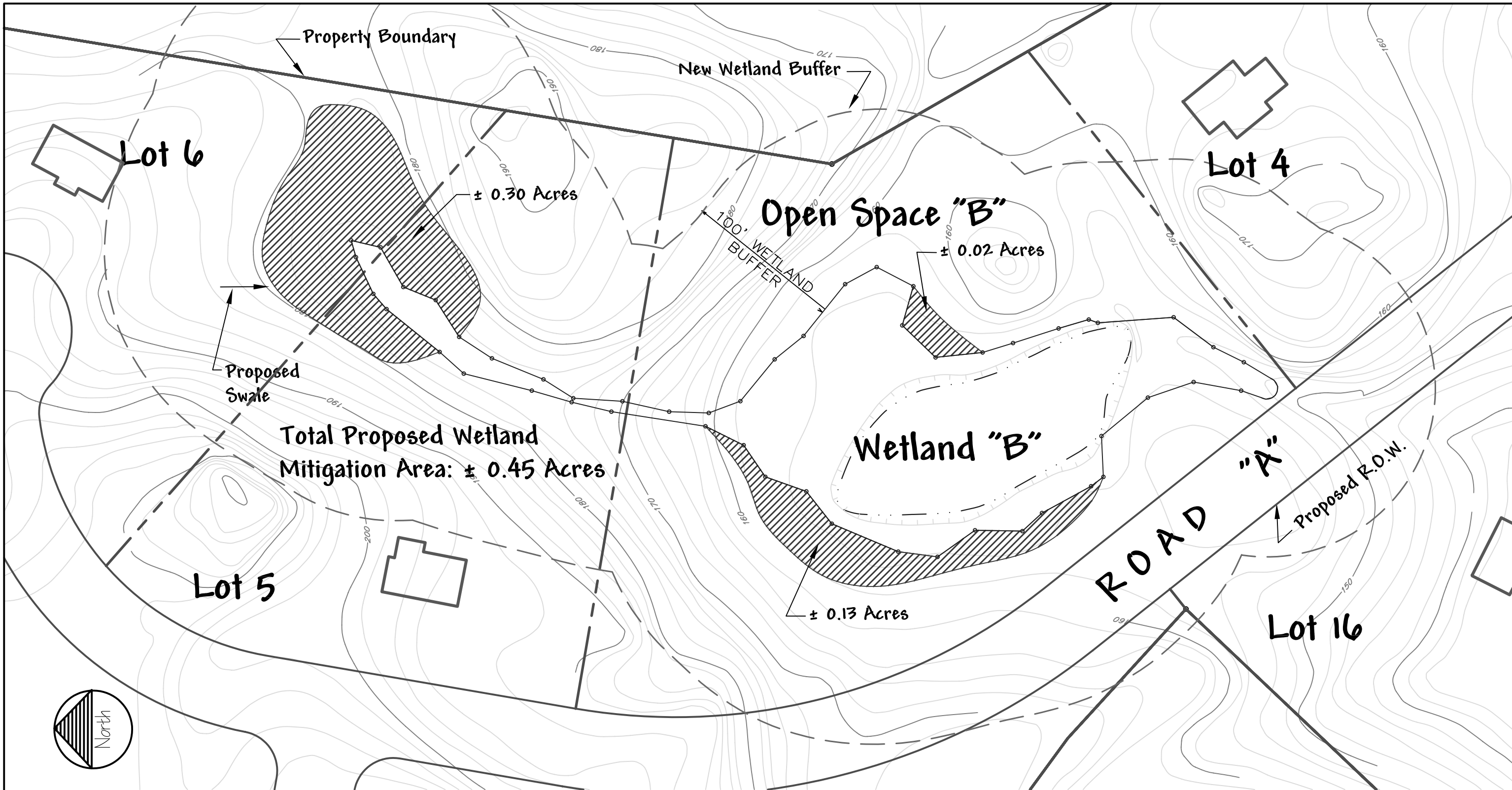
Comment 5-18 (Letter #10, Bob Milano, January 3, 2004): The property in question is an environmentally sensitive habitat. Just some of the animals that live and nest on this property are Pileated Woodpeckers, turtles, Wild turkey, Great Horned Owls, Carolina Wrens, and Red-bellied Woodpeckers just to mention a few, in addition to the more common wildlife. Coyote and fox have also been seen in the area.

***Response 5-18:** The ecological resources at the site have been studied by the applicant's environmental consultant and the Town's biodiversity consultant. Based on the results of these studies, the proposed development is not expected to create significant adverse ecological impacts. While development of this site will result in the loss of some wildlife habitat, the areas proposed to remain undisturbed, in connection with adjoining wooded lands, will continue to provide habitat for these non-endangered species.*

Comment 5-19 (Letter #9, Ed Vergano and Ken Verschoor, November 20, 2003): The Town Wetland Consultant for this application should review the proposed subdivision to further advise the Planning Board.

***Response 5-19:** Mr. Stephen Coleman has reviewed the proposed 18-lot subdivision plan, an 18-lot alternative loop road plan, the recommendations of Dr. Klemens, and the draft responses in the FEIS. In response to Mr. Coleman's December 2005 comments (included in FEIS Appendix A), the applicant has revised its initial 18-lot loop road plan with regard to natural connections between wetlands. The revised 17-lot Alternative Loop Road Plan is presented in Chapter 9.0 of this FEIS. Particular elements of the loop road plan reflect specific recommendations of Mr. Coleman with regard to preserving*

wildlife corridors and limiting fragmentation of regional habitat. These elements are listed in FEIS Section 1.2.



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
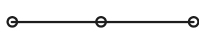

-  Proposed Mitigation Areas
-  Wetland B Boundaries
-  Proposed Lot Lines

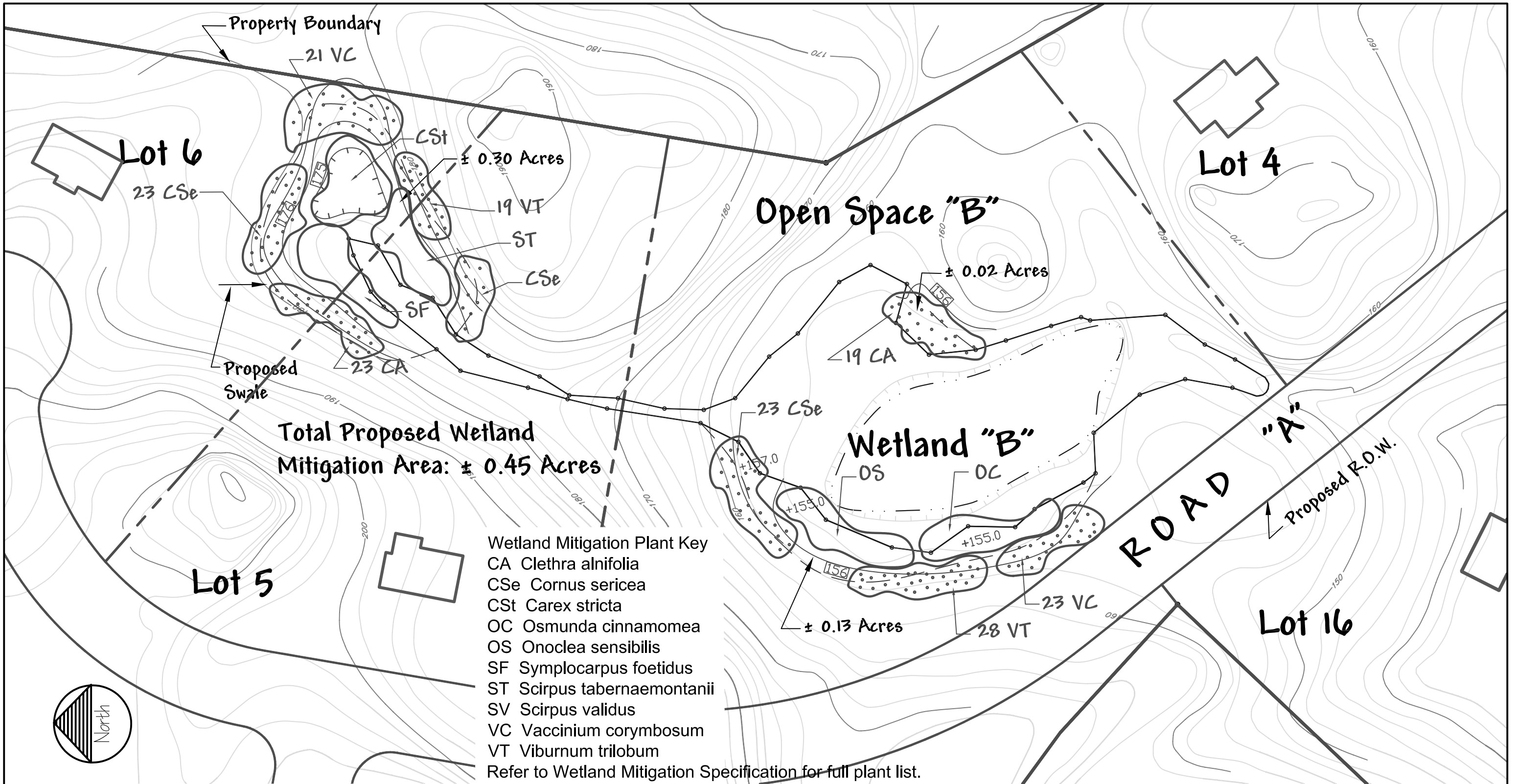
Figure 5-1: Conceptual Location for Wetland Mitigation Areas

Furnace Dock Subdivision

Town of Cortlandt, Westchester County, New York

Base Map: Ralph G. Mastromonaco, PE, PC.

Scale: 1" = 60'



Total Proposed Wetland Mitigation Area: ± 0.45 Acres

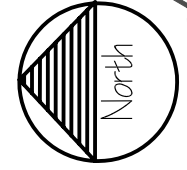
Wetland Mitigation Plant Key

- CA Clethra alnifolia
- CSe Cornus sericea
- CSt Carex stricta
- OC Osmunda cinnamomea
- OS Onoclea sensibilis
- SF Symplocarpus foetidus
- ST Scirpus tabernaemontanii
- SV Scirpus validus
- VC Vaccinium corymbosum
- VT Viburnum trilobum

Refer to Wetland Mitigation Specification for full plant list.

Legend

- Proposed Mitigation Planting
- Wetland B Boundaries
- Proposed Lot Lines



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Figure 5-2: Conceptual Wetland Planting Plan
 Furnace Dock Subdivision
 Town of Cortlandt, Westchester County, New York
 Base Map: Ralph G. Mastromonaco, PE, PC.
 Scale: 1" = 60'

6.0 TRAFFIC COMMENTS AND RESPONSES

Comment 6-1 (Letter #1, Jeanne Romeu, October 13, 2003): Traffic and traffic signal: I believe the increased traffic the DEIS report mentions resulting from this subdivision has been greatly understated, but it states another "benefit" (p. 2-3) will be "helping to mitigate traffic congestion by contributing to the future signalization of Furnace Dock Road and 9A". There has never been a traffic congestion problem at that intersection and I was unaware we were having a problem by not having a signal there.

Response 6.1: *Based on actual turning movement counts and level of service calculations, traffic during the AM peak hour currently operates at a level of service F at the intersection of Furnace Dock Road and Route 9A. This means the delay for vehicles waiting to turn from Furnace Dock Road onto Route 9A is longer than the Institute of Transportation Engineers has identified as an acceptable delay (<35 seconds) for an unsignalized intersection. This poor level of service condition exists during the AM peak hour of traffic, although vehicles traveling through this intersection during other times of the day may be unaware of this condition.*

Comment 6-2 (DEIS Public Hearing, Catherine Marsh, October 7, 2003): I had some concerns about traffic. When I looked at the DEIS, they talked about the number of trips that would be made in a day, and they talked about how many would come out in the morning - 28 trips during the morning peaks and 32 in the evening. Checking around with some other towns and some other projections what I have learned is that the average household makes 12 trips a day; six in and six out. That seems to be the standard used in many of the other towns in Westchester. I question the number that they have here for the housing and the number of people that are going to be living there. If they are saying there are only going to be 21 in school and the rest are going to be under five or over 18, it seems we have a lot more drivers, and a lot more cars, and a lot more trips than are accounted for in the DEIS.

Response 6.2: *The number of trips generated by single family homes were projected using the Institute of Transportation Engineer's Trip Generation manual, which is the standard reference for traffic studies based on surveys of actual traffic generation. While most traffic occurs outside of the two peak hours, the peak hours are evaluated as a maximum impact situation. Intersection and signal designs are predicated on peak hour conditions. If operating conditions on the area roadways are acceptable during the peak hours of use, conditions at other times should be acceptable.*

Trip Generation (ITE 7th Ed., 2003) identifies 11.58 trips per unit are made during the day. This number includes trips made by households as well as by services typically used by the households, such as delivery, repair and maintenance services.

The 2000 census data for the Town of Cortlandt indicate there is an average of 1.316 commuters per dwelling unit (excludes the unemployed and those working at home). The census data indicate 35 percent of workers leave in the AM peak hour. Thus, in this project 11 commuter trips would be expected during the AM peak ($23 \times 1.316 \times 0.35 = 10.59$). Over the day commuter trips would account for about 23 percent of all trips.

Comment 6-3 (Letter #5, Arthur Rich, November 14, 2003): By virtue of a 2000 foot road with no sidewalks for walking, (constructed through wetlands, rock outcroppings and buffers) the future residents will be required to drive for every errand. Small children will have to use their bikes on the sole roadway. Emergency access and egress for the entire development is

dependent on this single road which can easily become blocked by a woodland fire, downed tree or flooded stream overflowing its banks onto the roadway.

Response 6.3: *The Furnace Dock development has been designed by the project engineer to comply with all of the provisions of the Town Subdivision Regulations (§265 of the Town Code), except that the proposed plan includes a ±2,000-foot long dead-end road. The proposed road width is consistent with Town standards for a two-way public road consistent with practically all other subdivision roads approved by the Planning Board in the Town of Cortlandt. The standard road width has proven to accommodate normal traffic flow and access for emergency services without a problem in the Town. In addition, the road design will incorporate stabilized shoulders in several sections and mountable curbs over its length that will allow for vehicles to circulate past a roadway obstruction, if needed in the event of an emergency. The stabilized road shoulder would consist of a 50 foot long by 12 foot wide strip of concrete grass pavers along the shoulder of Road 'A' at stations 3+50 and 11+00. Given the irregular configuration of the property and the existing topographic features of this site (wetlands, slopes, and the stream corridor that crosses its entire frontage), and the fact that all land surrounding this property has been developed, a dead end street design appears to be the only option for access to a public street. Thus, the applicant believes that this represents an exceptional situation as provided for in §265-17(F) of the Cortlandt Town Code.*

A provision for a potential future road connection is shown on the current subdivision plan in the vicinity of road Station 13+50, which would connect to a private drive. Such a connection appears to be possible (grade-wise) to the nearby private roadway, and would then create a second means of emergency access to the interior of the project site as well as provide the same benefit to the adjoining properties with sole access from the private drive. It is noted that a future secondary road access may not occur since the adjacent property is currently developed with private driveway access to Route 9A

Comment 6-4 (Letter #6, Gertrude Bush, November 14, 2003): The plan does not portray a realistic accounting of the potential traffic entering or leaving Furnace Dock Road. The proposed entrance, as well as the entrance from Furnace Dock onto 9A, are dangerous.

Response 6.4: *The access to the Furnace Dock subdivision is proposed at a point on Furnace Dock Road that will provide the safest means of access into the site. Clear sight lines looking east and west from the new street intersection will be approximately 400 feet in either direction on Furnace Dock Road. A sight distance easement is proposed to the east to achieve a clear sight line.*

The posted speed limit on Furnace Dock Road in the area of the proposed site access is 30 miles per hour. To assess conditions on Furnace Dock Road, a survey of actual operating speeds along Furnace Dock Road in the area of the project was conducted on April 16, 2003. The 85th percentile operating speed was recorded as approximately 42 miles per hour.

As described in the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets 2004, each intersection has the potential for several different types of vehicular conflicts. The possibility of these conflicts occurring can be greatly reduced through the provision of proper sight distance and appropriate traffic controls. Sight distance is the length of the road visible to the vehicle driver.

According to AASHTO, stopping sight distance is the minimum distance a vehicle needs to stop to avoid a collision with another vehicle entering or exiting a road. Stopping sight distance is provided along roadways and at intersection approaches to allow drivers sufficient time to stop. Stopping sight distance is the minimum amount of sight distance necessary and as such is fundamental to traffic operations.

AASHTO defines intersection sight distance as the sight distance desirable to enhance traffic operations. Intersection sight distance provides an additional margin of safety beyond stopping sight distance.

AASHTO states “Sight distance is provided at intersections to allow the drivers of stopped vehicles a sufficient view of the intersection roadway to decide when to enter the intersecting roadway or to cross it. If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. However, in some cases, this may require a major road vehicle to stop or slow to accommodate the maneuver by a minor road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road.”

Table 6-1 below lists both stopping sight distance and intersection sight distances recommended by AASHTO for various speeds. The New York State Department of Transportation relies on the AASHTO standards for their Policy and Standards for Design of Entrances to State Highways.

Sight distance is measured from a point a minimum of 14.5 feet from the edge of pavement and at driver eye level, 3.5 feet off the ground.

Table 6-1 AASHTO Recommended Sight Distances		
Speed (in miles/hour)	Stopping Sight Distance	Intersection Sight Distance*
25	155 Feet	280 Feet
30	200 Feet	335 Feet
35	250 Feet	390 Feet
40	305 Feet	445 Feet
45	360 Feet	500 Feet
50	425 Feet	555 Feet
55	495 Feet	610 Feet

*Values listed are for left turns at grades of 3 percent or less.

A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, 5th ed., 2004.
New York State Department of Transportation Policy and Standards for the Design of Entrances to State Highways, November 24, 2003

The recommended intersection sight distance, according to AASHTO, for the posted speed limit of 30 miles per hour is 335 feet. The recommended stopping sight distance according to AASHTO, for up to 45 miles per hour is 360 feet. Thus, clear sight lines of 400 feet from the new road in either direction meet the minimum stopping sight distance for the prevailing operating speed of 42 miles per hour and meet the recommended intersection sight distance for the posted speed limit of 30 miles per hour. Thus, the location of the proposed roadway meets the AASHTO recommendations for safe operating conditions.

Conditions at the intersection of Furnace Dock Road and Route 9A are not the result of limited sight distance, but instead are a result of inadequate gaps in the through traffic during the AM peak hour of traffic. Signalization of this intersection will improve this situation, as the intersection meets NYSDOT signal warrants. The applicant for Furnace Dock subdivision proposes to contribute a fair share of the cost of signalization. The NYSDOT is responsible for the operation and maintenance of NYS Route 9A, and would ultimately be responsible for installing a traffic signal at this location if warranted. Since future traffic at this location would be affected by other development in addition to this project, the applicant's contribution would assist the Town of Cortlandt in its future coordination with NYSDOT for the signal installation.

Comment 6-5 (DEIS Public Hearing, Robert Foley, November 5, 2003): On the traffic, I also wondered about the number of trips, 28 peak AM, and 32 peak PM. We have 24 homes with three or four bedrooms; that number doesn't seem realistic. On page 1-7, you mention about a problem, in your traffic statistics here, the turning movement problem bringing the level of service down to F. Existing conditions would be the same even with the building of 24 homes. I would think it would be possibly more. There is no level below F.

Response 6.5: *The trip generation rates are based upon the industry standard ITE rates, and represent the number of trips during the peak hour only. The published data in ITE Trip Generation provides the multipliers per household used to project the number of peak hour trips, based on actual counts conducted at a sampling of residential developments and is the accepted source for these data by NYSDOT.*

Besides level of service, there are other measures presented in the traffic study to evaluate intersection operations. These are: vehicle delay, the amount of time a vehicle has to wait until it can move; and vehicle-to-capacity ratio, the projected number of vehicles versus the vehicular capacity of the roadway. These are also addressed in the DEIS traffic study.

Comment 6-6 (DEIS Public Hearing, Robert Foley, November 5, 2003): On the construction truck traffic; I know you referred to it on page 3.5-17, that the only construction truck traffic would come from 9A and up Furnace Dock Road, there wouldn't be any movement of construction vehicles on the rest of Furnace Dock Road or on Mount Airy Road. I would hope not.

Response 6.6: *Based upon the road widths and the horizontal curves in Furnace Dock Road, it is reasonable to expect that construction traffic would be routed to the site via Route 9A for safer and more efficient travel.*

Comment 6-7 (DEIS Public Hearing, Susan Todd, November 5, 2003): What is the sight distance that you're proposing now?

Response 6.7: *The sight distance from the location of the proposed access road onto Furnace Dock Road is approximately 400 feet looking to the west, and 400 feet looking east. A sight distance easement is proposed to provide for maintenance of the sight distance looking east. Refer to Response 6-4.*

7.0 COMMUNITY SERVICES COMMENTS AND RESPONSES

Comment 7-1 (Letter #1, Jeanne Romeu, October 13, 2003): 7-1a: Tax Revenue: As I stated at the public hearing, one of the reported "benefits" (p2-3) in this DEIS report the proposed subdivision will bring is increased tax revenue. I am sure with 24 homes on a 42 acre parcel, the \$77,000 in town tax income will not be sufficient to meet the needs of lighting, garbage and recycle collection, sewage and street repair, road maintenance, winter sanding, salting and snow plowing, lighting, police protection, etc. ...

Response 7-1a: *The Furnace Dock Subdivision is projected in the DEIS to increase the population of Cortlandt by 66 persons. The annual per capita property tax levy for municipal services is projected to be \$598. This figure was adjusted to reflect the portion of the tax base attributable to residential uses (58%) to arrive at the annual residential cost per capita property tax levy for municipal services. Thus, residential costs payable through the property tax which are expected from Furnace Dock Subdivision are projected to total \$22,642 per year.*

The cost to the Town of Cortlandt (without adjusting the per capita cost of \$598 by 58% as above) would be \$39,020. Total taxes generated to the Town are projected to be \$41,915, \$6,101 of which are paid in general Town of Cortlandt taxes and \$35,814 of which are paid in Town Highway taxes. On balance, the proposed project is likely to generate revenues to the Town of Cortlandt that exceed the cost to the Town by about \$19,273. Without the adjustment to the percentage attributable to residential uses, there would still be a surplus in revenue of approximately \$2,897.

Comment 7-1b: The increase in school-age children (where they get only 21, I don't know - 3-5 bedrooms x 24 = approx. 75-150 bedrooms = lots of children), with only \$191,000(?) in school taxes a year will not be enough to cover additional teachers, services such as books, lunches, supplies, school bus transportation, etc. At present the parcel now brings in a total of over \$19,000 in town and school tax revenue, which the Town gets to keep all of it free and clear without expenses. Benefit? I believe if this subdivision is built, the Town will be subsidizing this development.

Response 7-1b: *The 2000 US Census data indicates the average household size in the North Westchester County area is 2.8 persons per household. The 2000 Census also indicates the average family size in the Town of Cortlandt to be 3.3 persons.*

The population projection for the Furnace Dock subdivision is based on demographic information for the "single-family" housing type for the northeastern United States derived from the 1987 American Housing Survey and reported in the Development Impact Assessment Handbook published by the Urban Land Institute in 1994. This publication was authored by the most noted practitioners of fiscal impact analysis in the United States -- Robert W. Burchell, David Listokin, and William R. Dolphin of Rutgers University's Center for Urban Policy Research. In 1994, the demographic multiplier for a four bedroom house in the northeast region of the United States was 3.63 persons per household. This is slightly higher than the 2000 US Census data for average family size for the Town of Cortlandt as used in the DEIS, and thus provides a conservative multiplier to project a maximum impact scenario.

For 18 four-bedroom units in the proposed single family homes, this residential subdivision is projected to add 66 persons to the Town's population (24% less than shown in the DEIS for 24 lots), including 16 school age children, 15 of whom can be expected to attend public schools.

Upon completion of the Furnace Dock subdivision, the increase in municipal and school expenses as a result of this project are anticipated to be funded by tax revenues collected from the new tax lots: a surplus of over \$38,000 is expected to be generated, in excess of \$19,000 to the Town and in excess of \$19,000 to the School District.

Comment 7-2 (Letter #3, Catherine Marsh, November 5, 2003): The DEIS does not mention that in addition to school busses from the Henrick Hudson School District, there are a number of busses from the Croton School District who make multiple trips on this Road. The DEIS indicates 21 school age children but only 20 are listed as attending Henrick Hudson School. It is implied, but not stated, that 1 child will attend private school. This would result in another school bus missing from the calculation.

Response 7-2: *As discussed in DEIS Section 3.8.2.3, information provided by the Westchester-Putnam School Boards Association indicates that approximately six percent (6%) of school age children attend private or parochial schools. Thus, it is anticipated that a total of 15 school age children will attend the public schools and 1 child will attend private school.*

Vehicle trip generation used in the traffic impact study, which was done at an earlier stage of the project, was based on a unit count of 26 units and was not reduced to reflect the current proposed unit count. Nevertheless, trip generation rates for peak traffic periods are based on actual count data, such data would account for the various types of vehicles on the road during those periods.

Comment 7-3 (Letter #3, Catherine Marsh, November 5, 2003): The DEIS contains the names of several child care facilities. However, in most communities in Westchester there are long waiting lists for childcare. The shortage is especially true for infant care. I request clarification on availability of child care for the proposed community.

After-school care, which is especially important to working parents, is not addressed. The after-school care in our community is very limited. The situation is exacerbated for middle school age children for whom after-school programming is almost non-existent.

Response 7-3: *Children's day care and preschool services (both private and public) are provided at several locations in the Cortlandt area, including Open Day Preschool (located in the Town of Yorktown), the Flying Goose Nursery School (located on Oregon Road in north Cortlandt), the Tom Thumb Preschool (located on Route 6 in Mohegan Lake), the Hansel and Gretel Nursery School (located in Peekskill), the day care center at the FDR VA Hospital, and the Mother Connection of Cortlandt. Infant care is available at Bright Beginnings Nursery School in Yorktown and at Our Montessori School in Yorktown and Carmel. Infant care is also available by referral through the Westchester Child Care Council.*

Enrollment at each of these facilities varies from year to year, although many are reported to be operating below but near their current capacity. As demand increases or

declines in the area, the private facilities are expected to adjust their staffing and facilities within their means to accommodate such changes.

The Hendrick Hudson School District provides a wide range of sports programs and after school activities for middle school students. Additionally the Town of Cortlandt Youth Center is available to residents and provides a supervised after school program from 3 PM to 8:30 PM weekdays and is open from 6:30 PM to 11:00 PM on Saturdays. The Youth Center is located on Albany Post Road, and is accessible for middle school students by school district transportation from the Blue Mountain Middle School.

Most day care facilities in the vicinity are privately owned and funded, while the operation cost of public facilities are supplemented through revenues received from the federal, state or local government. The cost to public facility users generally depends on family income and a variety of other qualification requirements. Tax revenues from this proposed project paid to the publicly funded services could be used to offset the potential increases in need for such social services resulting from this project. DEIS Section 3.8, Socioeconomics, addresses projected tax revenues.

Comment 7-4 (Letter #3, Catherine Marsh, November 5, 2003): The developer has produced numbers that could only have been arrived at by "voodoo mathematics." The developer proposes 24 single residences with 3 and 4 bedrooms and states that 87 people will live there. That will leave a lot of empty bedrooms! According to the DEIS these 24 homes will produce a maximum of 20 students. This is less than 1 per house. At the same time, the developer projects only 28 trips during the AM peak traffic hour and 32 during the evening. This is far less than the 12 per household standard adopted by other towns in Westchester. This voodoo math raises serious question to the projected revenue and costs to the town, the traffic study, use of recreational facilities, social services, and projected school enrollments and related costs. I respectfully request that the Planning Board recalculate the statistics based on a realistic expectation of residency. I suggest that instead of calculations utilizing average household size in Cortlandt which includes numerous apartments and condominiums, the calculation be based on residency in other 3 and 4 bedroom homes.

Response 7-4: *As is common planning practice, the demographic calculations in the DEIS are based upon the Urban Land Institute's (ULI) research of population statistics in the Northeast region of the United States. Specifically, a multiplier of 3.63 persons per household for 4-bedroom houses was used. The ULI multiplier for school aged children is 0.87 per 4-bedroom household. These multipliers are consistent with 2000 US Census data for the Cortlandt area and, therefore, the applicant believes that the projected revenue and costs to the town, use of recreational facilities, social services, and projected school enrollments and related costs in the DEIS are realistic for the purpose of assessing potential impacts.*

Trip generation for the project is based on the standard reference: Trip Generation (ITE). Refer to Response 6-2 for further discussion of the typical distribution of trips during the day. In any tally of trips, the sum of the peak hour trips will be less than the Westchester standard of 12 trips per household, as some trips are made outside of peak hour intervals.

Comment 7-5 (Letter #3, Catherine Marsh, November 5, 2003): Is the proposed fee of \$4,000 per subdivided lot in line with fees for other equivalent homes paid by other subdivision

developers? Is this fee based on the number of people in the home? If so, the fee should reflect a realistic occupancy number.

Response 7-5: *When no active recreation area is proposed in a subdivision, the Town of Cortlandt requires payment of a recreation fee of \$4,000 per approved lot. This fee, in combination with tax revenues generated to Cortlandt by the proposed development, will be available for use by the Town toward the continued provision of recreation services to residents.*

Comment 7-6a (DEIS Public Hearing, Jeanne Romeu, October 7, 2003): I was looking at the cost of the income that would be generated from this subdivision to the Town. I notice that they estimate a Town tax generated of about \$77,000 a year to the Town in the tax part. 24 houses at, I guess, over a half million dollars apiece. I find that that's a low amount. A measly amount for the cost of the services that will be necessary for the subdivision of 24 homes.

Response 7-6a: *The projected tax revenue is based upon the Town of Cortlandt's municipal tax rates and the residential assessment ratio set by the Town tax assessor's office. Based on the discussion in the DEIS Fiscal Section 3.8, municipal expenditures to cover the cost of the projected population increase resulting from 18 new homes is anticipated to be \$22,642; any additional funds collected would be a surplus to the Town.*

Comment 7-6b: We're talking about a road that's going to go in there that the developer is willing to give to the Town. So, therefore, we're looking at the maintenance of a road, sanding, salting, plowing, sewage maintenance, lighting, not to mention garbage pick up of these homes probably twice a week and recyclables.

I just feel that I'm sure the Town will be generating a lot more in costs to support this subdivision than what would be generated coming in the tax money. I'm not sure how this would be a benefit to the Town.

Response 7-6b: *Total taxes generated to the Town are projected to be \$41,915, \$6,101 of which are paid in general Town of Cortlandt taxes and \$35,814 of which are paid in Town Highway taxes. On balance, the proposed project is likely to generate revenues to the Town of Cortlandt that exceed the cost to the Town by about \$19,273. Without the adjustment to the percentage attributable to residential uses, there would still be a surplus in revenue of approximately \$2,897. Of the town services mentioned, sewer service is not to be provided by the town at this development and street lighting is not proposed.*

Comment 7-6c: I notice there is also about \$191,000 a year for school tax coming in which they say is also a benefit. The houses, I guess, are three to five bedrooms a piece times 24. You do the math. 50 to 150 bedrooms. I think there's going to be a lot more than 21 children according to the DEIS report.

Response 7-6c: *The Urban Land Institute Development Assessment Handbook projects 0.87 students per four-bedroom single-family house, based on actual surveys of residential occupancy. This multiplier is consistent with the projections used by various school districts throughout Westchester, Putnam and Orange Counties.*

The Town of Cortlandt Department of Planning, in conjunction with the neighboring Lakeland School District, conducted a study in 1997, of five single-family residential developments within the district and the Town. These developments comprised a total of 216 units, and included Red Mill Crossing, Apple Hill, Peachwood, Conklin Park, and Wild Birch Farms. This study found that the Red Mill Crossing subdivision, which consists of 11 units, produced the highest school children per unit generation rates of the five subdivisions with 0.91 students per unit. Conklin Park produced the lowest school children generation rates of the five subdivisions with 0.27 students per unit. See also student generation data from Hendrick Hudson Central School District dated Fall 2004 at the end of this section.

The demographic multipliers published by the ULI in the Development Assessment Handbook are based upon a much larger sample of data. The multiplier of 0.87 students per housing unit is toward the high end of the range of field data collected in the Town of Cortlandt. Based upon this information, the projection of 16 students for a development of 18 single family homes appears reasonable.

Comment 7-6d: Looking at maybe the school buses going in there as well as the teachers salaries for these additional children I somehow think that the Town again will be burdened with something that will be more than \$191,000 a year in school taxes. How that is a benefit also to the Town I'm not quite sure. I think the town is going to be paying a lot more than what is going to be generated by this property.

Response 7-6d: As stated in the DEIS Fiscal Section 3.8, the projected cost per student is \$8,260. Enrollment projections prepared by the School District for the 2002 through 2004 period are summarized in the table below (DEIS Table 3.7-2):

Table 7-1 Enrollment Projections Hendrick Hudson School District			
Grades	2002	2003	2004
K through 5	1,355	1,325	1,351
6 through 8	692	699	675
9 through 12	791	836	853
Ungraded Elementary	41	41	41
Full-time BOCES	22	22	22
TOTAL	2,901	2,923	2,942
Source: Hendrick Hudson School District			

The enrollment projections take into consideration growth in the area including several other development projects that are proposed or under construction within the Hendrick Hudson School District. These include the Valeria, Blue Mountain Estates, Abee Rose Estates, Red Oak Estates and Hyman Mendelowitz projects. In response to these projections, the School District is already planning to add ten classrooms to the Blue Mountain Middle School where the need is the greatest. The Hendrick Hudson High School is undergoing a 50,000 square foot addition and a major renovation to accommodate the projected school population.

Even distribution of the enrollment increases over a period of years, in combination with the projected increase in tax revenue (as further discussed in response to Comment 7-7 below), should allow the school district to accommodate the expected increases.

Comment 7-6e: This is a wetlands area. There's Furnace Brook Pond, the streams that go in there, and the ponds in there. I'm not sure if these houses are built and their basements get flooded will they look to the Town as well to help them in their problems of how to get that not to happen.

Response 7-6e: *The proposed storm water management plan is designed to control storm water for all storms in the 2 year through 100 year frequency of occurrence. The proposed plan utilizes several measures to maintain and reduce peak flows at the various design points and is designed in accordance with modern, accepted engineering standards. The project road design, including the proposed bridge structure, and the design of the individual lots and foundations, provide for stormwater management to avoid adverse effects of storm flows. As shown in the DEIS, the proposed plan accounts for the 100-year flood elevation adjacent to Furnace Brook.*

Based upon the measures to be taken to deal with storm water management, flooding of structures or basements from surface waters or groundwater is not anticipated in the Furnace Dock development, and as such it is not expected that this development will be a burden to the Town of Cortlandt.

Comment 7-7 (DEIS Public Hearing, Thomas Bianchi, October 7, 2003): Concerning taxes on Page 1-12 where the summary of taxes generated for the town and for the school district are. It notes here that the project is projected to bring \$191,000 in additional property taxes to the school district. The difference or the increase in taxes is stated at \$177,000. I'm not sure which is the right number. I believe \$177,000 would then reduce the surplus down about \$15,000, so it is marginal at that point. I want to verify that the number in the paragraph towards the bottom of page - whether that is correct or not. It states \$191,0000. I also think that the projected taxes to the Town seem to be low.

Response 7-7: *The total taxes paid to the Hendrick Hudson School district by this property currently are approximately \$13,607. The projected taxes to the Hendrick Hudson School District are anticipated to total \$143,254. The increase in tax paid to the Hendrick Hudson School District is projected to be \$129,647.*

Costs projected to the Hendrick Hudson School District as a result of a 15 student increase population is projected to be \$123,900. Total school tax paid minus the cost to the school district equals a potential surplus to the school district (\$143,254 - 123,900 = \$19,354).

The projected Town tax revenue is based upon the Town of Cortlandt's municipal tax rates, and the Residential Assessment Ratio (RAR) of 2.29, set by the Town Tax assessor's office. Based in the DEIS discussion in the Fiscal section 3.8, municipal expenditures to cover the cost of the projected population increase is anticipated to be \$22,642; any additional funds collected would be a surplus to the Town.

Comment 7-8 (DEIS Public Hearing, Robert Foley, November 5, 2003): On the schools and fiscal impacts, you're showing surpluses both for the town and schools of \$25,000, give or take.

I've always questioned the methodology on some of the ways the applicants have figured out the school impacts. I wish that could be looked at more carefully, maybe comparing it with other existing developments and the generation of students of those developments over the recent years.

Response 7-8: *In an effort to ensure the most accurate and appropriate information possible is used for the projection of school child population, two additional sources corroborate the demographic multipliers used to assess school impacts. In 1997, the Town of Cortlandt Department of Planning, in conjunction with the neighboring Lakeland School District, conducted a study of five single-family residential developments within the district and the Town. These developments comprised a total of 216 units, and included Red Mill Crossing, Apple Hill, Peachwood, Conklin Park, and Wild Birch Farms. This study found that the Red Mill Crossing subdivision, which consists of 11 units, produced the highest school children per unit generation rates of the five subdivisions with 0.91 students per unit. The Conklin Park produced the lowest school children generation rates of the five subdivisions with 0.27 students per unit.*

In 2004, the Hendrick Hudson Central School District compiled student generation data for five residential developments within the school district. These developments comprised a total of 454 units, and included Coachlight, Scenic Ridge, Roundtree Lane, Dickerson Road, and Valeria residential developments. This study found that the Dickerson Road subdivision, with 38 units, produced the highest school children per unit generation rate of the five subdivisions, with 0.84 students per unit. The Valeria subdivision produced the lowest generation rate of the five, with 0.06 students per unit. (Reference student generation data from Hendrick Hudson Central School District dated Fall 2004 in Table 7-2 at the end of this section.)

The demographic multipliers published by the ULI in the Development Assessment Handbook are based upon a much larger sample of data. The multiplier of 0.87 students per housing unit is toward or above the high end of the range of field data collected in the Town of Cortlandt in 1997 and in 2004. Based upon this information, the projection of 16 students for a development of 18 single family homes appears conservative.

Comment 7-9 (Letter #11, Kathleen A. Burleson, January 19, 2004): While the DEIS contains a letter from Jeff Tkacs (10/02) stating that this proposed subdivision will have no impact to roads or sanitation services, this subdivision and all other proposed additional subdivisions are driving the need to create additional Sanitation and Snow Plow routes, thus adding both personnel (5 F/T - \$234,000) and equipment (2 trucks - \$287,000) to the Town's budget process.

Response 7-9: *Total taxes generated to the Town from this development are projected to be \$41,915, \$6,101 of which are paid in general Town of Cortlandt taxes and \$35,814 of which are paid in Town Highway taxes. On balance, this project is likely to generate revenues to the Town of Cortlandt that exceed the cost to the Town by about \$19,273.*

The costs indicated by the commentor above suggest cumulative impacts from several developments. Other new developments will likely add to the municipal tax base in a manner similar to the proposed Furnace Dock development offsetting the necessary expenditures. Each year the Town revisits its capital and operating requirements when it votes on budgets and establishes tax rates. Existing uses and prospective land use

changes all come into play when assessing future demands and budget requirements of the Town.

Comment 7-10 (Letter #12, John Palmiotto, September 29, 2003): I'm responding to the proposed Furnace Dock subdivision PB 9-99, with potential impacts which would effect recreation programming. The estimation of 105 people including 35 school-age children of unknown age/grade levels would have an impact on recreation. Two areas of major concern would be our youth sport leagues and our summer day camp programs. Our sports leagues include basketball, soccer, softball, baseball, and roller hockey. Use of school ball fields and gyms are already at peak numbers due to increasing numbers of school children in the Town of Cortlandt. The Hendrick Hudson High School is undergoing a 50,000 square foot addition, but there are not plans to add any ball fields or gyms. The Recreation Dept. looks towards the school districts in the Town of Cortlandt for the majority of field and gym use. Our summer day camp which serves kindergarten through eighth grade, fills up very quickly with a wait list of over 100 campers. Due to a shortage of facilities, and ever larger numbers, we would see a greater demand on our existing facilities.

Response 7-10: *The proposed Furnace Dock development is expected to increase the population of the Town of Cortlandt by 66 persons including 16 school age children, based on the DEIS Section 3.8.1.3, Population Projections and information presented above (See Response 7-8).*

With construction and occupancy of this project projected over two or more years, the population growth will be introduced gradually. The project applicant will pay a recreation fee of \$4,000 per approved lot. This fee, in combination with tax revenues generated to Cortlandt by the developed lots, will be available for use by the Town toward the continued provision of recreation services to residents.

Comment 7-11 (Letter #13, Mike Sellazzo, January 14, 2004): It should take approximately 20 minutes to collect the regular garbage from the 24 homes. The additional time for paper should be about 10 minutes, commingle 8 minutes, bulk 10 minutes once a month, and organic 15 minutes during November.

Using 165 pounds, 2½ pails, as a guideline for regular garbage per new home of the proposed size, the weekly weight would be about 4,200 pounds. The monthly estimate would be 16,800 pounds or 8.4 tons and the annual weight would be 218,400 pounds or an additional 109.2 tons. Weekly paper pick-up would weigh an estimated 15 pounds per household. That comes to 360 pounds per week for the development. Monthly paper would be 1,440 pounds, .72 tons and the annual total is estimated to be 18,700 pounds or 9.36 tons. Commingle would be less per week, estimating only about 5 pounds per household or 120 pounds per week for the development. This estimate indicates a monthly total of 480 pounds, or 0.24 tons, and 6,240 pounds annual or 3.12 tons of commingle for the year. Organic waste in November could be between 25 and 50 bags. It is difficult to estimate organic since some are done privately and some are just blown into the woods behind the homes.

Response 7-11: *The DEIS estimates the project would generate approximately 4.6 tons of solid waste per month (55.6 tons per year), which represents 0.7 percent of the total solid waste generated by the Town of Cortlandt in 2001-2002 and less than 0.009 percent of the total permitted capacity of the Charles Point solid waste facility. (These projections would be reduced by 25% for the currently proposed 18-unit plan.) Using the*

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commentor's total of 9.6 tons per month (115.5 tons per year), solid waste generated by the project would represent 1.6 percent of the total solid waste generated by the Town and less than 0.018 percent of the total permitted capacity of the Charles Point facility.

TABLE 7-2

HENDRICK HUDSON CENTRAL SCHOOL DISTRICT - FALL 2004
STUDENT GENERATION RATES

PROJECT NAME	NUMBER OF UNITS	NUMBER OF STUDENTS					
		Private Schools		Public Schools			Total
		Total	Elementary	Middle	High School		
Coachlight	210	66	3	28	14	21	63
Scenic Ridge	97	42	1	14	11	16	41
Roundtree Lane	29	19	2	6	4	7	17
Dickerson Road	38	34	2	14	8	10	32
Valeria	80	5	0	5	0	0	5

PROJECT NAME	NUMBER OF UNITS	GENERATION RATES - NUMBER OF STUDENTS PER UNIT					
		Private Schools		Public Schools			Total
		Total	Elementary	Middle	High School		
Coachlight	210	0.3	0.014	0.13	0.06	0.1	0.3
Scenic Ridge	97	0.42	0.01	0.14	0.11	0.16	0.42
Roundtree Lane	29	0.58	0.07	0.2	0.14	0.24	0.58
Dickerson Road	38	0.84	0.05	0.37	0.21	0.26	0.84
Valeria	80	0.06	0	0.06	0	0	0.06

Source: Hendrick Hudson School District
Town of Cortlandt Department of Technical Services, Planning Division
July 27, 2004

8.0 ALTERNATIVES COMMENTS AND RESPONSES

Comment 8-1 (Letter #1, Jeanne Romeu, October 13, 2003): Location of entrance to subdivision: The planned entrance to this subdivision is on Furnace Dock Road, is on a curve in a wooded area over a beautiful stream. Cars go down this road pretty fast - an entrance on a curve is very dangerous. If this goes forward, the applicant, I'm sure, must destroy all the roadside trees on their property to give better visual sight to the drivers (which has already been noted in the drawings). It's a bad place for an entrance, and everyone loses here, the environment due to loss of trees, the birds and animals, and we lose a precious scenic area that will never again appear.

***Response 8-1:** The location of the proposed entrance road was determined by several factors. A near perpendicular stream crossing was selected to avoid stream disturbance and minimize grading disturbance in the stream buffer. Achieving appropriate sight lines for drivers based on actual speeds of cars on Furnace Dock Road, and providing road geometry required by the Town's road specifications was also part of the design goal. It is the applicant's opinion that the proposed location addresses these factors while preserving as much of the existing stream corridor scenic value as possible, with landscaping and stone wall features proposed to emulate scenic features in the project area.*

DEIS Figures 2-8 and 2-9 illustrate the appearance of the proposed entrance feature to the subdivision, including stone walls and landscaping that will reflect the existing rural character of the site area.

Comment 8-2 (Letter #2, Jeanne Romeu, October 25, 2003): The proposed entrance to this site is on a curve in the road on Furnace Dock Road. Page 1-21 of the DEIS states "wooded rural character of Furnace Woods area will be maintained by the wooded stream corridor preserved at the front of the site". Committee, how can this be when they are going to build a road with a 50' wide right of way, with utility easements, etc. as well as bridge over the stream, right through this area? This is a false statement and contradiction! They will destroy this scenic area forever, and what's more, there's an old dirt road which went directly to the furnace, or grist mill, that is still there. They claim a guardrail is blocking it, but that is not so, plus a small portion of that guardrail, if necessary, can be removed, This would be a much better entrance way as a bridge will not need to be built over the stream, and the road will not destroy the woods at this spot. At present, the present proposed entrance on the curve will necessitate the downing of many roadside trees for sight vision. This old dirt road can be widened and is a better entrance just south of the stream bridge on Furnace Dock Road. You can see this also on the site map 3.2-8 referred to above.

***Response 8-2:** The project engineer studied potential site access taken in the area of the existing dirt road into the project site (see FEIS Figure 8-1). This alternative access addresses one of the four design factors cited above in Response 8-1 (road geometry required by Town road specifications) and avoids a second (stream crossing). This alternative cannot meet the other two factors (minimized grading disturbance in stream buffer, and sight lines based on actual speeds of cars on Furnace Dock Road). Disturbance within the stream corridor would account for approximately 0.9 acres of land (50 percent more than the proposed plan), including 0.3 acres of impervious pavement surfaces in close proximity to the stream itself (51 percent more than the proposed plan). A 400' sight distance to the east appears to be achievable from this*

location, with some possible tree clearing. Sight distance to the west for the same distance cannot be achieved due to the existing grade and the vertical and horizontal alignment of Furnace Dock Road. Clear line of sight to the west would be about 230 feet, which is not adequate for existing traffic speed, is unsafe and unacceptable to the applicant. While reconstruction of a portion of the existing roadway would be required to lower the road grade to achieve adequate visibility at this location, correction of the sharp turn in the road is not possible due to its proximity of the stream. For the last reason alone, the applicant cannot propose access to the project site at this point on Furnace Dock Road.

A comprehensive discussion of sight distance considerations is provided in FEIS Response 6-4. The table below shows the AASHTO recommended sight distances for various speeds. A sight distance of 230 feet does not meet the minimum stopping sight distance of 360 feet for the prevailing speed of 42 miles per hour.

Table 8-1 AASHTO Recommended Sight Distances		
Speed (in miles/hour)	Stopping Sight Distance	Intersection Sight Distance*
25	155 Feet	280 Feet
30	200 Feet	335 Feet
35	250 Feet	390 Feet
40	305 Feet	445 Feet
45	360 Feet	500 Feet
50	425 Feet	555 Feet
55	495 Feet	610 Feet
*Values listed are for left turns at grades of 3 percent or less.		
A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, 5th ed., 2004. New York State Department of Transportation Policy and Standards for the Design of Entrances to State Highways, November 24, 2003		

Comment 8-3 (Letter #3, Catherine Marsh, November 5, 2003): The developer proposes a single entry/exit road from the property. The proposed road is 2000 feet, far exceeding the 500' maximum established by the Town. In addition to the safety concerns raised by entering or leaving Furnace Dock Road, the Planning Board must evaluate the potential risk to the safety of the residents and emergency personnel. A storm the size of Hugo, which did not even warrant hurricane status, flooded Furnace Brook in several areas. The residents of the development would be stranded without access to emergency services by such a storm or even a single downed tree.

Response 8-3: The proposed site access has been designed in accordance with current engineering standards and Town of Cortlandt road specifications applicable to the project and the site conditions, with the single exception of road length. The design of the proposed bridge crossing accounts for potential flood conditions of Furnace Brook. As described in DEIS Appendix J, the bridge culverts are designed to safely convey storm flows in excess of those developed by Hurricane Floyd, the largest local storm on record. Storm flows from the 100 year storm would pass beneath the bridge a mid-culvert depth. Since the proposed bridge is located above the 100 year flood elevation and is designed to safely convey flows in excess of the 100 year storm to

avoid potential flooding concerns, no significant adverse flood plain impacts are anticipated from the project.

Since the property has no other road frontage for a second means of access, the applicant has proposed a right-of-way which could provide future secondary emergency access via an existing driveway to Route 9A. (Refer to Response 2-11.) Given the location of this possible future secondary access at road station 13+50, the subdivision roads would then exceed the 500' standard by 356' for proposed Road A and 273' for proposed Road B. As is provided for in §265-17(F) of the Cortlandt Town Code, an exceptional case may necessitate a dead end street exceeding 500 feet in length. Given the irregular configuration of the property and the existing topographic features of this site (wetlands, slopes, and the stream corridor that crosses its entire frontage), and the fact that all land surrounding this property has been developed, the applicant believes that the Planning Board will consider this an exceptional situation.

Comment 8-4 (DEIS Public Hearing, Susan Todd, October 7, 2003): I have difficulties with the entrance of this site. I drive that Furnace Brook frequently, probably two or three times a day on my six trips in and out of my house, and I think that is one of the most beautiful spots in our town; that stream flowing through the rugged valley with the big, tall trees. I would really hate to see an imposing subdivision entrance wreck that for all of us in this town. I think it is a very special view shed in our town that should be preserved. I do think there are other areas to make an entrance to this subdivision. John and I were talking about this after our site visit on Sunday. We thought that we have already got a bridge that crosses the Furnace Brook on Furnace Dock. To make a kind of wide connection to that to give you the entrance and exit safety room that you need is definitely more I think - less impact of that beautiful area, and makes a lot more sense to me than stuffing that stream into more and more of covered brooks and pipes. I also think that the crossing point you have selected crosses one of the flood plain areas of the brook and that floods up quickly in a lot of storms.

Response 8-4: *The design of the proposed bridge crossing accounts for potential flood conditions of Furnace Brook. See Response 8-3. As described in Response 8-2, the applicant believes the proposed road location is the best location from which viable access can be provided to the subject parcel.*

Comment 8-5 (DEIS Public Hearing, John Bernard, October 7, 2003): The applicant should look into the possibility of reusing that existing entrance over the Furnace Dock with an eye to replacing that existing structure which is too narrow for the stream. It allows no habitat traffic under the bridge which your new bridge across there does give ample room. You have addressed that and it is a good looking structure.

If there is a possibility, install that new structure in two phases at the existing location so that traffic could be maintained. But the new entrance would be where the existing one is so that we don't end up with a nice, new, wide structure that works for habitat and then it all funnels into an old structure that is too narrow already.

Response 8-5: *As described in Response 8-2, the applicant believes the proposed road location is the best location from which viable access can be provided to the subject parcel. Reconstruction of the Furnace Dock Road bridge would not provide a viable entrance location for the subject site and would be expected to result in disruption to local traffic for construction of a new bridge, as well as greater impact to the stream.*

Comment 8-6 (DEIS Public Hearing, Steven Kessler, October 7, 2003): I don't think the DEIS discussion of Cluster was an accurate representation of the spirit of what the clustering alternative should be. I think pretty much the intent was to concentrate the building in one part of the site. What the cluster did was concentrate it in the same two parts of the site that it currently is proposed. It seems to me that this extension at the back part of the site, which seems to be for the purposes of getting the additional buildings, is more disturbance than perhaps what is reasonable in my mind.

Response 8-6: *In accordance with §278 of Town Law, a cluster plan was developed that provided for the preservation of open lands while accommodating the permitted number of building lots in a plan that would conform to applicable zoning and other laws regarding lot size and density. This plan accesses the rear portion of the project site to accommodate the permitted unit count while preserving the significant environmentally sensitive areas. DEIS Table 4-1 presents a detailed breakdown of various areas of environmental concern in a table that allows comparison of a conventional plan (the DEIS proposed plan) and a cluster plan of comparable size.*

The applicant has prepared a reduced density 18-lot plan in response to concerns raised regarding the DEIS plan. Refer to FEIS Section 1.0, Summary, for a description of the plan changes made for the current proposal.

Comment 8-7 (DEIS Public Hearing, Jeanne Romeu, November 5, 2003): The proposed entrance to the subdivision, it indicates in the DEIS that the applicant proposed to keep the stream wooded areas preserved and in pristine condition but they will be placing a 50-foot wide road right where the stream is on a curve on Furnace Dock Road, and also in one of the maps I have here, there exists right now an unpaved road and I guess it exists from where it used to be a grist mill and before that, the furnace area. It's a road that's a dirt road and it comes from Furnace Dock Road and it continues into this parcel. It runs sort of parallel to the stream. It is accessible from Furnace Dock Road and there's a paved sort of cutout to get to this wooded dirt road and I was wondering, since that's less invasive and it doesn't blaze right into the stream and the wetlands, why could that not considered as an entrance to the property?

Response 8-7: *The wooded stream area would of necessity be crossed by an entrance roadway to access the developable portions of the property, however the visual impact of this entranceway is proposed to be made compatible with the rural character of the area and similar entranceways in the community. Appropriate landscaping and stone wall abutments made of native stone would be offset from the road sufficient to provide clear line-of-sight for drivers exiting from or approaching the entrance. DEIS Figures 2-8 and 2-9 illustrate the appearance of the proposed entrance feature to the subdivision, including stone walls and landscaping that will reflect the existing rural character of the site area.*

The existing access to the site is an unimproved driveway from a point south of the Furnace Dock Road bridge over Furnace Brook. This driveway is presently blocked at the road by a guide rail. This driveway is accessible from a paved driveway curb cut at the southwest corner of the property. Neither of these points are proposed to be used for access to the Furnace Dock development due to the inadequate sight distance afforded from this location and such a plan would place significantly more impervious pavement surfaces in close proximity to the stream than the proposed plan. Refer to Response 8-2.

Comment 8-8 (DEIS Public Hearing, Robert Foley, November 5, 2003): I still see a long roadway going in, length beyond what I believe the code would allow. I would like to see, as others have brought up on the board, Susan and John, at the first site visit a while back, that there was a way to have the entrance road and bridge crossing over Furnace Brook. I would like to see that using the existing bridge on 9A or in the entranceway next to it in some form or another.

Response 8-8: The existing access to the site, an unimproved driveway from a point south of the Furnace Dock Road bridge over Furnace Brook, is not proposed to be used for access to the Furnace Dock development due to the inadequate sight distance afforded from this location. Refer to Response 8-2.

Comment 8-9 (DEIS Public Hearing, Susan Todd, November 5, 2003): You propose that the initial construction will use the dirt road that everybody has been talking about, the one existing dirt road and again, my question is why not use it permanently?

Response 8-9: The existing access drive will provide the only means of vehicle access to land on the north side of Furnace Brook that is necessary to construct the site access road and bridge. Due to inadequate sight distances from this location, a flagman will likely be needed during the construction period. For this reason, however, this location is not proposed for the permanent subdivision road. Refer to Responses 8-7 and 8-2.

Comment 8-10 (DEIS Public Hearing, John Bernard, November 5, 2003): And the road crossing, I would very much like to see the existing road crossing redone. I understand from the applicant's engineer that they had originally looked at that original road crossing and at that time didn't prove to be a doable entry to the project, but I would request that they look at that again or at least we be allowed to see the original study of that crossing. The crossing that exists there now has an undersized culvert. I think that probably floods frequently there, and if there is going to be a new crossing. I would like to see a new crossing replace that existing crossing. And that certainly can be done. It's going to be wide enough for two lanes, the new crossing is, so it would be very good for the Furnace Dock itself if we are going to do another crossing to replace that undersized one.

Response 8-10: Refer to Response 8-2.

Comment 8-11 (DEIS Public Hearing, Steven Kessler, November 5, 2003): I would like to see, as you have in table 3.1-4, the disturbance on each lot itemized lot by lot of slopes over 15 percent for the alternatives that you proposed here. I believe there are two alternatives: a conventional subdivision plan with no disturbances to wetlands and buffers, and also a cluster alternative. So I would like to see that table replicated, because I want to deal with this issue as to what is an appropriate level of disturbance of slopes over 15 percent on a lot-by-lot basis and decide in my mind what I think is an appropriate level that I believe I would allow and permit under the ordinance of this town that grants us that approval authority.

Response 8-11: Tables listing steep slopes disturbance lot by lot for the cluster subdivision alternative and the Planning Board alternative plans are included at the end of this section.

Comment 8-12 (Letter #9, Ed Vergano and Ken Verschoor, November 20, 2003): It is recommended that an alternative site access road from Furnace Dock Road immediately west

of the existing Furnace Dock Road Bridge be evaluated in the FEIS. This evaluation should include a schematic plan of the proposed road and sight distance on Furnace Dock Road. This alternative road will eliminate the need to cross Furnace Brook.

Response 8-12: *Refer to Response 8-2.*

Comment 8-13 (Letter #9, Ed Vergano and Ken Verschoor, November 20, 2003): The minimal wetland crossing alternative is favored since it reduces the length of the proposed road and results in less site disturbance and less impact on woods, wildlife habitat, steep slopes and wetlands and preserves more open space. This alternative plan should also include the alternate access road suggested in [Comment 8-12] above if possible, additional preservation of the historic resources and potential clustering of the proposed housing units.

Response 8-13: *The alternative subdivision plan that minimizes the wetland crossing and provides safe access to the project site is presented in the DEIS Figure 4-2. As the commentors' note, this plan results in lesser impacts to the site than the proposed plan. As described in Response 8-2, location of the access from a point west of the Furnace Brook bridge is not shown due to the inadequate sight distance afforded from this location. It is noted that the current proposed subdivision plan expands the area of open space provided around the old house and mill site. Neither a plan that clusters the houses on small lots (as in the DEIS Cluster Alternative) nor a plan that significantly reduces the number of lots (as in the DEIS Planning Board Alternative) meet the objectives of the project sponsor, nor is economically viable for the sponsor, considering the cost associated with construction of a bridge crossing that provides the safest access from Furnace Dock Road.*

The applicant has prepared a reduced density 18-lot plan in response to concerns raised regarding the DEIS plan. Refer to FEIS Section 1.0, Summary, for a description of the plan changes made for the current proposal.

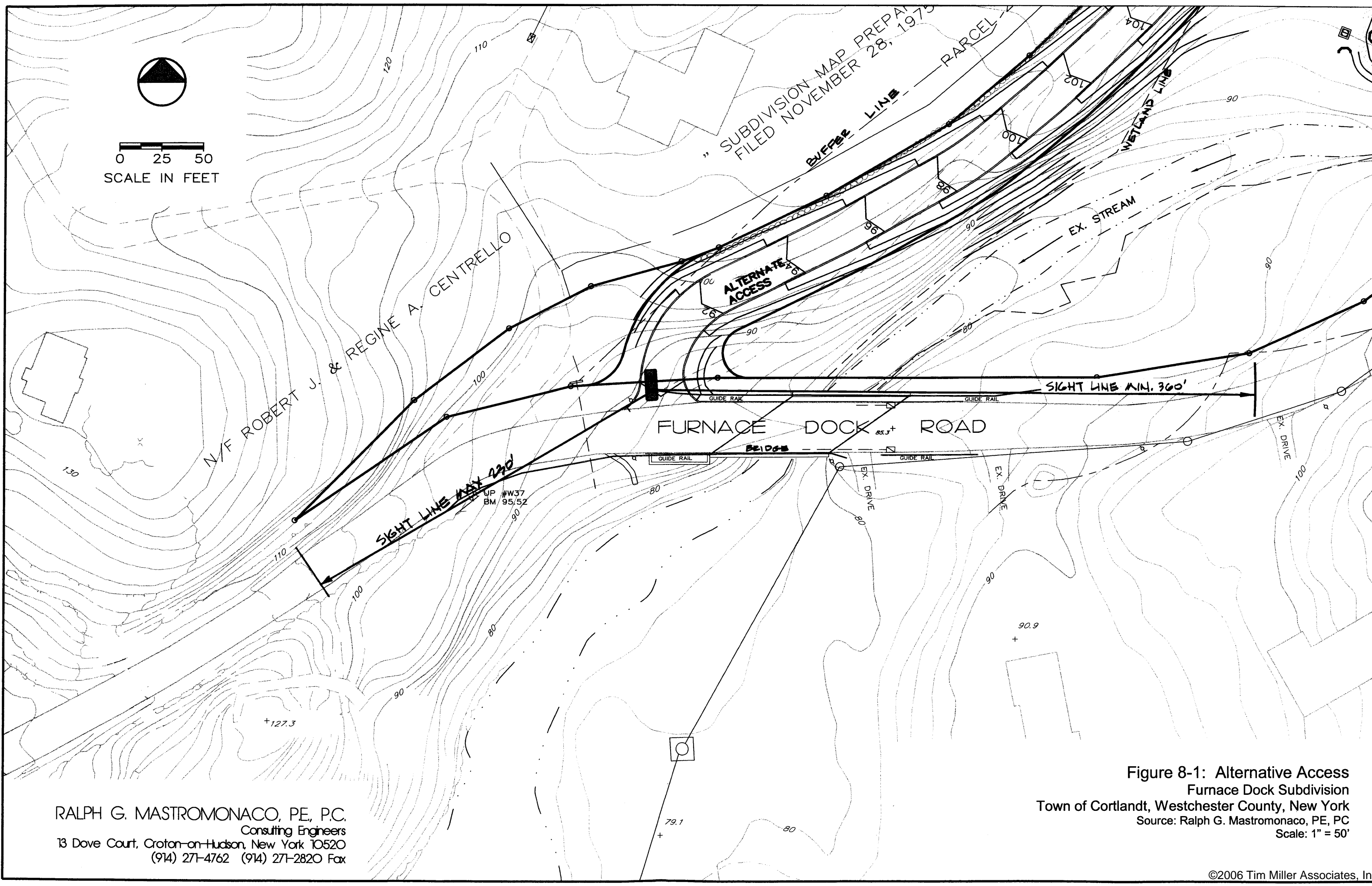
Table 8-2		
Steep Slopes Disturbance by Lot		
Cluster Subdivision Alternative Plan		
Lot Number	Area of Disturbance (Acres)	Area of Disturbance on Slopes Over 15% (Acres)
1	0.38	0.02
2	0.30	0.05
3	0.27	0.14
4	0.27	0.04
5	0.29	0.01
6	0.29	0.14
7	0.24	0.11
8	0.28	0.04
9	0.34	0.25
10	0.42	0.16
11	0.47	0.20
12	0.31	0.22
13	0.47	0.13
14	0.24	0.17
15	0.29	0.16
16	0.30	0.09
17	0.25	0.05
18	0.26	0.08
19	0.29	0.16
20	0.26	0.18
21	0.28	0.14
22	0.25	0.15
23	0.25	0.11
24	0.26	0.04
25	0.25	0.00
26	0.27	0.02
open space	1.71	0.45
ROW	3.53	1.12
Total	13.04	4.44

Table 8-3		
Steep Slopes Disturbance by Lot		
Planning Board Alternative Plan		
Lot Number	Area of Disturbance (Acres)	Area of Disturbance on Slopes Over 15% (Acres)
1	0.36	0.02
2	0.45	0.05
3	0.43	0.17
4	0.48	0.02
5	0.38	0.17
6	0.31	0.17
7	0.51	0.14
8	0.54	0.05
open space	0.51	0.04
ROW	1.07	0.17
Total	5.05	1.00



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" SUBDIVISION MAP PREPARED
FILED NOVEMBER 28, 1975



N/F ROBERT J. & REGINE A. CENTRELLO

FURNACE DOCK ROAD

ALTERNATE ACCESS

SIGHT LINE MAX. 220'

SIGHT LINE MIN. 300'

BRIDGE

RALPH G. MASTROMONACO, PE, P.C.
Consulting Engineers
13 Dove Court, Croton-on-Hudson, New York 10520
(914) 271-4762 (914) 271-2820 Fax

Figure 8-1: Alternative Access
Furnace Dock Subdivision
Town of Cortlandt, Westchester County, New York
Source: Ralph G. Mastromonaco, PE, PC
Scale: 1" = 50'

9.0 ALTERNATIVE LOOP ROAD PLAN

An alternative to the proposed plan has been developed by the applicant that incorporates a loop road configuration in response to comments regarding the length of the public access roads ending in two turnarounds in the DEIS plan. An initial 18-lot loop road plan was reviewed by Mr. Stephen Coleman, the Town's wetland consultant and was amended in response to comments received from Mr. Coleman with regard to natural connections between wetlands. While this Alternative Loop Road Plan, consisting of 17 lots, is not preferred by the applicant, it is presented here in response to several DEIS comments and is evaluated herein to allow comparisons with the current proposed plan. The loop road plan is shown in Figure 9-1.

In this 17-lot alternative, the two cul-de-sacs have been replaced by a "loop" end road. Such a configuration would address the concern raised regarding the length of the "dead end" roadways in the DEIS plan as well as the concern about accessibility for Town Public Works vehicles and school busses. The road is 1,450 feet in length to the point where it splits in two directions around the loop. Like the proposed plan, the subdivision road would be built to the Town's standard width with mountable curbs throughout and stabilized shoulder sections at Stations 3+50 and 11+00 to allow extra room for emergency vehicles to pass.

This road configuration would utilize areas that are less constrained by slopes, while preserving a prominent rock outcropping in the center of the loop. The lot layout would facilitate locating seven houses immediately off of the loop and two additional lots that utilize building pads in areas of lesser slopes. The layout incorporates a range of lots of somewhat smaller sizes than the proposed plan (0.93 to 1.73 acres) while generally providing lots in conventional shapes .

Within the development constraints of the wetlands and slopes on the site, the applicant believes that this plan provides similar protections to the site's environmental resources as the current proposed plan. Elements of the loop road plan reflect specific recommendations of Mr. Coleman with regard to preserving wildlife corridors and limiting fragmentation of regional habitat. These elements are listed below. This plan would include wetland mitigation as in the proposed plan. The loop road plan, by its nature however, would create a habitat island that is separated from the natural corridors by the roadway.

- Provides physical land connections of natural, open space between the brook and interior wetlands, including corridors within conservation easements along both the eastern and western property lines, by reconfiguring various lots.
- Includes permanently protected natural corridors on or behind individual lots with permanent demarcation of the open space boundaries by stone cairn monuments every 50 feet (rather than stone walls) to allow easy wildlife movement. Each monument will be approximately 3 feet high and labeled with a permanent marking indicating the conservation easement.
- Eliminates one lot between Lots 6 and 10 and reconfigures these lots to place the houses closer to the road, thus allowing an uninterrupted corridor and connection between open space / wetland areas in the center and far interior of the site and reducing upland habitat disturbance.
- Expanded conservation easement areas on Lots 4, 5 and 6 with the easement line located a minimum dimension of 50 feet from the edge of existing and created wetlands.

- Provides two compact areas of development while preserving open space on the remaining portions of the site for wildlife.

Provides low impact development practices, including rain gardens and infiltration trenches, to reduce dependence on constructed stormwater basins.

The total acreage of site disturbance required to develop the loop road plan would be approximately 10.7 acres, or 25% of the total property area. Over 31 acres of the 42.4 acres of existing woodlands and wetlands on the property would remain undeveloped. Of this area, approximately 20.56 acres (six parcels) would be set aside in perpetuity as open space parcels, potentially available to Town residents. As in the proposed plan, one of these protected open spaces would be the area of the historic remains of the grist mill, which would be preserved and appropriately developed as an interpretive woodland trail.

Like the proposed subdivision plan, the alternative loop road plan has been designed so that large areas within the buffer zones of the site's wetland and stream features and large areas of steep slopes would remain undisturbed. The loop road plan would disturb approximately 0.22 acres of wetlands (in two road crossing areas) and approximately 1.46 acres of wetlands buffer for road construction, where temporary grading disturbance along the road shoulders would be restored to vegetative cover. The wetlands mitigation proposal, which would result in the creation of approximately twice the acreage of wetlands as would be disturbed, is also a component of the loop road plan. Like the proposed plan, this plan would require a wetland permit to be granted by the Planning Board for disturbances within wetlands and wetland buffers.

Areas of grading activity for the alternative loop road plan are shown in Figure 9-2. In comparison to the DEIS 24-lot plan with approximately 15 acres, or 35 percent of the site, to be graded, the 17-lot alternative loop road plan reduces this total to under 11 acres. Table 3-1, Steep Slopes Disturbance, presents a comparison of the areas of slope disturbance for each slope class for the DEIS 24-lot plan, the proposed FEIS 18-lot plan and the Alternate Loop Road plan. Overall, the loop road plan would result in the disturbance of approximately 3.1 acres of slopes greater than 15 percent, representing a disturbance to approximately 16 percent of the steep slopes found on the project site.

Given the topography of the site, the disturbance of some steep slope areas remains unavoidable to develop the alternative plan. However, the alternative development plan is designed in compliance with the Standards for Approval, Section 259-6 of the Cortlandt Code on steep slopes.

The following table describes changes in surface cover in the 17-lot loop road plan:

Table 9-1 Changes in Surface Cover (Acres) 17-Lot Alternative Plan				
<i>Cover Type</i>	<i>Existing</i>	<i>Disturbed</i>	<i>Created</i>	<i>Post-Dev't.</i>
Woods (upland)	38.36	10.50	-0.45*	27.41
Wetlands and Water	4.04	0.22	+0.45*	4.27
Impervious Pav't. & Bldgs.	0.03	0.00	2.93	2.96
Lawns & Landscaping	0.00	0.00	7.79	7.79
<i>Totals</i>	<i>42.43</i>	<i>10.72</i>	<i>10.72</i>	<i>42.43</i>

Source: Ralph Mastromonaco, PE, PC; Tim Miller Associates, Inc.
 Notes:
 * New wetland created in existing upland woods area.
 Post-dev't. lawn areas include stormwater basins and utility easements to be maintained as meadow.

A table listing steep slopes disturbance on a lot-by-lot basis for the 17-lot loop road plan is provided below. A comparative listing of open space / conservation easements, lawn areas, etc. for the various plans is set forth in FEIS Section 2.0 that presents the environmental impacts and benefits of each plan. There is no meaningful use for a list of these areas on a lot by lot basis as it is the overall impact of a plan that provides the relevant comparisons.

Table 9-2		
Steep Slopes Disturbance by Lot		
17-Lot Alternative Plan		
Lot Number	Area of Disturbance (Acres)	Area of Disturbance on Slopes Over 15% (Acres)
1	0.54	0.03
2	0.53	0.21
3	0.37	0.03
4	0.34	0.10
5	0.34	0.08
6	0.30	0.10
7	0.43	0.08
8	0.39	0.09
9	0.32	0.20
10	0.29	0.16
11	0.60	0.15
12	0.52	0.14
13	0.32	0.03
14	0.34	0.18
15	0.41	0.23
16	0.41	0.10
17	0.42	0.03
open space	0.90	0.28
ROW	2.95	0.87
Total	10.72	3.09

A comparative impact table is provided in FEIS Section 2.0 (Table 2-1) showing various areas of environmental concern with regard to the DEIS 24-lot plan, the DEIS cluster alternative plan, the current proposed plan, and the alternative loop road plan.



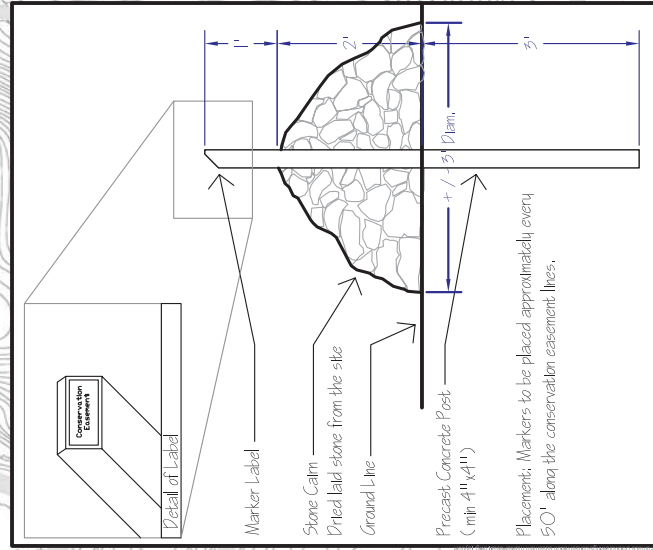
TOTAL AREA:
1848451 s.f.
42.435 acres



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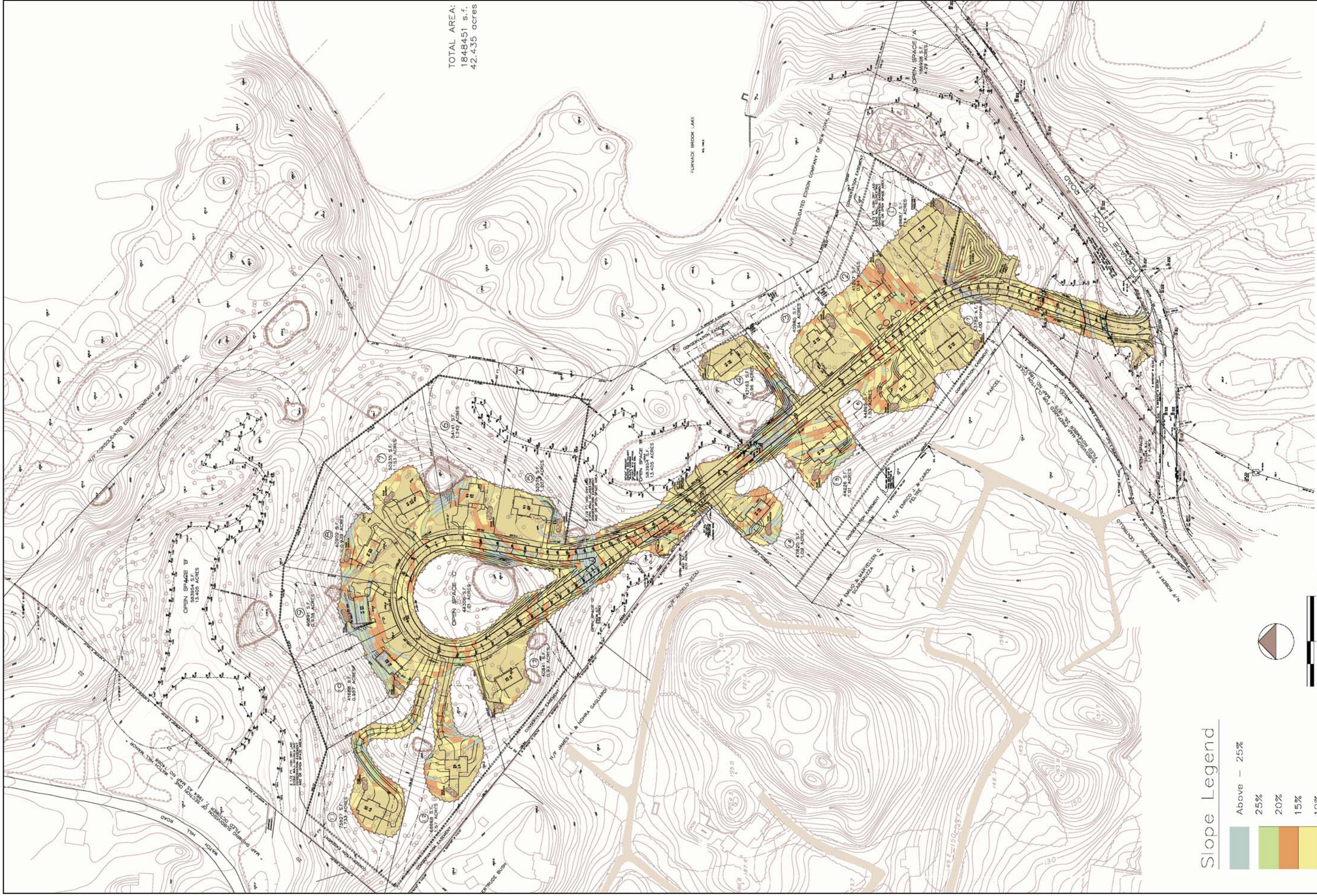
- Wetland
- Created Wetland
- Conservation Easement/Open Space
- Undisturbed Woods
- Lawn/Landscaped
- Furnace Brook



Conservation Easement Marker Detail

5-6-06
Tim Miller Associates, Inc., Cold Spring, NY

Figure 9-1: 17-Lot Alternative Plan
Furnace Dock
Town of Cortlandt, Westchester County, New York
Source: Ralph G. Mastromonaco, P.E., P.C., 01/05/06
Scale: Graphic



TOTAL AREA:
1848451 s.f.
42.435 acres

Slope Legend

- Above - 25%
- 25%
- 20%
- 15%
- 10%
- 0 - 10%

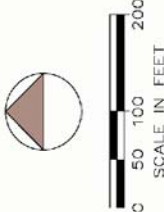


Figure 9-2: Slope Disturbance - Alternative Plan
Furnace Dock
Town of Cortlandt, Westchester County, New York
Source: Ralph G. Mastromonaco, P.E., P.C., 01/05/06
Scale: Graphic

Appendix A
CORRESPONDENCE



New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

August 26, 2004

Eric Tinkhauser
Blitman Development Corp
118 North Bedford Rd
Mt. Kisco, New York 10549

Dear Mr. Tinkhauser:

Re: SEORA
Furnace Dock, Inc. Subdivision
Cortlandt, Westchester County
02PR04546

The Office of Parks, Recreation and Historic Preservation (OPRHP) has reviewed the information submitted for this project. Our review has been in accordance with Section 14.09 of the New York Parks, Recreation and Historic Preservation Law and relevant implementing regulations.

The OPRHP has received the Supplemental Stage 2 Archeological Investigation, dated June 2004. As you know our office requested additional testing/excavation, the historic documentation/archival research and a revised artifact catalog. The OPRHP would like to state that this information was justified, as the new information is important in the interpretation of the site. In the near future we will be providing some additional comments on the report as it relates to the signage.

Our previous letter discussed the short and long term protection of the portion of the *Furnace Dock Historic Complex* that is outside the APE. We are approving the submitted plan with the change of the "minor grubbing". We suggest cutting trees/bushes to ground level without grading.

As a result of our review, it is our opinion that the project will have No Adverse Impact on historic properties in or eligible for listing on the State and National Registers of Historic Places with the following conditions:

- The APE as currently defined does not change.
- Signage for the *Furnace Dock Historic Complex* is approved by the OPRHP prior to installation and is installed prior to property transfer.
- The Avoidance Plan is fully implemented.

If you have any questions, please call me at (518) 237-8643, extension 3288.

Sincerely,

Cynthia Blakemore
Historic Preservation Program Analyst

CMB:bsa

cc: Town of Cortlandt
City/Scape

Michael W. Klemens, LLC
47 Florida Hill Road
Ridgefield, CT 06877

July 20, 2005

Mr. Erik Tinkhauser
Blitman Development Corporation
118 North Bedford Road
Suite 102
Mount Kisco, NY 10549

In RE: Furnace Dock Subdivision, Cortlandt, NY

Dear Mr. Tinkhauser:

I am in receipt of various documents that you have forwarded to me concerning the above mentioned subdivision. The environmental analysis and designs that are illustrated on these plans are the results of more than a year of site visits, design meetings, and subsequent refinements by you and your team. I would first like to characterize the site from a biodiversity specific, specifically the presence of wetland-dependent amphibians and reptiles. I have made two visits to the site over the last year, on April 30th and June 25th, 2004 and submit these data to augment the earlier report on the site prepared by Stephen Coleman on behalf of the Cortlandt Planning.

The large central vernal pool is a breeding site for wood frogs (*Rana sylvatica*), gray treefrogs (*Hyla versicolor*), spring peepers (*Pseudacris crucifer*), and green frogs (*Rana clamitans*). A dead sub-adult snapping turtle (*Chelydra serpentina*) was also found dead at the edge of this pool. Spotted salamanders (*Ambystoma maculatum*) were not found in this wetland, possibly due to the overall landscape level disturbance of the site and its environs (see discussion below under box turtle).

The ridge area on the north side of the property, above the wetland that flows westward and crosses Watch Hill Road is the best forested habitat on site. This woodland is used by spring peepers and wood frogs. On June 25th more than 25 individuals of each of these frog species were found hopping about on the forest floor. An adult American toad (*Bufo americanus*) was found under a large log (April 30th), and an adult black rat snake (*Elaphe obsoleta*) was observed in a hollow tree about 20 feet above the forest floor (June 25th).

On June 25th gray treefrog toadpoles were also observed in the inundated area that lies on the western edge of the property and is shared with the lands owned N/F James A. Nohra Gagliardi and N/F Angelo Zeoli.

Garter snakes (*Thamnophis sirtalis*) were found throughout the site on both dates. The Coleman study located a single, near dead box turtle on the northern ridge area of the property. Although the habitat on the site looks good for box turtles, none were found despite a concerted effort to locate additional turtles on the site on both April 30th and June 25th. If box turtles occur here, they occur at extremely low densities, which may reflect the advanced stage of habitat fragmentation that occurs at the landscape level surrounding the site. Generally box turtles require a habitat bloc of 1,000 acres of interconnected on a landscape scale to flourish. These conditions are not met by the subject property and this area does not lie within the Croton to Highlands Biotic Corridor (Miller and Klemens 2004: Croton-to-Highlands-Biodiversity Plan: Balancing Development and the Environment in the Hudson River Estuary Catchment MCA/WCS Technical Series No. 7) specifically because the landscape context is too fragmented to support area-sensitive species. *However, the exclusion of this area from the Biotic Corridor should not be construed as an invitation to develop without environmental safeguards and/or concern for the remaining biodiversity on the site.* It is with this caveat, to maximize the conservation benefits of the proposed sub-division, that I offer the following comments/observations to you and to the Cortlandt Planning Board.

VERNAL POOL AND VERNAL POOL ENVELOPE (0-100 Feet)

In reviewing the 18-lot plans I note that the encroachments of both plans to the large central vernal pool are equivalent. Both plans by necessity intrude into the vernal pool envelope (the area from the high water mark to 100 feet distal from the high water mark). In my publications and lectures I have consistently stated that all development and roadways should be excluded from this area, however, I recognize that the configuration of the subject parcel leaves no prudent and feasible alternative to access the rear portion other than running the access road within the vernal pool envelope. Therefore I proposed, and you have appropriately responded, with mitigation that allows for amphibian movement under the road, and excludes amphibians from the road portion that traverses the vernal pool envelope, directing the amphibians under the road at various key crossing sites.

The construction of the amphibian underpasses (please note that these are not tunnels) is of a square construction (round sides tend to impede movement by disorienting frogs), contains a natural substrate favored by amphibians, and allows for daylight and moonlight to spill into the underpass facilitating movements (even at night amphibians will not enter an opening that appears totally dark). These underpasses are also two feet high by almost three feet wide, another important design requirement. Amphibian movement through underpasses is facilitated by a spaciouly configured underpass. In short, the design I have developed for your site overcomes the design flaws that have plagued most conventional amphibian tunnels. The latter have been marginally effective, largely because of their narrow, circular design, and their lack of ambient light spillage into the tunnel. Coupled with these tunnels is a rim alongside the road that excludes

Klemens to Tinkhauser/July 20, 2005/ Page 3

amphibians from the road surface in the vernal pool envelope area by funneling them through the underpass. I noted that you provided design details of the underpass but not of the exclusion rims along the portion of the road in the vernal pool envelope. I would suggest that you have Mr. Mastromonaco prepare a rendering/cross section detail of the excluder rim along the road to assist the Cortlandt Planning Board in their review of your application.

CRITICAL UPLAND HABITAT OF VERNAL POOL (100-750 Feet)

The zone of terrestrial habitat used to support vernal pool biodiversity extends from the high water mark of the pool to 750 feet. The first hundred feet is considered the vernal pool envelope, and has been discussed in the preceding paragraphs. Standards on the zone from 100-750 do not exclude all development, but limit development to 25% of the upland area, including previous development. The calculations that you prepared with my guidance have indicated that there is currently (pre-development) 4.209 acres of the critical upland habitat zone lost. You propose to develop an additional 10+ acres which will result in 22% development of this zone post-construction. The differences between the 18-lot or the 18-lot loop are minimal in impact to the upland habitat zone, except that more of the steep slope area (favored by amphibians) is lost in the loop plan, and the loop plan creates a 1-acre habitat island in the loop area. Generally creation of such habitat islands should be avoided, however, with the low intensity of traffic on the loop I do not consider the island to constitute an ecological sink (= an area which lures amphibians to it but creates elevated mortality of those amphibians because of being surrounded by roads).

Unlike the roadways in the vernal pool envelope, the management goal in this zone is to facilitate movement of amphibians across roads and to achieve that effect, the use of the 1:4 curbing ("Cape Cod Curbing") has been proposed and detail is provided. I also recommend that the use of hydro-dynamic separators be avoided in order to reduce amphibian mortality in the stormwater renovation systems. I recommend that you use low-impact infiltration and bio-rational stormwater management techniques such as swales, rain gardens, and similar conveyances to manage stormwater runoff from the roadways. Roof water should be directly re-infiltrated on each house lot.

In conclusion, I feel that we have made a tremendous amount of progress in refining the design of this subdivision to steward the natural resources that occur on the site. I would recommend that your provide members of the Cortlandt Planning Board copies of Calhoun and Klemens (2002): Best Development Practices: Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States, MCA Technical Paper Series: No. 5 which has served as the template for vernal protection on this site. I will not be able to attend the August 2nd meeting but look forward to discussing my findings with the Cortlandt Planning Board at their September 7th meeting.

Sincerely,

Michael W. Klemens, PhD



STEPHEN W. COLEMAN
 ENVIRONMENTAL CONSULTING, LLC

December 02, 2005

Edward Vergano, P.E., Director
 Department of Technical Services
 Town of Cortlandt, Town Hall
 1 Heady Street
 Cortlandt Manor, New York 10567

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 DOTS Director Wetland Delineation & Assessment
 C.A.C. Natural Resource Management
 A.R.C. Pond & Lake Management
 Wildlife & Plant Surveys
 Breeding Bird Surveys
 Landscape Design

..... Applicant
 Tim Miller & Linda Whitehead
 Chris
 Sent 12-13-05

PB 9-99

**Re: Furnace Dock Subdivision – Review of Proposed Subdivision Plans,
 Proposed Mitigation Measures and Potential Impacts on Biodiversity**

Dear Mr. Vergano:

As per your request, I have completed a review of the proposed subdivision plans submitted for the Furnace Dock Subdivision; the recommendations submitted by the applicants consultant, Dr. Klemens; and responses to the FEIS. Based upon this review I offer the following comments for the Planning Board's consideration:

Proposed Subdivision Plans:

I have reviewed the proposed subdivision layout and the alternate loop road plan. Both layouts propose a total of 18 lots. Based upon my prior biodiversity analysis, it is my recommendation that the density is too high and that the placement of several of the lots interfere with natural corridors that are present on the property. The proposed density will effectively fragment and eliminate the majority of the linear connections and corridors between wetland areas. The attractiveness and wildlife value is the unique assemblage of wetland systems and the open space corridors between each of the wetland systems. In addition, the location of this property is part of a relatively large regional landscape scale "habitat corridor" that provides important linkages and movement corridors for wildlife species. As noted, the site may not harbor endangered, threatened or special concern species, but in the context of the regional landscape, does provide important habitat value and is capable of supporting a sufficient diversity of other environmentally sensitive species. The applicant has carefully addressed mitigation measures for reducing impacts to resident populations of reptiles and amphibians. I highly support the recommendations provided by Dr. Klemens for the wildlife crossings and other best management practices recommended. However, my primary concern is with the maintenance of functional open space and linkages between the wetland areas and the adjacent upland sections that connect these areas. My specific recommendations are as follows:

DEL 12

1. A physical land connection should be provided that connects the brook with the wetlands on both sides of the proposed road system serving to link areas designated as Open Space Areas A-C, and sections designated for proposed Conservation Easements as well. A minimum of a 50-foot corridor along the eastern property line and also the western property line would serve to connect these areas better. I suggest that this corridor be placed in a conservation easement and some form of permanent demarcation be placed to identify this corridor.
2. On the Proposed Subdivision Layout Plan, lots that should be modified to accommodate the above recommendation are:
 - Lot # 1 should be shifted closer to the road
 - Lot # 4 shift closer to road or re-configure lots on this side of road to fit this lot outside of recommended buffer area to the rear
 - Lots 6 and 7 should be removed or altered to allow an uninterrupted corridor and connection between open spaces parcels B & C.
 - Lot 16 interferes with the connection between open space B and conservation easement area C
3. The Alternate Loop Road Plan, recommended changes are:
 - Lot 4 shift closer to road or re-configure lots on this side of road to fit this lot outside of recommended buffer area to the rear
 - Lot 7 should be removed or altered to allow an uninterrupted corridor and connection between open space parcels B & C
 - Lot 10 moved closer to road to minimize disturbance to ridgeline habitat
 - Lots 15 and 16 should be reconfigured to maintain connection between open space parcels and wetland areas
 - Consideration should be given to creating a normal cul-de-sac – even if longer than town standards – to preserve more of the corridors
4. An alternative layout that clusters the development tightly around a cul-de-sac in the rear of the property would serve to bring the development closer to the carrying capacity of the property, and provide greater opportunities to preserve functional open space areas.
5. I strongly support all of the low impact development measures that have been discussed including the use of rain gardens, common drives, infiltration trenches, and other methods to reduce the need for creating basins that are often difficult to maintain, provide a source for invasive plants to become established, and are aesthetically unpleasing.

This completes my review of the proposed Furnace Dock Subdivision Plans, and potential impacts on biodiversity at this time. Please let me know whether you have questions or require additional information.

Sincerely,

A handwritten signature in cursive script that reads "Stephen W. Coleman".

Stephen W. Coleman
Principal
SWC/tbh



STEPHEN W. COLEMAN
 ENVIRONMENTAL CONSULTING, LLC

February 20, 2006

Edward Vergano, P.E., Director
 Department of Technical Services
 Town of Cortlandt, Town Hall
 1 Heady Street
 Cortlandt Manor, New York 10567

Copies 7 Planning Board
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 A.R.C.
 Applicant

 Sent 2-28-06 PB 9-99

Environmental Planning & Site Analysis
 Wetland Mitigation & Restoration Plans
 Wetland Delineation & Assessment
 Natural Resource Management
 Pond & Lake Management
 Wildlife & Plant Surveys
 Breeding Bird Surveys
 Landscape Design

Re: Furnace Dock Subdivision – Review of revised Proposed Subdivision Plans, Proposed Mitigation Measures and Potential Impacts on Biodiversity

Dear Mr. Vergano:

As per your request, I met with the applicant and Town staff on 01-04-06, and completed an additional review of the proposed subdivision plans that have been submitted for the Furnace Dock Subdivision. The latest submission, dated 01-05-06 reflects recommended changes discussed at our 01-04-06 meeting. The revised plans are based upon the "17 Lot Alternate Loop Road Plan, Conventional Layout Plan, dated 01-05-06. This Alternate Loop Plan was determined to be the best-suited layout for minimizing biodiversity impacts. Therefore, my comments are specific to the revised 17 Lot Alternate Loop Road Plan. I offer the following additional comments for the Planning Board's consideration:

1. The house sites in the rear of the property have been moved closer to the proposed loop road, which increases the separation distance from wetland area "C" and creates more open space. These changes also further reduce the amount of steep slope impacts. (On the plans, this is labeled as open space B)
2. The house sites for lots 1-4 have also been slightly modified to reduce the amount of disturbance.
3. A 50-foot wide Conservation Easement has been established around the entire perimeter for most of the lots – in the rear of the lots, to create a "no disturbance area" for each lot, which serves to create more of a natural habitat and movement corridor for resident wildlife.
4. Although the plan shows construction of a 2-1/2 foot dry stonewall, to delineate the conservation easement on each lot, it is my recommendation that this be changed. A solid stonewall may prohibit movement of small mammals, reptiles and amphibians. Instead, I recommend that permanent conservation easement monuments be constructed, and that these monuments, be spaced

approximately every 50 feet along the conservation easement line (a minimum of 3 per rear lot boundary should be sufficient). These monuments should be 2-3 feet in height and 6-8 inches in width. Each monument should be labeled with a permanent marking that indicates a conservation easement area.

5. Rain gardens have been incorporated into the design of each lot to handle stormwater runoff from impervious surfaces. This measure will create more natural habitats and allow for infiltration and water quality treatment of stormwater runoff on each individual lot. This low impact measure will keep more natural runoff within each individual lot, instead of re-directing runoff off each lot to a central location. It is important that notes be added to each site plan, or the subdivision plans, that these areas must be maintained in perpetuity, as part of the overall approved stormwater management program for the subdivision.
6. I recommend that more permanent protection be provided for the wetland located between proposed lot 4 that extends into lots 5 & 6. Due to the close proximity of the 100 foot wetland buffer to the rear yards of the proposed house locations on lot 5 and 6, I request that at a minimum, a permanent 50- foot buffer line be established to protect the wetland and reduce the potential for disturbance from residential activities into the regulated buffer. The conservation easement area could be modified to run along the 50 foot buffer line instead of the rear of the lot along lots 5 and 6. In addition, the buffer area in lot 4 could also be protected in the northwestern corner with the same methods. This measure would further enhance the wildlife corridor by including the majority of the wetland and regulated buffer area.

The applicant has been very cooperative and responsive to addressing prior concerns regarding biodiversity impacts from the proposed development. This completes my additional review of the proposed Furnace Dock Subdivision Plans, and potential impacts on biodiversity at this time. Please let me know whether you have questions or require additional information.

Sincerely,

Stephen W. Coleman

Stephen W. Coleman
Principal
SWC/tbh
Cc: E. Tinkhauser

Appendix B

PUBLIC HEARING TRANSCRIPTS

PUBLIC HEARING
 ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT
 FOR FURNACE DOCK SUBDIVISION

TOWN OF CORTLANDT PLANNING BOARD
 TOWN HALL, 1 HEADY STREET
 CORTLANDT MANOR, NEW YORK 10567

Held October 7, 2003 at 8:00 P.M.

PRESENT:

Steven Kessler, Chairman
 John Bernard, Board Member
 Thomas Bianchi, Board Member
 Loretta Taylor, Board Member
 Susan Todd, Board Member
 Kenneth Verschoor, Town Planner

REPORTED BY: DIANE HANSEN

1 DEIS PUBLIC HEARING 10/7/03

2 MS. WHITEHEAD: Good evening. My
 3 name is Linda Whitehead. I'm a partner
 4 with the firm of McCullough, Goldberger
 5 & Staudt.

6 We're here for the Public Hearing
 7 on the Draft Environmental Impact
 8 Statement, subdivision application, and
 9 related applications for the Furnish
 10 Dock subdivision.

11 With me is Fred Wells from Tim
 12 Miller Associates. They are the project
 13 planners and the drafters of the DEIS.

14 Also present are Ralph Mastronaco, our
 15 project engineer, and Gail Guillet from
 16 City/Scape, our archeological
 17 consultants.

18 I am just going to do a brief
 19 introduction of the project and then
 20 Fred is going to take you through the
 21 plan for the members of the public who
 22 may be here. The Board is fairly
 23 familiar with it already.

24 We have a court reporter here for
 25 purposes of having an accurate record.

DEIS PUBLIC HEARING 10/7/03

1 For the benefit of the public who
 2 may be new to this process, what we do
 3 here this evening is take comments, and
 4 then we respond to them in a document
 5 called a Final Environmental Impact
 6 Statement. The purpose of having the
 7 reporter here is to make sure that we
 8 have accurately recorded all comments so
 9 that we can properly respond to them.
 10 We do ask that anybody who does speak
 11 speaks clearly and slowly enough so she
 12 can keep up.

13
 14 MR. KESSLER: Also make sure they
 15 identify themselves by name and where
 16 they live.

17 MS. WHITEHEAD: The Board will
 18 also accept written comments after the
 19 close of the hearing, and the Board will
 20 determine the date -- the date that was
 21 in the notice was October 17, but the
 22 Board has the ability to extend the date
 23 for written comments to be accepted. We
 24 will also be responding to written
 25 comments as well.

DEIS PUBLIC HEARING 10/7/03

1 The property which is the subject
 2 of this application contains a total of
 3 42 acres. It's located in a R-40 Zoning
 4 District. It is on the north side of
 5 Furnace Dock Road approximately a
 6 quarter mile from Albany Post Road. It
 7 is located within the Hendrick Hudson
 8 School District.

9 The proposed subdivision will
 10 result in 24 single-family lots, all of
 11 which fully conform to the requirements
 12 of the zoning ordinance.

13 The lots will range in size from
 14 .92 to 1.43 acres. Approximately
 15 14.75 acres will be located in
 16 restricted open space lots which will be
 17 owned by a homeowners association, and
 18 those will be restricted from any
 19 further development.

20 Fred will show you when he goes
 21 through, but they are essentially the
 22 lighter green areas shown on that plan.
 23 There are approximately 4 acres
 24 of wetlands on the site. No homes are
 25

DEIS PUBLIC HEARING 10/7/03

proposed within either the wetlands or the 100-foot buffer. A wetlands permit is required for road crossings, utilities, and a few driveways. Access to the property is not possible without crossing some small areas of wetlands and/or buffer.

A steep slopes permit is also required as some areas of slopes over 15 percent will be disturbed.

Throughout the review process with the Planning Board we have made some changes to the plan which have reduced the amount of wetlands, wetland buffers, steep slopes disturbances, and which has resulted in the significant areas of restricted open space.

The houses will be served by public water, and will be connected to the Baltic Estates Sewage Treatment Plant.

The proposed developer of the project is Blitman Development Corp. (phonetic). There is information

DEIS PUBLIC HEARING 10/7/03

concerning this company that is contained within the DEIS. They're a developer of several other residential subdivisions in the area including the Preserve at Rye and the Preserve at Samers, both of which incorporated and improved environmentally sensitive areas and wetland areas and utilized some innovative forms of treating storm water runoff. The company has been a successful residential developer in the area for many years.

In preparing the DEIS we reviewed many areas of potential impact which had been identified by the Planning Board as part of its scope of review. That scope also incorporated comments made by neighbors which were received at the Public Scoping Session.

Among the areas of potential impacts that were studied are: Geology, soils and topography; water resources, including surface, ground water and runoff; air resources and noise;

DEIS PUBLIC HEARING 10/7/03

terrestrial and aquatic ecology;
traffic; land use and zoning; community
services; socioeconomic; historic and
archeological resources; and visual
resources.

As required by SEQRA, which is
the State Environmental Quality Review
Act, we also analysed certain
alternatives to the project. These
included a 26 lot cluster plan, which
brought the lot sizes down to a smaller
lot size to preserve additional areas of
open space. It included a conventional
plan with no wetland or steep slopes
disturbance discussed. It included a
conventional plan with only minimal
wetland disturbance to gain access into
the site. It also included a no action
alternative that we are required by law
to study.

The proposed project is a low
density development with approximately
one acre per 1.77 acres. This is
consistent with other low and medium

DEIS PUBLIC HEARING 10/7/03

density development in this area.
There are community facilities,
shopping, and public transportation all
nearby. There is existing
infrastructure to support the
subdivision. All of these factors
support this property being an
appropriate location for this
development.

It meets the standards for smart
growth. It meets the standards set
forth by the County of Westchester in
their publication "Patterns for
Development" by having all these
factors.

At this time I'm going to hand it
over to Fred to take you through the
plan, and then we will take any
comments. We will answer any questions
if the Board would like us to. Our
other consultants are here to answer
questions as well.

MR. WELLS: If I may, I would
like to step up to the plan to point out

DEIS PUBLIC HEARING 10/7/03

1 a few things.

2 The colored plan we have here is

3 a colored plan of the engineer's design

4 for the subdivision.

5 Just to orient yourself north is

6 actually that way. On the south side of

7 the site is Furnace Dock Road, which is

8 here. Watch Hill Road is this road up

9 here, which are single-family homes on

10 the north side of the site (indicating).

11 Furnace Dock Lake is here.

12 There's a utility easement or right of

13 way here. Con Ed power lines.

14 Single-family homes on this side of the

15 site (indicating).

16 What we have shown here in a

17 couple of different colors of green --

18 the OS stands for open space, which are

19 dedicated open spaces which include this

20 corridor where Furnace Brook flows.

21 Furnace Brook flows over the entire

22 frontage except for a little corner here

23 (indicating).

24 Our subdivision road enters the

DEIS PUBLIC HEARING 10/7/03

1 property and goes towards the back of

2 the property which also we provide open

3 space in the back. There's a large

4 wetlands space here we are proposing to

5 preserve untouched. There is also an

6 open space parcel here, and a small

7 portion on the other side of our

8 proposed road which also contains a

9 wetlands and the buffer. These four

10 open space areas are dedicated open

11 space in order to preserve the woods as

12 is, untouched (indicating).

13 In addition to those open space

14 areas this plan shows the green tree

15 line, which is actually the edge of

16 disturbance. The back of these lots

17 would also remain untouched by

18 construction. They would still be

19 wooded (indicating).

20 The general orientation of the

21 subdivision is a single, interior road

22 with a cul-de-sac and a small road

23 coming off towards the end.

24 As Linda described, there is no

DEIS PUBLIC HEARING 10/7/03

road access in the rear of the property so we are proposing a single access from Furnace Dock. This access requires a crossing of this brook, so we are proposing a bridge here to do that. This is where the bulk of the wetlands disturbance occurs on this project, that brook crossing (indicating).

Essentially that's -- it's a conventional subdivision layout with additional open space shown. We can answer other questions the Board has or proceed with public comments. As indicated, we are here to listen to the public comments and receive them for later addressing in the Final Environmental Impact Statement.

MR. KESSLER: I think we will go to the public before we go to the Board. Come up to the microphone. If you want to line up, that is fine. Please state your name for the record, as well as where you live. State your comments, your questions.

DEIS PUBLIC HEARING 10/7/03

As Ms. Whitehead said all of your questions will be answered in the Final Environmental Impact Statement Document which the applicant is required to prepare based upon the public comments, the comments of the staff, the Board, and our consultants.

MS. BYRNE: Nancy Byrne. I live at 32 Watch Hill Road.

Just to kind of -- as you pointed out where Watch Hill Road is I will show you where my house is. Right here (indicating).

I have read through the DEIS and, as I said, where I am is identified in the report as the -- my property borders Wetland A, and Design Point 1, which is identified in the report as a stream which exits the northwest portion of the project site.

Watershed No. 1 is directly adjacent to my property. The culvert is on the property line between my backyard and the Furnace Dock, Inc. property. An

4-5

DEIS PUBLIC HEARING 10/7/03

1 easement from the culvert to another
 2 culvert near the road goes through my
 3 side yard. According to the existing
 4 topography map my property is at the
 5 lowest point on the map.
 6
 7 My main concern after reading the
 8 report is that there appears to be a
 9 conflict between some of the information
 10 that appears in the report and the
 11 report's conclusions regarding flooding
 12 in the area.
 13 In the water impact section of
 14 the report it concludes that "no water
 15 quantity concerns are expected" because
 16 Wetlands A will not be touched, and the
 17 wetland buffer zone will only be
 18 slightly disturbed; that there is "no
 19 water quantity info available," and "the
 20 wetland and surrounding area is
 21 generally in a natural condition."
 22
 23 Later in the report it states
 24 that "proposed storm water management
 25 plan will maintain storm water runoff
 rates for the 2 to 100-year storm events

4-5

DEIS PUBLIC HEARING 10/7/03

1 to the predevelopment levels.
 2 Therefore, no downstream flooding
 3 related impacts are expected to result
 4 from the proposed development."
 5
 6 The report also states however
 7 that "areas within the A Zone are
 8 located within the 100 year flood zone
 9 and are considered to have the potential
 10 for flooding." Design Point 1 is in the
 11 A Zone. The hydrographs at Design Point
 12 1 show existing 100 year water exceeded
 13 the new proposed runoff water rate.
 14 This is particularly disturbing because
 15 according to the map A Zone goes right
 16 up to the back of my garage and along
 17 the sidewalk.
 18
 19 The report further states that
 20 Design Point 1's existing peak water
 21 flow for a 100-year storm is 62. The
 22 plan's proposed peak flow is 61. The
 23 slight decrease, in and of itself,
 24 doesn't concern me. What does concern
 25 me is the fact that this conclusion is
 based on the assumption that Design

4-5

DEIS PUBLIC HEARING 10/7/03

1 Point 1 can indeed properly handle the
 2 water from a 100-year storm.
 3 The 2 feet of water in my
 4 basement, the submerged side yard where
 5 the easement is located, the water
 6 rising above the culvert wall into my
 7 backyard all from Tropical Storm Floyd
 8 tells me that Design Point 1 cannot
 9 handle or properly accommodate the
 10 100-year storm water flow. In fact,
 11 Design Point 1 can't even accommodate
 12 the water properly from a tropical storm
 13 such as Allison, which again resulted in
 14 my basement being flooded and the water
 15 rising above the culvert wall into my
 16 backyard.

17 Based on the findings I read I am
 18 baffled as to how the report summarizes
 19 the findings to say "no downstream
 20 flooding related impacts are expected to
 21 result from the proposed development."

22 I am very concerned about
 23 potential flooding in this area,
 24 especially as it has happened twice
 25

4-5

DEIS PUBLIC HEARING 10/7/03

1 before to me. I hope the Board will
 2 take this concern into -- will look at
 3 it further as they are going forward.

4 MR. KESSLER: Would anyone else
 5 like to comment?
 6

7 MS. BYRNE: I have pictures if
 8 anyone needs to see the flooding.

9 MR. KESSLER: Yes. You can leave
 10 the pictures with us.

11 MS. BYRNE: (Handing).
 12 (Inaudible conversation.)

13 MR. KESSLER: Why don't you go
 14 back to the mike and put it on the
 15 record.

16 Do you know when the photographs
 17 were taken?

18 MS. BYRNE: Those photographs are
 19 of my basement the morning after Floyd.

20 FEMA was aware of the flooding as
 21 we had received a \$5,000 grant from them
 22 to fix numerous things that had been

23 cause by the flooding. This happened
 24 again -- not nearly to the extent, but
 25 happened again with Allison which was

4-5

DEIS PUBLIC HEARING 10/7/03

not nearly the strength of a storm that Floyd was.

For them to say Design Point 1 can handle that amount of water -- I can't see how it can be.

MR. BERNARD: Have you been

placed in a flood zone by FEMA?

MS. BYRNE: No. It is interesting because the Flood zone ends at my house, but my house is not in the flood zone. I don't know how the flood decides that it doesn't go into my house.

MR. KESSLER: Thank you.

MS. ROMEU: Good evening. My name is Jeannie Romeu, 29 Scenic Drive. I live at the Amberlands Apartments (phonetic) that are across the street from the proposed site.

In reading the Draft Environmental Impact Study in your office the other day I just wanted to comment on -- not even so much the wildlife and the wetlands, and everything that is going to be

DEIS PUBLIC HEARING 10/7/03

disturbed, but I was looking at the cost of -- the income that would be generated from this subdivision to the Town.

I notice that they estimate a Town tax generated of about \$77,000 a year to the Town in the Town tax part. 24 houses at, I guess, over a half million dollars a piece. I find that that's a low amount. A measly amount for the cost of the services that will be necessary for the subdivision of 24 homes.

We're talking about a road that's going to go in there that the developer is willing to give to the Town. So, therefore, we're looking at the maintenance of a road, sanding, salting, plowing, sewage maintenance, lighting, not to mention garbage pick up of these homes probably twice a week and recyclables.

I just feel that I'm sure the Town will be generating a lot more in costs to support this subdivision than

7-6a

7-6b

DEIS PUBLIC HEARING 10/7/03

7-6b

1 what would be generated coming in in the
2 tax money. I'm not sure how this would
3 be a benefit to the Town.
4

5 I notice there is also about
6 \$191,000 a year for school tax coming in
7 which they say is also a benefit. The
8 houses, I guess, are three to five
9 bedrooms a piece times 24. You do the
10 math. 50 to 150 bedrooms. I think
11 there's going to be a lot more than 21
12 children according to the DEIS report.

7-6c

13 Looking at maybe the school buses
14 going in there as well as the teachers
15 salaries for these additional children I
16 somehow think that the Town again will
17 be burdened with something that will be
18 more than \$191,000 a year in school
19 taxes. How that is a benefit also to
20 the Town I'm not quite sure.

7-6d

21 I think in that respect -- not
22 even mentioning the flooding that may be
23 happening. Floyd is -- well, this is a
24 wetlands area. There's Furnace Brook
25 Pond, the streams that go in there, and

7-6e

DEIS PUBLIC HEARING 10/7/03

7-6e

1 the ponds in there. I'm not sure if
2 these houses are built and their
3 basements get flooded will they look to
4 the Town as well to help them in their
5 problems of how to get that not to
6 happen.
7

8 I think the Town loses. I think
9 the taxpayers lose. That's basically
10 what I wanted to bring up. I think the
11 Town is going to be paying a lot more
12 than what is going to be generated by
13 this property, and then it is going to
14 be lost forever.

2-10

15 I know there will be buffer
16 zones, but I'm sure that on private
17 property there isn't a guarantee that
18 those buffer zones will be respected or
19 maintained. I just thank you for the
20 time.

21 MS. MARSH: Good evening. I'm
22 Catherine Marsh, 27 Spice Hill.

23 I have a question about the
24 proposed road. It is 2,000 linear feet.
25 I believe the town regulations call for

2-11

DEIS PUBLIC HEARING 10/7/03

1 500 feet as the maximum for a dead end
 2 road. I would like to address -- I
 3 would like the Board to address, really,
 4 the safety and security issues of one
 5 road, one access, one egress for this
 6 development.
 7 They also mention in the DEIS
 8 about a possible connection to a private
 9 drive. I was not able on the map to
 10 locate where that private drive is, and
 11 considering it might be mine I would
 12 like to see what that is. If someone
 13 would please point that out, I would
 14 appreciate that.

15 MR. WELLS: Right here

16 (indicating).

17 MS. MARSH: Which is near Furnace
 18 Dock itself?

19 MR. WELLS: Furnace Dock is here.
 20 It's about halfway in. There's a
 21 driveway here (indicating).

22 MS. MARSH: Has the owner of that
 23 property been contacted about that as a
 24 possibility, or is that just something
 25

DEIS PUBLIC HEARING 10/7/03

1 that exists on paper?
 2 MR. KESSLER: I think it just
 3 exists on paper.
 4 On paper; right?
 5 MR. WELLS: That is correct.
 6 MS. MARSH: The other issue I
 7 have a concern about is the blasting
 8 that is proposed on the site.
 9 My house, we use well water. I
 10 am concerned about the blasting's
 11 impact. My property is quite close to
 12 the stone wall. I border the stone wall
 13 where the sewer line will be coming
 14 down. There are a lot of large trees
 15 there. There are also rocks. I am
 16 concerned what would blasting do to my
 17 house which is built on a slab, as well
 18 as my well where I get my water from.

19 Thank you.

20 MR. KESSLER: Any other comments
 21 from members of the audience.

22 MR. SMITH: My name the Peter
 23 Smith. I live at 84-A Furnace Dock
 24 Road.
 25

DEIS PUBLIC HEARING 10/7/03

I can shed some light on the private drive because I'm one of the owners that use that drive. The drive is owned collectively by six homeowners. In order to gain access through the drive you would need to effectively get the consent of the six homeowners who adjoin the drive.

MR. WELLS: Mr. Chairman, if I could clarify?

From what I understand the driveway that Mr. Smith is on is another driveway that this does not connect to. The road that we're showing, a paper street essentially or potential connection, has access from Watch Hill Road -- sorry, Albany Post Road.

MS. WHITEHEAD: It is not the road that comes up from Furnace Dock.

MS. TODD: My question is: What's the point of this road?

It hasn't been determined that you have access on it. Why is it in the DEIS?

2-12

DEIS PUBLIC HEARING 10/7/03

MS. WHITEHEAD: What we did was we looked -- in response to some questions and concerns by this Board we looked to see if there was any location to provide a potential secondary access or emergency access.

We noticed at this point there is a private drive that comes fairly close to the property line, and that it is also a relatively long, dead end drive. We thought that if any owners of that property in the future were interested it would benefit them as well as us -- what we did was we provided right of way to the property line.

If we didn't do that at this time, it would never be a possibility in the future. We thought that by providing that, showing that potential future connection at this time it is there for the future, not knowing whatever is going to happen on that adjacent property.

It was really the only -- since

2-12

DEIS PUBLIC HEARING 10/7/03

1 the property on the other side is
2 Con Ed, and there's the large wetlands
3 in the rear, it was the only location
4 where there was a feasible point of
5 connection.

6
7 MS. TODD: But it is not going to
8 be something we can really say is going
9 to improve the functioning of the
10 cul-de-sac or anything at this point
11 because you don't have the right of way.

12 MS. WHITEHEAD: We're just
13 showing it as a potential future
14 connection.

15 MR. KESSLER: Any other comments
16 from the audience?

17 Please.

18 MR. RICH: My name is Arthur
19 Rich. I live at 27 Spice Hill which
20 adjoins their property.

21 One of the concerns that I have
22 is environmental. My understanding is
23 that the biodiversity study is required
24 to be done for all four seasons, and I
25 don't see any mention of that in the

2-12

DEIS PUBLIC HEARING 10/7/03

1 paperwork. It is hard to believe that
2 in an area that has as much wetlands as
3 this there is only one type of snake
4 that they could find, and it's a
5 gardener snake. A little tiny one.

6
7 There's no mention of the foxes,
8 coyotes, and owls that we see regularly.
9 I question the study in a serious way,
10 not to mention the deer which we all
11 know about.

12 The New York State Department of
13 Environmental Conservation has criteria
14 for determining significance to a
15 proposed Type 1 or unlisted action.

16 They say that removal or destruction of
17 large quantities of vegetation or fauna,
18 substantial interference to the movement
19 of any resident or migration of fish or
20 wildlife species impact a significant
21 habitat area.

22 It's hard to believe that there
23 wouldn't be a significant impact in that
24 54 or whatever it is acres considering
25 the layout that they are showing here.

5-6

5-6

DEIS PUBLIC HEARING 10/7/03

I don't see how they can get around this state requirement. There is no mention of it.

MS. MOYER: Hi, I'm Lisa Moyer (phonetic). I live at 44 Sunset Lane in Croton.

I guess my concerns are the health of lake and the brook that runs from the lake. I didn't read the DEIS, so I apologize for not having a lot of information. It is my understanding that that brook within a mile or so runs into the Hudson River at Lake Oscawana Nature Preserve.

At that place and time at the nature preserve there is the blue sign from Department of Environmental Conservation.

I'm a little nervous and its past my bedtime. I have a one year old. The DEC has the blue sign that denotes what he is talking about which is the Hudson River estuary program. At that place they signify that that is a

5-6

4-6

4-6

DEIS PUBLIC HEARING 10/7/03

significant nature preserve, and what they are preserving there is the marsh land. The brook that actually runs right there runs into that marsh land.

My concern is that a mile up the road the lake and that brook are being disturbed by all this runoff, and the health of that marsh can only be as healthy as the brook that runs a mile above it. I am concerned about what is their storm water plan, and how are they addressing that issue that one mile down the road it is protected by DEC and we're talking about a major subdivision one mile up the road. Thanks.

MR. KESSLER: Any other comments from the audience?

MS. MARSH: I forgot to mention something.

MR. KESSLER: Sure. Go ahead.

MS. MARSH: Catherine March. 27 Spice Hill.

I forgot to ask about the traffic study because I had some concerns about

4-6

6-2

DEIS PUBLIC HEARING 10/7/03

1 that. When I looked at the DEIS, they
 2 talked about the number of trips that
 3 would be made in a day, and they talked
 4 about how many would come out in the
 5 morning -- 28 trips during the morning
 6 peaks and 32 in the evening.
 7
 8 Checking around with some other
 9 towns and some other projections what I
 10 have learned is that the average
 11 household makes 12 trips a day; six in
 12 and six out. That seems to be the
 13 standard used in many of the other towns
 14 in Westchester.
 15 I question the number that they
 16 have here for the housing and the number
 17 of people that are going to be living
 18 there.
 19 If they are saying there are only
 20 going to be 21 in school and the rest
 21 are going to be under five or over 18,
 22 it seems we have a lot more drivers, and
 23 a lot more cars, and a lot more trips
 24 than are accounted for in the DEIS.
 25 Thank you.

6-2

DEIS PUBLIC HEARING 10/7/03

1
 2 MR. KESSLER: Anybody else before
 3 we ask the Board for their comments?
 4 Anybody want to comment?
 5 MS. TODD: Sorry, I don't have
 6 all of my comments prepared. I have
 7 been out of town.
 8 I would like to say something
 9 about the biodiversity study that Steve
 10 Coleman did. He's an excellent
 11 professional I believe. I think what he
 12 came back with sort of startled him as
 13 well.
 14 He didn't find the kind of high
 15 quality biodiversity on the site at
 16 present that you might expect bordering
 17 on the lake and everything. He feels
 18 that maybe impacts in the past might
 19 have killed a lot of that biodiversity,
 20 the more rare salamanders, and the more
 21 rare turtles. That doesn't mean you are
 22 not seeing a great diversity of owls, or
 23 coyotes, or foxes which can move into an
 24 area pretty quickly. But things like
 25 rare salamanders and turtles once they

5-7

DEIS PUBLIC HEARING 10/7/03

get wiped out of an area they really don't come back unfortunately.

What Steve did recommend, which I think is not really successfully done in this plan, is connections between the different habitats.

I see right here three open spaces that are very disconnected from each other which doesn't please me. I believe the only way to get more connections in this area is to really reduce the lot count considerably.

I also regret sounding like a broken record, but I still really have difficulties with the entrance of this site.

I drive that Furnace Brook frequently, probably two or three times a day on my six trips in and out of my house, and I think that is one of the most beautiful spots in our town; that stream flowing through the rugged valley with the big, tall trees.

I would really hate to see an

5-7

8-4

DEIS PUBLIC HEARING 10/7/03

imposing subdivision entrance wreck that for all of us in this town. I think it is a very special view shed in our town that should be preserved. I do think there are other areas to make an entrance to this subdivision.

John and I were talking about this after our site visit on Sunday. We thought that we have already got a bridge that crosses the Furnace Brook on Furnace Dock. To make a kind of wide connection to that to give you the entrance and exit safety room that you need is definitely more I think -- less impactful of that beautiful area, and makes a lot more sense to me than stuffing that stream into more and more of covered brooks and pipes.

Why do that? I just think it is harmful.

I also don't think that the crossing point you have selected is -- yes, it might be best for sight distance and all that, but it crosses one of the

8-4

8-4

8-4

DEIS PUBLIC HEARING 10/7/03

1 flood plain areas of the brook and that
2 floods up quickly in a lot of storms.

3
4 That's all I have to say at this
5 time.

6 MR. KESSLER: Any other comments?

7 MR. BIANCHI: I also have not

8 reviewed the entire document, but I have
9 a few and I will summarize my other
10 comments at the next meeting or in a
11 memo.

12 Concerning taxes on Page 1-12
13 where the summary of taxes generated for
14 the town and for the school district
15 are. It notes here that the project is
16 projected to bring 191,000 in additional
17 property taxes to the school district.
18 The difference or the increase in taxes
19 is stated at 177. I'm not sure which is
20 the right number.

21 I believe 177 would then reduce
22 the surplus down about 15,000, so it is
23 marginal at that point.

24 I want to verify that the number
25 in the paragraph towards the bottom of

7-7

DEIS PUBLIC HEARING 10/7/03

1 page -- whether that is correct or not.
2 It states 191,000.

3
4 I also think that the projected
5 taxes to the Town seem to be low. I
6 have to look into that a little more,
7 and how we have calculated, if, in fact,
8 that is explained further in the
9 documented. I assume it is. I have a
10 concern that that is a little low.

11 Page 1-17. Under wetlands it
12 indicates that the applicant proposes to
13 create a total of 0.55 acres of wetlands
14 on the project site. I know there has
15 been a lot of debate as to whether or
16 not creating wetlands is an effective
17 route to ameliorate the action or not.
18 I am going to be looking a little closer
19 on that, but I have a concern with
20 creating wetlands to replace ones that
21 are destroyed.

22 Page 1-22 it indicates that there
23 are some historical monuments at the
24 site: A gristmill foundation, and a
25 house foundation.

2-13

5-8

7-7

DEIS PUBLIC HEARING 10/7/03

I am just wondering how that is going to be protected as the site is developed and then afterwards.

I'm also thinking that maybe some kind of a historical marker may be appropriate for this location since it is a pretty significant part of the town and early roots seem to generate from this area with the boundary, etcetera, to look at that being placed there.

Concerning the alternatives, I have to look into it a little more. I reviewed the alternative analysis. I guess I was looking for a little more in terms of what some of the alternatives were, specifically the cluster, etcetera. I will further that comment with some more details as I get into the document subsequently. I will bring these up at the next meeting or summarize them in a memo.

That's pretty much as far as I have gotten at this point.

MR. KESSLER: Any comments?

DEIS PUBLIC HEARING 10/7/03

MR. BERNARD: Just to reiterate what Susan was saying about the entranceway. It would be nice if the applicant could look into the possibility of reusing that existing entrance over the Furnace Dock with an eye to replacing that existing structure which is too narrow for the stream.

It allows no habitat traffic under the bridge which your new bridge across there does give ample room. You have addressed that, and it is a good looking structure.

If there is a possibility, install that new structure in two phases at the existing location so that traffic could be maintained. But the new entrance would be where the existing one is so that we don't end up with a nice, new, wide structure that works for habitat and then it all funnels into an old structure that is too narrow already. That's what we would like to see.

8-5

2-13

DEIS PUBLIC HEARING 10/7/03

The other comment I have right now is just on this current iteration with this tree line completely surrounding the lots and the roadways; what's that for?

MS. WHITEHEAD: It's a limit of disturbance line.

MR. BERNARD: So those aren't trees or bushes planted side by side?

MS. WHITEHEAD: No.

MR. MILLER: And that will be the edge of the canopy after grading the curb to install the road --

MR. BERNARD: All that fluffy green line is just to describe the limit of disturbance?

MR. MILLER: That would be the edge of the canopy.

MR. BERNARD: No other comments at this time.

MR. KESSLER: Okay.

Just a couple of comments myself.

I would like to be clear what additional studies we are going to be receiving as

2-14

DEIS PUBLIC HEARING 10/7/03

I believe there was a part of the FEIS. I believe there was a Phase II Archeological Study. Someone earlier mentioned a seasonal study of the biodiversity aspects of the site.

I also, and I believe I have made previous comments on this --

MS. WHITEHEAD: Mr. Chairman?

MR. KESSLER: Yes.

MS. WHITEHEAD: I don't think there was any additional work coming on the biodiversity.

MR. KESSLER: I know we had discussions about the seasonal aspects.

MR. VERSCHOOR: We will look into it.

MR. KESSLER: In terms of what Mr. Bianchi said about the proposed cluster, I don't think the cluster was an accurate representation of the spirit of what the clustering alternative should be.

I think it pretty much -- the intent was to concentrate the building in one part of the site. What the

8-6

DEIS PUBLIC HEARING 10/7/03

1 cluster did was concentrate it in the
2 same two parts of the site that it
3 currently exists.
4

8-6

5 I understand the applicant's need
6 to want to get the maximum out of
7 building on the site as allowed under
8 the zoning rules, but it seems to me
9 that this extension at the back part of
10 the site, which seems to be for the
11 purposes of getting the additional
12 buildings, is more work, or more
13 disturbance is what I should say, than
14 perhaps what is reasonable in my mind.

8-6

15 The only other comment is just a
16 general comment. I think unfortunately
17 what the public doesn't see is what is
18 up on the screen is the conditions of
19 the site as presented in the DEIS that
20 shows the amount of steep slopes,
21 wetlands, and wetland buffers that
22 exists on the site.

23 I think that the engineering of
24 this and the threading the needle in a
25 sense of this development is very

DEIS PUBLIC HEARING 10/7/03

1 precarious and difficult.
2
3 What our intent here now is that
4 we will probably adjourn this to the
5 next meeting. One of our Board Members
6 I know has some comments he would like
7 to make on this as well. We would like
8 to keep this open to make additional
9 comments.

10 I understand that you are going
11 to say can we close it and keep the
12 response period open for a certain
13 number of days, but given the
14 sensitivity I think and as long as we
15 have all come out on this I think this
16 Public Hearing should be kept open for
17 another meeting.

18 We may have a new Planning Board
19 Member by the next meeting.

20 MS. WHITEHEAD: There is never
21 anything to stop a new Planning Board
22 Member or any Planning Board Member from
23 giving comments certainly, even if you
24 wanted to extend the written comment
25 period. But the purpose of the Public

1 DEIS PUBLIC HEARING 10/7/03

2 Hearing is to hear from the public. I
3 think everybody who was here tonight has
4 had an opportunity to speak.

5 If you wanted to extend the
6 written comment period out further for
7 the benefit of the Board Members and any
8 other members of the public, we don't
9 have a problem with that. But we would
10 really like you to consider closing the
11 hearing as everyone who has asked to
12 speak has been able to speak.

13 MR. KESSLER: And also for the
14 public to hear the comments of the Board
15 as well. While it would be well and
16 good to have the new member comment he
17 has not been appointed yet by the Town
18 Board. I think we have to wait for that
19 positive action before he can review the
20 materials.

21 I think I appreciate your
22 remarks. They are not unexpected. But
23 I think we will keep this open so that
24 we can continue our review of the
25 documents and make additional comments,

1 DEIS PUBLIC HEARING 10/7/03

2 if necessary, at the next meeting.

3 I have heard from at least a
4 couple of Board Members that they feel
5 they need a little more time to review,
6 so we will do that.

7 MS. WHITEHEAD: Any written
8 comments, other Board comments, or staff
9 comments that we can get as soon as they
10 are available --

11 MR. KESSLER: Absolutely.

12 MS. WHITEHEAD: -- we would like
13 that so that we can kind of start the
14 process and start working on our
15 responses. Anything that can be
16 available, and staff comments if they
17 are coming as well.

18 MR. KESSLER: Ken?

19 MR. VERSCHOOR: No, nothing else.

20 MR. KESSLER: Last call from the
21 audience.

22 As I said we will adjourn this so
23 there will be an opportunity at the next
24 meeting to comment further. If there
25 are others that want to read the

1 DEIS PUBLIC HEARING 10/7/03

2 document, that is available at the

3 Planning Department offices. You are

4 certainly free to do that.

5 If there is no objection, may I

6 have a motion to adjourn?

7 MR. BIANCHI: I move to adjourn

8 this Public Hearing to the November 5th

9 meeting.

10 MR. KESSLER: A second, please?

11 MS. TODD: Second.

12 MR. KESSLER: All in favor?

13 (ALL IN FAVOR.)

14 (Whereupon, at 9:20 P.M. this

15 meeting was adjourned.)

16

17

18

19

20

21

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24

25

C E R T I F I C A T I O N

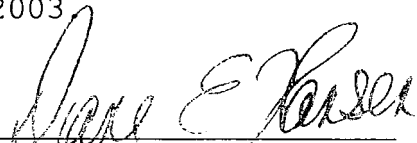
STATE OF NEW YORK)
) SS.
COUNTY OF NASSAU)

I, DIANE E. HANSEN, a Court Reporter and Notary Public within and for the State of New York, do hereby certify:

That this is a true and accurate record of the meeting 7th day of October, 2003.

I further certify that I am not related to any of the parties to this action by blood or marriage and I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 6th day of October 2003



DIANE E. HANSEN

TOWN OF CORTLANDT
PLANNING BOARD

-----x

Public Hearing: Application and Draft
Environmental Impact Statement dated July 18,
2003 of Furnace Dock, Inc. for Preliminary
Plat Approval and Steep Slope and Wetland
Permits for a 24 lot conventional subdivision
of 42.43 acres located on the north side of
Furnace Dock Road, 1,500 feet east of Albany
Post Road as shown on a 14 page set of
drawings entitled "Preliminary Plat, Furnace
Dock Inc." Prepared by Ralph G. Mastromonaco,
PE, latest revision dated July 21, 2003.

-----x

November 5, 2003
8:15 p.m.

B E F O R E:

STEVEN KESSLER, Chairman

MEMBERS:

ROBERT FOLEY

LORETTA TAYLOR

IVAN KLINE

JOHN BERNARD

SUSAN TODD

JOHN J. KLARL, Deputy Town Attorney

KEN VERSCHOOR, Deputy Director Planning

ED VERGANO, Director, Department of Technical
Services

LEW LESLIE, Conservation Advisory Council

1

2

A P P E A R A N C E S :

4

5

6

MCCULLOUGH, GOLDBERGER & STAUDT, LLP.

7

Attorneys for the Applicant

8

1311 Mamaroneck Avenue, Suite 340

9

White Plains, New York 10605

10

11

BY: LINDA B. WHITEHEAD, ESQ.

12

13

14

15

ALSO PRESENT:

17

Tim Miller, Tim Miller Associates, Inc.

19

000

20

21

22

23

24

25



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57 West 38th Street, New York, New York 10018 212.679.6095 www.dalcoreporting.com DALCO REPORTING, INC.

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PROCEEDINGS

1
2 MS. WHITEHEAD: This is the
3 continuation of the public hearing, so at
4 this time we would like to take further
5 comments.
6 THE CHAIRMAN: Is there anybody in
7 the audience that wishes to comment on
8 this application? Come on up and state
9 your name for the record and your
10 address, please.

11 MS. ROMEU: My name is Jeanne Romeu
12 and I live on Scenic Drive which is a
13 public street on this proposed 24 acre
14 subdivision. Looking at the DEIS in
15 your offices and looking at the proposed
16 lots where they are located, this
17 particular map doesn't show the wetlands
18 that exist, at least by the properties.
19 I do have copies here of the proposed
20 footprints of those proposed lots with
21 wetlands and the buffer space. I
22 believe there should be -- it indicates
23 that there's about a two -- there's open
24 space designated areas around the
25 wetlands. The footprints of the housing

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PROCEEDINGS

1 lots are in the open space.
2
3 What I would like to know is since
4 they're saying that these areas here
5 will remain wooded areas, these lots
6 continue as private property beyond the
7 houses themselves and I would like to
8 know if -- since it exits and it goes
9 deep inside the wetland buffer space,
10 are -- if these protected woods will be
11 assigned easements?

12 MS. WHITE: We weren't going to
13 respond tonight.
14 THE CHAIRMAN: They will respond to
15 this in the FEIS. Every question that
16 you ask, there will be a written response
17 to. You're welcome to respond if you
18 like.

19 MR. MILLER: Mr. Chairman, Tim
20 Miller of Tim Miller Associates. We did
21 talk about this at the public hearing
22 last month, and the applicant is
23 considering placements of easements on
24 some portions of the lots. That's
25 something we are evaluating.

DALCO REPORTING & LEGAL VIDEO

2-18

2-18

1 PROCEEDINGS

1 PROCEEDINGS

2 Obviously, these lots, you know,
3 have to meet certain size requirements
4 and we do want to make sure that the
5 people do have a use of backyards, but
6 we have heard the comment and we did
7 indicate to the planning board at the
8 last meeting that we will consider
9 conservation easements, at select
10 locations.

2 it comes from Furnace Dock Road and it
3 continues into this parcel. It runs
4 sort of parallel to the stream. It is
5 accessible from Furnace Dock Road and
6 there's a paved sort of cutout to get to
7 this wooded dirt road and I was
8 wondering, since that's less invasive
9 and it doesn't blaze right into the
10 stream and the wetlands, why could that
11 not be considered as an entrance to the
12 property?

11 THE CHAIRMAN: Thank you.

12 MS. ROMEU: My second question is:

13 The proposed entrance to the
14 subdivision, it indicates on the DEIS
15 that the applicant proposes to keep the
16 stream wooded areas preserved and in
17 pristine condition but they will be
18 placing a 50-foot wide road right where
19 the stream is on a curve on Furnace Dock
20 Road, and also in one of the maps I have
21 here, there exists right now an unpaved
22 road and I guess it exists from when it
23 used to be a grease mill and before
24 that, the furnace area.

25 It's a road that's a dirt road and

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8-7

8-7

3-1

1 PROCEEDINGS

1 PROCEEDINGS

2 projected plan is implemented. The
3 developer states a project blasting
4 program will be designed prior to the
5 commencement of blasting activities in
6 order to identify the particular needs
7 of this project.

2 well. Without a blasting plan, how can
3 this board determine the impact on
4 either my home or my water supply?
5 Considering the developer either did not
6 know that I had a well or chose to
7 ignore that I have a well, how can I be
8 assured -- or how can you all be assured
9 that there will be no impact?

3-1

8 The rock located in the turn-around
9 at the end of road B would appear to be
10 a target for blasting. My house, built
11 on a concrete slab and containing
12 several large plate glass windows is
13 less than 100 yards from this rock. Can
14 the developer or this board assure me
15 that there will be no adverse impacts to
16 my home or my property?

10 The plan also includes a perforated
11 pipe with crushed stone surroundings.
12 This pipe is about 183 feet directly
13 uphill in my well. I would like
14 clarification on both the purpose and
15 implementation -- implications of this
16 pipe on the quality of my sole source of
17 water. I can't tell, I'm not an expert.
18 I don't know what that pipe is for.

2-6

17 Next, existing wells on the
18 adjacent property section. It states,
19 none of the nearby residential
20 properties obtaining water from wells.
21 This is untrue. My property is adjacent
22 to subdivision 18 and 19. My well is
23 less than 95 yards from the rock located
24 in the road B turn-around. Other large
25 rocks are less than 65 yards from my

19 There's also a stone wall running
20 from northeast to southwest on lot 18.
21 That is not shown on any of the maps and
22 it is not included on the list of stone
23 walls to be removed. However, a
24 proposed sewer line appears to be
25 located exactly where the stone wall now

3-2

2-7

9

PROCEEDINGS

1
2 is.
3 Another omission: The water
4 resource table 3.2-9, there's no data
5 for design .2 on that table. Section --
6 Next point, section 3.4.3,
7 potential impacts on the adjacent echo
8 systems. The DEIS indicates that
9 Furnace Dock Lake upgradient of the
10 subject site, this is a quote, and
11 nearly all storm water runoff from the
12 developed portion of the Furnace Dock
13 site would drain away from the surface
14 water feature. However, when I looked
15 at the maps that we have, it looks like
16 Furnace Dock Lake is at 149 feet. The
17 eastern property lines of lots 3, 4, 5,
18 6, 7, 8 and 9, appear in my looking at
19 the drawings to go from 150 feet to 200
20 feet elevation, and that seems to ensure
21 that storm water drainage including any
22 herbicides and pesticides used on the
23 proposed properties, on the lawns that
24 will be created, are going to flow into
25 Furnace Dock and ultimately the brook.

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10

PROCEEDINGS

1
2 Another point, the DEIS does not
3 mention that in addition to school buses
4 from Hendrick Hudson School District,
5 that there are a number of buses that
6 come from the Croton district that serve
7 the Mount Airy area.
8 The DEIS also indicates there's 21
9 school children proposed at the project
10 or believed to have lived there, but
11 only 20 are listed as attending Hendrick
12 Hudson. I take it from the implied,
13 that one child will attend private
14 school. I therefore deduce that there
15 will be yet another bus, again, not
16 mentioned on the plan.
17 Aside from omissions and errors, I
18 have concerns about a few other things.
19 One is the sewer line, which according
20 to the plan is going to be a 20-foot
21 wide swath. It will cross within 81
22 feet of my well. It will cross and it
23 will unavoidably alter wetland C.
24 wetland C is described in the DEIS as
25 forested with a well developed canopy.

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4-3

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S-5

7-2

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PROCEEDINGS

1
2 It will be located, the sewer line,
3 immediately adjacent to an existing
4 stone wall which goes about 310 feet
5 along my property line. All the trees
6 will have to be removed for the sewer
7 line, and with them removed, I believe
8 that the storm water will further damage
9 the wetlands.
10 The trucks that will be needed to
11 put in this sewer line will be going
12 along that 20-foot swath and will, by
13 their very weight, compact the soil and
14 they will be under the canopy of the
15 trees that are located on my side of the
16 wall, and I believe the health of these
17 trees will be adversely impacted by the
18 compaction.

19 Steep slopes: The developer
20 indicates that 35 percent of the site
21 must be graded to accommodate the
22 proposed development. This appears to
23 be a very high percent of the property,
24 and it also appears it can only be
25 accomplished by blasting and major

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5-5

3-3

PROCEEDINGS

1
2 grading. I request clarification
3 regarding exactly what would be graded
4 and by what means. They indicate houses
5 will be built on the most level portions
6 of the property, yet refer to grading
7 for homes and surrounding water gardens.
8 wetlands and buffer zones: The
9 buffers are located in yards of many of
10 the homes. The developer cannot
11 (inaudible) the future homeowners of the
12 quote, 9.74 acres of undisturbed acreage
13 in the backyards. They cannot assure us
14 that that will continue under private
15 homeownership. What they're saying now
16 is this property will quote, mitigate
17 potential fragmentation of existing
18 wildlife habitat in the areas after the
19 construction of the project.
20 Conversion of buffers into lawns
21 does not protect the buffer, it does not
22 protect the biodiversity. Landscaping
23 and the use of herbicides and pesticides
24 are left at the homeowner's discretion.

The road: The developer proposed a

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3-3

2-8

3-3

PROCEEDINGS

1 single entry/single exit road from the
 2 property, 2000 foot long, far exceeding
 3 the 500 foot maximum established by this
 4 town. In addition to safety concerns
 5 raised entering or leaving Furnace Dock
 6 Road, the planning board must evaluate
 7 the potential risks of the safety of the
 8 residents and the emergency personnel
 9 who service them.

8-3

10 A storm the size of Hugo does not
 11 even warrant hurricane status, flooded
 12 Furnace Brook in several areas. The
 13 residents of this development would be
 14 stranded in a case like this.

15 Social services; I thought this was
 16 interesting. The DEIS contains names of
 17 several child care facilities, however,
 18 in most of westchester's communities
 19 there are long waiting lists for child
 20 care. They don't address that at all.
 21 The shortage is especially true for
 22 infant care. I request clarification on
 23 availability of child care for the
 24 proposed community.

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7-3

PROCEEDINGS

1 After school care, which is
 2 especially important to working parents,
 3 is not addressed at all. After school
 4 care in our community is very limited
 5 and the situation is even worse if your
 6 child is in middle school, in which
 7 there's very little after school
 8 programming.

9 Traffic impacts: The developer has
 10 proposed -- that I would say the
 11 developer's use of numbers in here is
 12 voodoo mathematics. They propose 24
 13 single residences with three and four
 14 bedrooms and state 87 people will live
 15 there; that's a lot of empty bedrooms.

7-4

16 According to the DEIS, these 24
 17 homes will produce a maximum of 20
 18 students. This is less than one per
 19 house. Remember, three to four bedroom
 20 homes. The same homes will produce 28
 21 trips during the a.m. peak traffic hours
 22 and 32 in the evening. This is far less
 23 than the 12 household standard adopted
 24 by other towns in Westchester.

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PROCEEDINGS

1
2 This voodoo math raises serious
3 questions for the projected revenue and
4 cost to our town, to the traffic study,
5 to the use of recreational facilities,
6 social services and projected school
7 enrollment and related costs.

8 I respectfully request that the
9 planning board recalculate the statistic
10 based on a realistic expectation of
11 occupancy. I suggest that instead of
12 calculations utilizing average household
13 size in Cortlandt, which includes
14 numerous condos, apartments, that the
15 calculation is based on residency of
16 other three and four bedroom
17 communities.

18 I also would like a clarification
19 on the \$4,000 recreation fee. Is this
20 equivalent to what is paid for other
21 subdivisions and is this fee based on
22 the number of people in the home? If
23 so, the fee should reflect a realistic
24 occupancy number.

25 Finally, will the remaining open

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PROCEEDINGS

1
2 space that is left on the property be
3 available to the residents of our town
4 or only to subdivision residents?

5 In conclusion, I urge the planning
6 board to deny the requests for this
7 residential subdivision. I urge this
8 board to uphold the regulations that
9 they have established in regard to
10 preservation of wetland and buffer
11 zones, steep slopes and single access
12 roads. Thank you very much.

13 THE CHAIRMAN: Anybody else have
14 any comments on this application from
15 the audience?

16 (No response from audience.)

17 THE CHAIRMAN: Members of the
18 board?

19 MR. FOLEY: I'm looking at my
20 notes. I wasn't at the last meeting.
21 I'm looking at my notes from that
22 meeting which I wasn't here at. I also
23 found some notes I made in February and
24 March, March 4th when we did the DEIS
25 review and I still see some of the same

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2-9

7-4

7-5

29

PROCEEDINGS

1 problems here in this document.
 2
 3 Back then I know you had 26 homes,
 4 you have brought it down to 24, and
 5 dropping lot 11 was one of those, but I
 6 still see a long roadway going in,
 7 length beyond what I believe the code
 8 would allow. I would like to see, as
 9 others have brought up on the board,
 10 Susan and John, at the first site visit
 11 a while back, that there was a way to
 12 have the entrance road other than
 13 bringing a new road and bridge crossing
 14 over Furnace Brook. I would like to see
 15 that using the existing bridge on 9A or
 16 in the entranceway next to it in some
 17 form or another.

8-8

18 The main thing I see in reading
 19 through this is the amount of
 20 disturbance and the percentage figures.
 21 I won't go through them all, but it
 22 concerns me, and I believe someone just
 23 mentioned that 35 percent of the site
 24 being sloped, some 15 acres, the amount
 25 of grading you have to do, even if you

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3-7

PROCEEDINGS

1 cut the fill, and you're saying in the
 2 documents that the 32,000 cubic yards
 3 would be kept on site, nothing would you
 4 be brought in and out. I hope that's
 5 true. I think the slopes are a big
 6 problem.
 7
 8 I won't refer to all of the page
 9 numbers, but that's right in the
 10 beginning on pages 1-2.
 11 The blasting which had been brought
 12 up, on page 1-5, 1.2.3, you do say, and
 13 I believe the president who just spoke
 14 brought this up, but I had it in my
 15 notes from the last month, that there
 16 are no wells on nearby properties, yet
 17 this resident has a well. So that has
 18 to be corrected.

4-9

19 On the wetlands and the referenced
 20 erosion, the amount of slope disturbance
 21 in your plan, you are increasing, as you
 22 have said, the impact's boundary, and I
 23 know you will have to follow the soil
 24 erosion and sediment control plans, but
 25 I have the concerns about that with the

DALCO REPORTING & LEGAL VIDEO

3-8

PROCEEDINGS

1 amount of slopes.
 2
 3 Back to the bridge, if you
 4 reconfigured an entrance road utilizing
 5 the existing 9A bridge, I believe that a
 6 certain percentage of the wetlands would
 7 not be disturbed, I think it's about a
 8 quarter acre, that (inaudible) Furnace
 9 Brook storm water basin area. That
 10 would be improved in my opinion. You
 11 did eliminate lot 11, as I indicated
 12 earlier from the wetland A area. Page
 13 1-4, Wetlands B and C, (inaudible) sewer
 14 line construction connection. Buffers,
 15 again, all facing -- again, all
 16 concerned about disturbances.
 17 The buffer areas, as a resident
 18 just mentioned, and I have in my notes,
 19 back the last month, some of the
 20 backyards and lawn areas become the
 21 buffers. I think there's about two and
 22 a quarter acres that go within the
 23 hundred foot town regulated wetland
 24 buffer areas, roads, driveways, lawns,
 25 et cetera.

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PROCEEDINGS

1 With the floodplains about half
 2 acre, about a half acre would be
 3 possibly disturbed even if you had a
 4 two-year-old flood plan according to
 5 your document. That means you have a
 6 road crossing, I believe. With the new
 7 impervious surfaces I think the 3.4
 8 acres approximately on the whole site
 9 (inaudible) new surfacing.
 10 The wooded area, upland, page 1-6,
 11 1.2.4, 4.8 acres, 35 percent of
 12 woodlands, if I'm reading this document
 13 correctly, would be removed and in some
 14 cases disturbing the habitat, although I
 15 do believe you say some of it will be
 16 restored.
 17 On the traffic, to get off the
 18 environmental disturbances, I also
 19 wondered about the number of trips, 28
 20 peak a.m. and 32 peak p.m. We have 24
 21 homes with three or four bedrooms; that
 22 number doesn't seem realistic. On page
 23 1-7, you mention about a problem with --
 24 in your traffic statistics here, the

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3-8

5-9

5-10

6-5

5-10

PROCEEDINGS

1 turning movement problem bringing the
 2 level of surface down to F. (Inaudible)
 3 existing conditions would be the same
 4 even with the building of 24 homes. I
 5 would think it would be possibly more.
 6 There is no level below F.

7
 8 On the schools and fiscal impacts,
 9 other people have brought it up. You're
 10 showing surpluses both for the town and
 11 schools of 25,000, give or take. I
 12 wonder again, I've always questioned the
 13 methodology on some of the ways the
 14 applicants have figured out the school
 15 impacts. I wish that could be looked at
 16 more carefully, maybe comparing it with
 17 other existing developments and the
 18 generations of students of those
 19 developments over the recent years.

20 On the historical, figure 3.1-2, I
 21 mentioned this at the work session, I
 22 know you're preserving the brisk(sic)
 23 mill foundation, but not the industrial
 24 complex area which would be lots 3 and
 25 4, I believe. If I am not mistaken, I

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6-5

7-8

2-19

PROCEEDINGS

1 guess the brisk mill would be beyond
 2 lots 1 and 2. I would like to see the
 3 industrial area, if possible, also
 4 preserved.

5
 6 And on the construction truck
 7 traffic; I know you referred to it on
 8 page 3.5-17 way back, am I correct, that
 9 the only construction truck traffic
 10 would come from 9A and up Furnace Dock
 11 Road, there wouldn't be any movement of
 12 construction vehicles on the rest of
 13 Furnace Dock Road or on Mount Airy Road.
 14 I would hope not.

15 The conservation easements somebody
 16 brought up. I wasn't sure, I thought I
 17 was reading here that -- no, I see that
 18 the homeowner's association would be
 19 responsible for that. pages 2-6. I
 20 don't know if you could look at that
 21 more carefully. Again, I think I
 22 mentioned the length of the road itself
 23 is a problem. I think that covers it
 24 from my notes.

I wonder if with all of the

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2-19

6-6

PROCEEDINGS

1 disturbance, if less still would be
 2 better here.
 3
 4 MS. TODD: I think that this is a
 5 very challenging piece of property to
 6 try and develop. We have three areas
 7 of important wetlands. First, Furnace
 8 Brook, then wetland B which requires a
 9 cross in the road and then you have
 10 wetland A towards the back, plus there
 11 are smaller wetlands as well.

12 At one point you say that impacting
 13 wetland B isn't such a problem because
 14 it's just a little appendage of it
 15 sticking out and filling that won't
 16 hurt, but then you also go on to say
 17 that it's important only when there's
 18 enough water to inundate it and then it
 19 starts to fill at that point, which to
 20 me is like saying your hand is not
 21 important to your arm because it does
 22 serve you at important times when you
 23 need it and I can't stand to see that
 24 stuff in the DEIS. I find it very
 25 frustrating that you don't have a more

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S-11

PROCEEDINGS

1 enlightened view of wetlands.
 2
 3 I think the major wetlands impact
 4 that I object to is the Furnace Brook,
 5 14.6 percent of the on-site wetlands in
 6 that corridor will be disturbed and I
 7 find that is too much. This is a
 8 bema(pho-netic) flood plain area, flood
 9 plain disturbance is very common in that
 10 area and I've seen that stream myself,
 11 way high. In fact, just last Thursday
 12 it was very high and you're proposing
 13 putting, not only the bridge but a storm
 14 water basin within the buffer of that
 15 wetlands area and I object to that and
 16 wish that you could find another place
 17 or both.

18 I agree with everyone else that has
 19 been talking about moving the bridge and
 20 combining it with the existing bridge.
 21 The separate crossing I think does not
 22 justify the impact.

23 Now, let's go down the list. I had
 24 a question about the open space areas
 25 being owned by a homeowner's association

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2-20

PROCEEDINGS

1 as Bob brought up. I don't think that
 2 that's a good strategy. I think it
 3 should be owned either by the Town or
 4 managed by a land trust. You talked
 5 about the reviving or rehabilitating the
 6 Baltic Estates sewer treatment plant;
 7 what does that mean? What does that mean
 8 to rehabilitate that? What is involved?
 9 The impacts again, 35 percent of
 10 the site must be graded. There is 4.9
 11 acres of steep slope disturbance. I had
 12 a question about the water main, the
 13 eight-inch water main. At first I had
 14 in my notes, does that go through the
 15 brook, but then I hear it goes through
 16 the bridge, through an earthy verm in
 17 the bridge. I need more explanation of
 18 what that is. Earthly verm, earthy
 19 fill, which makes me think that can get
 20 washed away very easily.

21 The individual resources section
 22 you talk about the clearing of the trees
 23 to improve site distance for the bridge
 24 that you're proposing and that I think

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2-20

2-21

2-22

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PROCEEDINGS

1 is -- when I looked at the map, there's
 2 a lot of trees that you're suggesting
 3 removing all in the buffer of the brook.
 4 You propose that the initial
 5 construction will use the dirt road that
 6 everybody has been talking about, the
 7 one existing dirt road and again, my
 8 question is why not use it permanently?
 9 46 percent of this site is 15
 10 percent slope or greater, that's a lot.
 11 The potential blasting, I counted just
 12 on the map, 15 areas of potential
 13 blasting to do that subdivision and
 14 there is no plan. I think that that's
 15 important that we know more about how
 16 much blasting is going to need to be
 17 done. It seems the bedrock in the
 18 geology and soils in 3.1.1, the bedrock
 19 is about 46 feet from the surface. So I
 20 would imagine there would be an awful
 21 lot of blasting. And 3.1.11, there's no
 22 mitigation proposed for 2.27 acres of
 23 disturbed wetland buffer. I think
 24 you're saying here (inaudible) planting

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S-13

8-9

3-9

S-14

PROCEEDINGS

1 grass. That for me does not qualify as
 2 mitigation.
 3
 4 In the storm water plan, it wasn't
 5 entirely clear to me. You're suggesting
 6 the Town is to maintain the basin and
 7 two infiltration trenches, yet all the
 8 other dry wells are going to be
 9 maintained privately. I don't see how
 10 that is a really workable storm water
 11 plan for the subdivision.

4-10

12 3.2 -- 3.6 pollutant loading. You
 13 said that you could not test for
 14 (inaudible) coliform bacteria in the
 15 stream. Why not, that's a test you can
 16 buy over the counter.

4-11

17 3.2.4, created wetlands are going
 18 to be owned by lots six, seven and
 19 eight, and that to me raises a lot of
 20 maintenance issues. How are you going
 21 to -- I mean those are privately owned
 22 lots. People can do whatever they want
 23 relative to the Town wetland code.
 24 Maybe they don't want to have the plans
 25 that you're suggesting would be in those

5-15

PROCEEDINGS

1 wetlands. I think those should be part
 2 of the community owned lot or in the
 3 land trust.

5-15

4
 5 Air noise; 69 to 90 decibels. Our
 6 code specifies nothing about 65 in
 7 residential areas. So how are you going
 8 to keep this construction from being too
 9 loud? And that doesn't make any sense
 10 to me. These are all sections in the
 11 DEIS. These documents are huge, so if
 12 we are rambling on and on, there's so
 13 many points to make in so many areas.

2-23

14 Terrestrial and (inaudible)
 15 ecology. I was very interested in this.
 16 You found high PH in Furnace Dock and in
 17 conductivity values suggesting the
 18 possibly of anthropogenic pollution,
 19 which I guess means human pollution, and
 20 they found a pipe outflow from under
 21 Furnace Dock Road. I would like to go
 22 out and look at that pipe. It's pretty
 23 clear that there is something going on
 24 in that pipe. It's 120 feet downstream
 25 from where the stream passes wetland

5-16

PROCEEDINGS

1 (inaudible). I would like more
 2 description of the natural invertebrates
 3 that may be found in the stream. There
 4 are a lot of (inaudible) flies,
 5 (inaudible) flies and
 6 hellgrammites(phonetic). I don't know
 7 enough to know whether that's
 8 significant. To me that would seem that
 9 the stream is fairly healthy despite
 10 this pollution.

11 Cultural resources. I think the
 12 iron -- the archeological study in this
 13 thing is about 50 pages long. I was
 14 reading it this afternoon and I think
 15 the iron industrial complex right now,
 16 that seems like it's being destroyed,
 17 that exists now on lots 2 and 3. We
 18 should definitely consider making that
 19 area -- setting it aside for open space
 20 and for the history of our town.

21 I also don't think that you really
 22 preserved the brisk mill, it's just in
 23 the wetland buffer. I think all those
 24 sites should be dedicated to the town

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5-16

2-24

PROCEEDINGS

1 and maybe our town historical committee
 2 can look at this and let us know whether
 3 it could be something that could be open
 4 to the public in some way or become a
 5 place people can visit and learn about,
 6 early prerevolutionary war iron making.
 7 I've asked a Van Cortlandt Manor
 8 student to read the documents and tell
 9 us more about this.

10 So in general, I support a much
 11 shortened cul-de-sac. I think that all
 12 of us feel that the 500 foot limit means
 13 something and that it doesn't make sense
 14 for us to approve a subdivision that is
 15 dependent on houses with 2,000 to 3,000
 16 foot long roads, and I would much favor
 17 a subdivision that is more clustered in
 18 the front, as some of your alternatives
 19 are, and I also would like to see it
 20 have street lighting, sidewalks and
 21 sidewalks to the A&P hamlet.

22 THE CHAIRMAN: Thank you. Miss
 23 Taylor ?

24 MS. TAYLOR: Thank you,

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2-24

2-25

PROCEEDINGS

1 Mr. Chairman. I would like to just sort
 2 of say to my colleagues here on the
 3 board. They have summed up a lot of
 4 what we all discussed. There are so
 5 many issues that sort of emanate from
 6 these kind of very difficult projects.
 7 We have a number of them on the board
 8 right now and they do require a lot of
 9 thought on the part of the planning
 10 board.

11 It isn't our mission in life to
 12 frustrate applicants and deny their
 13 opportunity to build, but at the same
 14 time we are charged with looking at the
 15 overall picture and not seem to be
 16 focusing on one or two or three areas.

17 In this case -- in this case with
 18 the Furnace Dock application, there are
 19 a lot of issues; drainage, the roadways,
 20 the fact that it's single access, the
 21 fact that there is a bridge crossing the
 22 stream and wetlands, the fact that there
 23 are site distance problems at that
 24 particular location, the need to protect

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PROCEEDINGS

1 wetland buffers with easements, which
 2 the applicant will at this point
 3 consider.

4 There are certain concerns for
 5 public safety when we have these very,
 6 very long roads and something happens.
 7 I mean, there was a point in our lives
 8 here that we kind of think well, it
 9 could happen, but it's not likely. I
 10 don't think many of us feel all that
 11 sure anymore. Things can and do happen.

12 So you would have to be worried as
 13 a board that the subdivision that we're
 14 creating would be built in a way that
 15 would keep safety for the residents in
 16 mind, and I do have some concerns about
 17 the length of some of the roads that are
 18 being requested through these
 19 applications.

20 There are maintenance issues that
 21 have to do with, you know, the open
 22 space, who manages it. And most of us
 23 who live with restrictions that are
 24 sometimes imposed by homeowner's
 25

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2-26

2-26

PROCEEDINGS

1 associations understand that these
 2 things are pretty much voluntary. I
 3 mean, the association has a certain
 4 amount of power, but it basically --
 5 people do, you know, break the rules, so
 6 to speak, or go off doing things that
 7 they should not do. I don't know that a
 8 homeowner's association can actually
 9 manage all of the things that some of
 10 the applicant thinks that they can
 11 manage.
 12 Uhm, there are steep slopes here as
 13 well. A whole list of things adding up
 14 to cumulative issues that we have to
 15 look at, and I for one am becoming less
 16 inclined to sort of go with the flow.
 17 There are things here that really need
 18 some looking at, and I think that I
 19 would like to impose the applicant to
 20 rethink the project a bit, maybe scale
 21 it down, the entrance and the crossing.
 22 You know, there are a number of other
 23 issues that I could bring up, but I'm
 24 not quite sure that I feel comfortable

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2-26

PROCEEDINGS

1 with this project as it is.
 2
 3 THE CHAIRMAN: Thank you, Miss
 4 Taylor. Mr. Bernard?
 5 MR. BERNARD: A couple of comments.
 6 The road is too long for the Town of
 7 Cortlandt code, which requires a
 8 cul-de-sac road, single entry, to be 500
 9 feet or less. The conservation
 10 easements at the back of the lots being
 11 part of the lots really is unacceptable
 12 and those back lot borders should be
 13 moved over towards the houses and as the
 14 rules suggest, a conservation easement
 15 should be part of a homeowner's
 16 association which would be at least a
 17 little bit easier to control. And the
 18 second point on conservation easements,
 19 I'm not sure of the town's ability to
 20 enforce conservation easements over
 21 time.
 22 We have been told by people like
 23 Beth Abrahams, that to enforce a
 24 conservation easement, the land has to
 25 actually be looked at and surveyed.

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2-27

2-26

PROCEEDINGS

1 There has to be some action on the part
 2 of the Town of Cortlandt in order to
 3 keep that conservation easement alive.
 4 I would request the staff to
 5 request of the town board a
 6 clarification of just how that
 7 enforcement action is done, how that's
 8 accomplished, because oftentimes we're
 9 suggesting conservation easements and
 10 yet there is no mechanism that I'm aware
 11 of that maintains that.
 12 The other request is that the
 13 resident who spoke, Cathy Marsh's
 14 written comments be included in our
 15 packet. I guess it will be included in
 16 the FEIS as part of the comments. I was
 17 wondering if we can get a copy of that
 18 as soon as possible.

19 And the road crossing, last
 20 comment, I would very much like to see
 21 the existing road crossing redone. I
 22 understand from the applicant's engineer
 23 that they had originally looked at that
 24 original road crossing and at that time

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PROCEEDINGS

1 didn't prove to be a doable entry to the
 2 project, but I would request that they
 3 look at that again or at least we be
 4 allowed to see the original study of
 5 that crossing. The crossing that exists
 6 there now has an undersized culvert. I
 7 think that probably floods frequently
 8 there, and if there is going to be a new
 9 crossing. I would like to see a new
 10 crossing replace that existing crossing.
 11 And that certainly can be done. It's
 12 going to be wide enough for two lanes,
 13 the new crossing is, so it would be very
 14 good for the Furnace Dock itself if we
 15 are going to do another crossing to
 16 replace that undersized one. That's it.
 17 Thank you.

18 THE CHAIRMAN: Thank you. Just my
 19 comments lastly. I just want to talk
 20 about what this board does and what the
 21 applicant has asked of us, and that is,
 22 you've come to us and asked us for
 23 approval of a subdivision. You've asked
 24 us for the ability to grant you a steep

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8-10

2-27

8-10

PROCEEDINGS

1 slope wetland permit and you do that
 2 because the town code requires that you
 3 come before us and the town code says
 4 that if you encroach on a wetland or
 5 encroach upon a buffer, we have to
 6 permit that and if there is some level
 7 of encroachment, that's for us to
 8 determine.
 9 The same thing with steep slopes.
 10 The ordinance says you have to come to
 11 us to get approval to build on slopes
 12 greater than 15 percent. As many people
 13 have said here this evening, there's a
 14 substantial amount of disturbance that's
 15 taken place on slopes over 15 percent, I
 16 think it's 5 out of 15 acres, that about
 17 one-third of the construction is
 18 proposed on slopes over 15 percent.

19 And we have this ordinance as I
 20 said here, and I grapple with at what
 21 point do we grant that approval? Is it
 22 incidental, is it 10 percent, is it 50
 23 percent, is it 90 percent encroachment
 24 on steep slopes. When I look at what

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PROCEEDINGS

1 you have proposed here in your 24 lots,
 2 a total of 15 out of those 24 lots, just
 3 what is being built on those lots have
 4 encroachment on steep slopes of greater
 5 than one-third of what is being proposed
 6 in the development of that lot, and one
 7 of the things I will have to deal with
 8 as I try and come to a decision here,
 9 is that too much or just right or at
 10 what point does the ordinance really
 11 have some meaning, and towards that end
 12 I would like to see, is you have in here
 13 table 3.1-4 which is the disturbance on
 14 each lot itemized by each lot of slopes
 15 over 50 percent. I would like to see
 16 that table replicated for the
 17 alternatives that you proposed here. I
 18 believe there are two alternatives.

19 One is a -- there is a conventional
 20 subdivision plan with no disturbances to
 21 wetlands and buffers, and that will be
 22 responded to in the scope of the DEIS
 23 that we're asking for and also a cluster
 24 alternative. So I would like to see

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8-11

PROCEEDINGS

1
2 that table replicated, because I want to
3 deal with this issue as to what is an
4 appropriate level of disturbance of
5 slopes over 50 percent on a lot-by-lot
6 basis and decide in my mind what I think
7 is an appropriate level that I believe I
8 would allow and permit under the
9 ordinance of this town that grants us
10 that approval authority.

11 So that's really my own comments,
12 and I think as you can see, I'm
13 seriously considering some of these
14 alternatives that we have asked for, and
15 unfortunately in many of the DEISS, we
16 don't always get the same level of
17 detail for the alternatives that we do
18 for what the applicant is proposing, so
19 hopefully meeting that (inaudible.)

20 It is critical in my mind to help
21 me to evaluate the alternatives without
22 having a full DEIS for each of those.
23 So those are my comments.
24 Anybody else in the audience that
25 wishes to comment at this time?

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(No response.)

1 THE CHAIRMAN: Anymore comments
2 from the board or staff? I'm sorry.
3 Come on up.

4 MR. RITCH(phonetic): Arthur
5 Ritch, 27 Spice Hill. It's quite a
6 simple thing. There is mention of a gas
7 line that they are planning to bring in,
8 but nowhere can I find where they are
9 going to do that. I can't find anything
10 that shows where the gas line is going
11 to be, how it's going to be installed,
12 no specifications at all. It's a very
13 simple thing.

14 THE CHAIRMAN: Okay. That will be
15 addressed. Last call.

16 MR. MILLER: Mr. Chairman, I just
17 want to kind of give an overview picture
18 here, because I've heard a lot of
19 comments here tonight and I think for
20 members of the public that haven't had a
21 chance to review the Draft EIS, a little
22 bit of perspective needs to be provided,
23 and I would like just a few minutes to

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8-11

2-28

PROCEEDINGS

1
2 do that.

3 Mr. Foley and Mrs. Todd talked
4 about the amount of disturbance on this
5 property. There have been a lot of
6 comments about the length of the
7 cul-de-sac and relocation of the
8 cul-de-sac road and so forth. This is
9 an R-40 zoning district. The amount of
10 disturbance on this property, I believe
11 in the R-40 zone, is not untypical at
12 all for any project that has been built
13 in the town in an R-40 zoning district.
14 Especially a project where you will be
15 installing a driveway, a house and a
16 septic system.

17 Now fortunately, the applicant has
18 negotiated an arrangement so that sewers
19 can be provided in this case which does
20 significantly reduce the amount of
21 disturbance, but I think in terms of
22 overall disturbance, both in terms of
23 the property and in terms of steep
24 slopes and so forth, I'm happy to say in
25 the Final EIS many examples in the town

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PROCEEDINGS

1
2 where subdivisions have been approved.

3 I've been to homes and I've visited
4 people who live in Cortlandt and I've
5 been to homes that are clearly -- this
6 amount of disturbance and more and
7 driveways that are far steeper than what
8 you would find here, this is not an
9 unusual subdivision. This is not an
10 unusual condition, and the fabric of
11 land that's developed in this area, in
12 fact where people live now, is very
13 similar to this type of land, these type
14 of slopes, this type of project.

15 With respect to the accessway, we
16 have studied that accessway. Obviously
17 both, you know, in terms of an
18 ecological impact as well as a cost
19 issue, developing a crossing of a brook
20 where one does not need to, you just
21 don't want to go there if you don't have
22 to.

23 There are several reasons why we
24 have not pursued the development of the
25 road as suggested by Mr. Foley and

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PROCEEDINGS

1 Mrs. Todd and some of the other board
 2 members.
 3 The most significant one is that
 4 that location is at a very dangerous
 5 place on Furnace Dock Road. The sight
 6 distance to the right is 150 feet and
 7 it's on property that we do not own,
 8 we cannot manage and cannot control.
 9 Now, if Mr. Vergano tells me he will
 10 approve a town road at a location where
 11 the sight distance is 150 feet, we will
 12 engineer that road and provide you with
 13 drawings for it, but that is so
 14 substandard with regard to public health
 15 and safety, that I believe the
 16 disturbance of 8 or 900 feet of wetlands
 17 with mitigation, far overcomes the sight
 18 distance problem of locating that
 19 driveway at a substandard location.

20 So I need to know if the town is
 21 willing to put public health and safety
 22 over the quarter acre of wetlands
 23 impacts for locating this road, because
 24 if you are, I will pursue that driveway

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PROCEEDINGS

1 location. If you're not, this is the
 2 only place we can access our property.
 3 It's a very important and serious
 4 issue for us. Obviously, the applicant
 5 has spent literally hundreds of
 6 thousands of dollars engineering this
 7 project. It's been in front of you for
 8 well over a year. Relocating this
 9 accessway or denying us access, we just
 10 don't think is viable, so I need to
 11 understand where the town stands on
 12 this.
 13 I could preserve a quarter of an
 14 acre of wetlands or I can build a road
 15 with substandard sight distance, it
 16 would not meet any standard anywhere in
 17 New York State.

18 MR. VERGANO: Obviously, that's
 19 not what we are looking for. The
 20 question which is raised by all the
 21 board members, is there a way to avoid
 22 that crossing, should be thoroughly
 23 evaluated. (Inaudible) just by meeting
 24 at the site and maybe just having one
 25

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1
2 more meeting on this issue.
3 MR. MILLER: We would be more than
4 happy to do that, because we don't come
5 up with these plans willy-nilly.
6 There's a lot of time spent in
7 addressing or attempting to address
8 these issues both in a technical
9 perspective, a health and safety
10 perspective and an environmental
11 perspective, and that's a very important
12 issue and I recognize the fact that the
13 board members have brought it up and
14 there's a genuine interest in protecting
15 environmental resources.

6-7

16 MS. TODD: What is the sight
17 distance that you're proposing now,
18 because when I drove by there and it
19 doesn't seem like --

20 MR. MILLER: It meets the standard
21 for the posted speed, which I think it's
22 over 300 feet. We do have to take down
23 some trees in order to secure that sight
24 distance, but I would rather remove the
25 trees and make sure that people can get

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PROCEEDINGS

1
2 in and out of there safely and minimize
3 accidents for people traveling on the
4 road.

5 MR. MASTROMONACO: The difference
6 there, Susan, is that the sight --
7 removing trees to get sight distance is
8 something we can do, but what they want
9 to do is similar to a project we have
10 before you, is -- actually, there's a
11 whole road that's in the way there and
12 the question is: Do we take the whole
13 road down. It's a vertical. It's not
14 that there's trees in the way, it's just
15 the road is coming up like this as you
16 look out there and the existing driveway
17 has that same problem. The people who
18 are that existing driveway have that
19 same problem and if they want to make a
20 left turn out of their driveway, there
21 could be a car coming over the top of
22 that hill that poses a certain danger at
23 that point.

MS. TODD: Towards 9?

MR. MASTROMONACO: No, if you're

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1 coming out of their driveways. I forget
2 the name of the road.

3 MS. WHITEHEAD: Looking towards 9.

4 MR. MASTROMONACO: If you're trying
5 to make a right turn -- excuse me, a
6 left turn -- if you're making a left
7 turn out of there, it's the cars that
8 are coming down heading north on Furnace
9 Dock Road that are posing the problem
10 because they can't be seen over the
11 crest of the hill.

12 MS. WHITEHEAD: Coming from 9.

13 MR. MASTROMONACO: Coming from 9,
14 and that's a serious problem that they
15 have at their driveway. You can ask
16 them if they're here what that issue is
17 like over there. There's another issue
18 that we all think about in redesigning
19 something, who I am going to damage --
20 who am I going to bother the least when
21 I put a road in? There's a house right
22 there. I mean, I'm going to put 600
23 feet of road right by somebody's kitchen
24 window. I just don't think that the

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1 people who live in that neighborhood
2 want that effect on their homes. So
3 what we had to do is come up with a way
4 to minimize the actual buffer and
5 wetland crossing and still be safe.

6 If we had the driveway crossing
7 down where you suggested, we would still
8 have to take all of the trees out on the
9 left, but in that case we would have to
10 take the bridge railing down. We would
11 have to take trees literally running
12 over the top of the brook to get sight
13 distance. So if you look at it and
14 we're prepared to show that on a plan,
15 which maybe we should have had before
16 this point, but we're prepared to show
17 all that on a plan. I'm just here in
18 general to speak about the engineering
19 behind the choice of that access point.

20 MS. TODD: Two days ago I just got
21 off and it seemed to me that it could
22 work rather well. I mean I parked there
23 in that driveway and I walked down and
24 the brook was really flowing, but I

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1
2 guess we need to study it more.
3 MS. WHITEHEAD: I think we've
4 studied it and I think we need to
5 provide you with that information and we
6 have gone back -- because you raised it
7 again, we went back and had Ralph look
8 at it again and study it again, because
9 if we could make it work, there's no
10 reason why we wouldn't do it.

11 MR. MILLER: With respect to the
12 length of the road, I don't have a good
13 answer for that. This property has been
14 in its current configuration for many
15 years. I first worked on this property
16 somewhere in 1998 when Rocco
17 Trigli(phonic) had an option to
18 purchase it.

19 Certainly, as the fabric of the
20 area developed there were opportunities
21 with the town to provide roadway
22 connections on adjacent pieces largely
23 to the area to the -- I guess the west.
24 For whatever reason that connection
25 wasn't provided. We cannot get out to

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1
2 Watch Hill Road, so our options are very
3 limited.

4 Now, the front portion of the site,
5 we have got one, two, three, four, five,
6 six, seven -- we've got nine homes, and
7 in order to get to what I call kind of
8 the light bulb of the site, this site is
9 in someone's imagination somewhat shaped
10 like a light bulb with a narrow neck and
11 a bulb at the end. We have to disturb
12 about 200th's of an acres of wetlands,
13 which is several hundred square feet and
14 most of the wetland buffer disturbance
15 is in fact associated with a road that's
16 crossing that very small wetland area B.

17 I don't in any way mean to discount
18 the importance of that. You denied
19 Round Top when I was disturbing at the
20 edge of a wetland for this property and
21 we reconfigured the entire project to
22 try and respond to that concern, so I
23 know that there is considerable amount
24 of viewed importance on the board's part
25 in order to protect wetlands and wetland

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1 buffers. But I do not believe that it
 2 behooves the town and the fabric of this
 3 neighborhood to put a cluster
 4 subdivision in that very small area in
 5 the front of this property.
 6 First of all, the value of these
 7 units will be approximately half of a
 8 single-family house, the tax ratables
 9 which this board has indicated a
 10 tremendous interest in, in making sure
 11 that the ratables offset the cost of
 12 services and school children and
 13 education will be not be there. It's a
 14 substantial fiscal and economic impact
 15 to go into a cluster type subdivision
 16 putting everything in the front of this
 17 property.

18 I will address this quantitatively
 19 in the Final EIS, but your job is to
 20 really look at this and provide a
 21 balanced decision as to the best way to
 22 use this piece of property. The
 23 property owners here have paid taxes on
 24 this site for many, many years without

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1 incurring any impacts to the school
 2 district or to the town or to the county
 3 and they believe and they should expect
 4 a fair and balanced decision making on
 5 the board's part. We have tried to
 6 present you with the information that
 7 will go allow you to do that.
 8 Steve, with respect to your
 9 comments on steep slopes. I haven't
 10 looked at the steep slopes lately, but
 11 my recollection is that the purpose of
 12 the steep slopes law is really to
 13 protect downstream resources from issues
 14 such as unmitigated erosion, loss of
 15 soil, flooding, things of that nature.
 16 If we can demonstrate on this project,
 17 as we have on other projects, that
 18 mitigation of those steep slopes are
 19 taking place with regard to proper
 20 erosion control, proper engineering
 21 techniques, proper storm water
 22 management, et cetera, I don't believe
 23 it's a question of whether it's one
 24 acre, three acres or five acres. I

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1 think the question is, are we protecting
 2 the resource that you have established
 3 your law for.
 4
 5 I am more than happy to provide you
 6 with whatever quantification that you
 7 would like, but you have recently
 8 approved substantially larger
 9 disturbances on steep slopes in the town
 10 and they were projects where extensive
 11 monitoring has taken place and extensive
 12 protective measures have been in place,
 13 and the results at least so far have
 14 been very successful in terms of
 15 protecting the resources that your steep
 16 slopes regulations are intended to
 17 protect.

18 So with respect to a couple of the
 19 comments. Mr. Foley, you raised again
 20 the question of the school children
 21 generated. You bring it up on every
 22 project. We've been down this road many
 23 times. We have gotten information from
 24 school districts that demonstrate that
 25 the factors that we've used in

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1 estimating school children are in fact
 2 consistent with what is taking place in
 3 your town. I don't know what more
 4 information I can give to demonstrate
 5 the accuracy of our numbers with regard
 6 to the school districts. We just went
 7 through the exercise on Emery Ridge. I
 8 thought we were past that.

9 So I'm just a little bit frustrated
 10 that I'm hearing the same stuff after
 11 we've addressed it only two months ago
 12 and I would invite you to look at that
 13 information within the Emery Ridge FEIS
 14 because surveys were done of homes and
 15 school children generated in your town,
 16 in your school districts and they
 17 support the numbers that we're using.
 18 We are not making up these numbers in
 19 our EIS.

20 MR. FOLEY: Mr. Miller, I didn't
 21 say you were making them up. We're
 22 talking about Furnace Woods, not Emery
 23 Ridge. I believe some later numbers
 24 came in later. The numbers that were

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1 supplied from the school system weren't
 2 the right amount of numbers. I tried to
 3 say that at the work session a few
 4 months ago, and I don't want to get into
 5 it now.

6 MR. MILLER: Well, I reviewed
 7 the --

8 Mr. FOLEY: You heard what Dr.
 9 Rossi(phonetic) and some other experts
 10 in the school system said. I don't know
 11 what Hen Hud is saying.

12 MR. MILLER: Well, we looked at the
 13 data that was provided by the school
 14 district, and even though they made
 15 comments disputing it, their very own
 16 data and their census information
 17 supported the multipliers that we used
 18 in the Emery Ridge DEIS, and I got to
 19 tell you, I have the same question on
 20 subdivisions in Orange County, in
 21 Rockland County, in Westchester County
 22 and Putnam County and Dutchess County,
 23 and the numbers continue to bear out the
 24 national statistics and the multipliers

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1 that we have used that are standard
 2 planning multipliers for school children
 3 generated.

4 Be that as it may, we have heard
 5 your comments, we are obligated to
 6 provide a written response in the Final
 7 EIS and we have every intention of doing
 8 so.

9 Again, this feedback is very
 10 important to us because we need to come
 11 up with a plan that is going to be
 12 approvable. We don't want to continue
 13 spending time and spending money and
 14 taking up the town's time and your staff
 15 time on something that is not viable.
 16 We have invested a tremendous amount of
 17 effort in this and we do believe it's a
 18 viable project, and you know, we want to
 19 be able to convince you of that at the
 20 end of the day.

21 So we are asking you to close the
 22 public hearing tonight so we can move
 23 forward with the Final EIS.

MR. BERNARD: Mr. Miller, before

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1 you leave, if I may, just address a
 2 couple of points. Unratables; you're
 3 absolutely correct. We have been
 4 bringing up for some time now that
 5 houses to sell for either 7 or 800,000
 6 to be able to pay their way in the town,
 7 but that doesn't mean that we want all
 8 houses to be built and be valued at
 9 800,000 or more.

10 what we're saying is, that if you
 11 build a house and it sells for 200,000,
 12 the town gets to pick up the tab.
 13 There's a difference between the ratable
 14 in that case and the services provided.
 15 Maybe you shouldn't build a house at
 16 all.

17 MS. WHITEHEAD: But the \$200,000
 18 homes are not going to be in your R-40
 19 zones, they're just not. In your R-40
 20 zones there is going to be the higher
 21 end houses.

22 MR. BERNARD: I don't understand
 23 that comment at all.

24 MS. WHITEHEAD: You're more --

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1 MR. BERNARD: I know what you're
 2 saying, but I don't understand that
 3 comment at all. One other thing, Mr.
 4 Miller, I wanted to comment on is the
 5 steep slopes. The legislation is not
 6 just to protect drainage. That's not
 7 the only thing that steep slopes are
 8 for. Have you ever been to Colorado,
 9 they have mountain steep slopes. You
 10 could level them all and mitigate the
 11 drainage and it would be a nice state
 12 and it will look a lot like New Mexico.
 13 There's nothing wrong with that, but
 14 that's not the only purpose of steep
 15 slopes legislation.

16 MR. MILLER: Yeah. I don't
 17 believe --

18 MR. BERNARD: But you took it all
 19 down to an argument of strictly
 20 mitigating the storm and the current
 21 cost of --

22 MR. MILLER: I didn't think that
 23 is --

24 MR. BERNARD: -- mitigating storm

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1 water is to control the runoff, take it
 2 off over the property and put it
 3 somewhere else, and I have a different
 4 opinion as to what happens --

5 MR. MILLER: Why do you believe
 6 there is a steep slope ordinance beyond
 7 the --

8 MR. BERNARD: I think you should
 9 read the steep slopes ordinance.

10 MR. MILLER: I've read it. I'm
 11 asking you --

12 MR. BERNARD: And there's some
 13 background information that went into
 14 that. I don't have it all at hand. I
 15 don't have any more than you do right
 16 here, but we can certainly have it for
 17 the next meeting. There was a lot of
 18 background information, and it was a
 19 long battle to put that in the town
 20 codes to start with, and there were a
 21 lot of reasons for it, but we should all
 22 take a look at it to see just what the
 23 reasons are for it.

24 MR. MILLER: It doesn't say that

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1 shall not disturb X acres of steep
 2 slopes.

3 MR. BERNARD: You're absolutely
 4 correct.

5 MR. MILLER: And that's the point I
 6 was making.

7 MR. BERNARD: I just wanted to make
 8 sure that the people understood it's not
 9 just for draining control, that's not
 10 the only thing we're trying to control.

11 MR. MILLER: I gotcha. I agree
 12 with you.

13 MR. BERNARD: And as to the school
 14 survey, you're correct. I read what the
 15 school board came out with and I was
 16 stunned that it was pretty much exactly
 17 what your figure showed. The figures
 18 that were coming out for Emery Ridge and
 19 other developments we've seen, and I do
 20 not understand at all how everybody's
 21 numbers can show the same figures and
 22 yet by visual evidence, by the count of
 23 students in the school, by the cost that
 24 needs to be -- that are required to keep

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1 the schools running, it seems to be more
 2 than a tax base support, as if there are
 3 more kids than we're able to count when
 4 we are approving the projects. I don't
 5 understand the math either, and I myself
 6 are searching for other sources of
 7 information to explain that phenomenon,
 8 but you're correct, the figures were the
 9 same.

10
 11 MR. MILLER: Well, the phenomena,
 12 to a certain extent, are the law of
 13 averages. When Bloomingdale's has a
 14 sale, not everybody shows up at 10:30 in
 15 the morning. I don't understand that
 16 either, but that's how it works out.

17 MR. BERNARD: And probably more to
 18 the point, we need to get the entire
 19 country off of property taxes to fund
 20 schools, it's the wrong approach, and
 21 it's about time because it affects us
 22 here.

23 MR. MILLER: That argument is
 24 beyond me here.

25 MR. BERNARD: That's correct.

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1 MS. WHITEHEAD: It has not worked
 2 in California.

3 MR. MILLER: I appreciate your
 4 comments and I appreciate your
 5 forthrightness and your honesty in those
 6 comments. We'll answer everything you
 7 brought up. We know that's our
 8 obligation and I appreciate your input.

9 MS. WHITEHEAD: Just very briefly,
 10 and we are here to try and work with
 11 you. There are some issues here that
 12 you are going to have to decide, such as
 13 looking at what the alternatives are for
 14 the road crossing. It's going to be a
 15 balancing, but we have to have access
 16 into our site.

17 Another thing I heard several times
 18 tonight is who's going to own, control,
 19 manage the open space areas. We're
 20 flexible on that. Our experience has
 21 been generally that the towns don't want
 22 the land. We have found homeowner's
 23 associations to be a way to do it. What
 24 we have often done is in a declaration

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1 that (inaudible) can be done on the
 2 property, we have given the town
 3 enforcement rights. So if the
 4 association doesn't enforce it, the town
 5 can step in and enforce it, and we've
 6 even found ways of providing for the
 7 town to recover their costs. And that
 8 can apply not only to the restrictions
 9 on the open space, but a question came
 10 up about the mitigation, wetlands and
 11 how those get maintained if they're on
 12 private lots. We have other projects
 13 that we have worked on where we have
 14 done the same thing, in a recorded
 15 declaration of covenant easements and
 16 restrictions, we have obligated those
 17 lot owners to maintain it according to
 18 certain criteria, and if they don't,
 19 either the homeowner's association or
 20 the town has a right to enforce it
 21 against them, and those are some of the
 22 mechanisms that can be used.
 23 If the town wanted those open
 24 spaces, I'm sure our client will be

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1 willing to consider that. They prefer
 2 not to have to create a homeowner's
 3 association. Similarly, if there was an
 4 entity that would be willing to -- like
 5 a land trust that would be willing to
 6 take a conservation easement over those,
 7 again, we're perfectly willing to
 8 discuss those kinds of alternatives.
 9 We put forth something that is
 10 typically done and that we have found to
 11 work, but we're certainly on those
 12 areas, open to alternatives and to
 13 discussing with the board and the town
 14 what they would prefer.
 15 MS. TAYLOR: On which of those
 16 documents that the buyer has to sign are
 17 those obligations?
 18 MS. WHITEHEAD: It's not something
 19 they have to sign. It's something
 20 that's in their chain of title. And
 21 very often we do it two different ways.
 22 We put notes on the subdivision map and
 23 we record a declaration and both of
 24 those things would come up in their

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1 title report. Their attorney should
 2 have them review and explain some of
 3 these things to them, but it would be in
 4 the line of title, as they say, so they
 5 would have notice of them.

6 MS. TAYLOR: And you find that
 7 effective?

8 MS. WHITEHEAD: Yes. Not always,
 9 but sometimes by looking at who you give
 10 enforcement rights to within that
 11 document can make it work also. But
 12 we're also willing --

13 MR. KLARL: I don't think
 14 (inaudible), but if they didn't abide by
 15 what's contained in the (inaudible) that
 16 the town would have the right -- the
 17 rights would also derive to the town to
 18 come in and do the necessary correctable
 19 measures and then I assume you would
 20 bring some kind of penalty clause saying
 21 the town can then pick up from the
 22 offending lot owner the damage that was
 23 caused --

24 MS. WHITEHEAD: Clean it and

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1 collect it with taxes, correct.

2 MS. TAYLOR: The reason I'm
 3 asking this is I want to be in my mind
 4 clear that this buyer is, from the
 5 moment he or she signs on, is aware of
 6 the specific restrictions and that it's
 7 not just something that's in the chain
 8 where that somebody needs to remind them
 9 of that and they don't get to see --

10 MS. WHITEHEAD: Well, they have to
 11 have a good lawyer.

12 MS. TAYLOR: Well, you know, if you
 13 don't come away with a piece of paper
 14 that you can sit down at your leisure
 15 and look at, you know, all of the things
 16 that can go wrong at that table, the
 17 passing of the papers and the signing,
 18 your mind doesn't --

19 MS. WHITEHEAD: For this particular
 20 client and for the initial buyers, I can
 21 tell you what they do and what they're
 22 doing on their project in Somers right
 23 now and what they did on their project
 24 in Rye. They give each homeowner a

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1 booklet, and in that booklet is included
 2 this kind of information, maintenance
 3 manuals, all of these kinds of things so
 4 that -- now, we can only control that
 5 for the initial homeowner, so the title
 6 method is a way of making sure that
 7 subsequent homeowners are on notice, but
 8 I can tell you, and we're perfectly
 9 willing to have that a condition, that
 10 we'll give the initial purchasers a
 11 package that's almost like a manual of
 12 what the homeowner's responsibilities
 13 are. In addition, assuming that we have
 14 a homeowner's association, there will be
 15 some kind of offering material that has
 16 to be provided to each homeowner as
 17 well.

18
 19 MR. KLARL: The attorney general
 20 requires that.

21 MR. BERNARD: On the entryway,
 22 right now the entryroad to the property,
 23 you just have a right-of-way on that
 24 road or none of that existing dirt
 25 road -- or the existing entry is on your

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1 property?
 2
 3 MS. WHITEHEAD: No, I think it's
 4 all on our property, isn't it? Yeah,
 5 it's all on our property.
 6 MR. BERNARD: So you're not
 7 landlocked?
 8 MS. WHITEHEAD: No.
 9 MR. BERNARD: Say you didn't have
 10 approval from the DEC or whoever to
 11 cross the stream, you would still have
 12 an entry to the property.

13 MS. WHITEHEAD: DEC will always
 14 grant approval to allow access into a
 15 site and DEC does not consider road
 16 crossings -- DEC looks at road crossings
 17 as something generally compatible in
 18 terms of accessing the site, so I don't
 19 think that will be a problem, but yes,
 20 we --

21 MR. BERNARD: It's not really an
 22 issue, anyway, you're not land looked.
 23 MS. WHITEHEAD: Right, we're not
 24 landlocked. It was more a concern about
 25 the sight distance --

DALCO REPORTING & LEGAL VIDEO

2-29

2-29

PROCEEDINGS

1 MR. BERNARD: I just wanted to
 2 clarify that.
 3
 4 MR. BERNARD: -- and as was also
 5 pointed out, the existing culvert is
 6 undersized so it would have to be
 7 rebuilt, even if we used that existing
 8 location. Again, as Tim said, we would
 9 love -- it's less expensive for us to
 10 use than to build something new. So
 11 again, these are things that we are here
 12 to work with you on.

13 THE CHAIRMAN: Thank you. No
 14 further comments. Mr. Bernard?

15 MR. BERNARD: Mr. Chairman, are we
 16 closing the public hearing?

17 THE CHAIRMAN: Yes.

18 MR. BERNARD: Mr. Chairman, I move
 19 that we close this public hearing and
 20 keep open a written comment period for
 21 15 days.

22 THE CHAIRMAN: Second?

23 MS. TODD: Second.

24 THE CHAIRMAN: On the question; all
 25 in favor?

DALCO REPORTING & LEGAL VIDEO

PROCEEDINGS

1 (All members says aye.)
 2
 3 THE CHAIRMAN: Opposed?
 4 (No response from the board.)
 5 THE CHAIRMAN: Thank you.

(Time noted: 9:25 p.m.)

DALCO REPORTING & LEGAL VIDEO

1 PROCEEDINGS

2 C E R T I F I C A T I O N

3

4 STATE OF NEW YORK)

) ss.

5 COUNTY OF WESTCHESTER)

6 I, MARCI LOREN DUSTIN, Court

7 Reporter and Notary Public within and for the

8 County of Westchester, State of New York, do

9 hereby certify:

10 That I reported the proceedings
11 that are hereinbefore set forth, and that such
12 transcript is a true and accurate record of
13 said proceedings.

14 AND, I further certify that I am
15 not related to any of the parties to this
16 action by blood or marriage, and that I am in
17 no way interested in the outcome of this
18 matter.

19

20 IN WITNESS WHEREOF, I have

21 hereunto set my hand.

Marci Loren Dustin
MARCI LOREN DUSTIN

22
23 Court Reporter

24

25

DALCO REPORTING & LEGAL VIDEO

Appendix C

WRITTEN COMMENTS RECEIVED
ON DEIS

Index of Written Comments Received on the DEIS

Letter #	Author	Date
1	Jeanne Romeu	10-13-03
2	Jeanne Romeu	10-25-03
3	Catherine Marsh	11-05-03
4	Westchester County Department of Health / Michael J. Sakala, PE	10-28-03
5	Arthur Rich	11-14-03
6	Gertrude Bush	11-14-03
7	Catherine Marsh	11-13-03
8	Lisa Moir	11-25-03
9	T. Cortlandt Dept. Technical Services / Ed Vergano, PE, Ken Verschoor	11-20-03
10	Bob Milano	01-03-04
11	Kathleen A. Burleson, Dir., Town of Cortlandt Dept. of Enviro. Services	01-19-04
12	John Palmiotto, Asst. Supt. Recreation	09-29-03
13	Mike Sellazzo	01-14-04
14	James J. Sullivan, EIT / Chas. H. Sells, Inc.	08-18-03

FS: comment ltr index FurnDock.lwp

October 13, 2003

OCT 17 2003

Mr. Steven Kessler, Chairman
Town of Cortlandt Planning Board
Town Hall
One Heady Street
Cortlandt Manor, NY 10567

-Zoning Board
-Town Board
-C.A.C.
-Attorney
-Engineer
-*Tim Miller*
-*Linda Whitehead*
-*Chris*

Re: PB Case #9-99 – Proposed Furnace Dock Subdivision

Dear Mr. Kessler:

I would like to bring these observations to the attention of the Town Planning Board in reviewing as much as I could of the DEIS report and related correspondence on the above planned subdivision during a recent visit to the planning office:

SENT 10/24/03

Overall, I believe many aspects of this report regarding matters such as wetland disturbance and decimation, forest decimation, increased traffic use, wildlife disturbance and sightings, etc. (see below) have been grossly underreported where necessary in order to maximize the attractiveness and acceptance of this report. It is almost as if they really believe the people reading this will be ignorant.

This is the first DEIS report I have ever seen. But this report minimizes in every conceivable way the impact this subdivision will create. I am not an engineer, planner, or any type of professional in these matters, but I do know when someone is trying to “pull a fast one” and this report is one of those times. I know this letter is lengthy, but I do hope you and the Board will take the time to read this and ponder over it. Please note these comments and observations are regarding only a small portion of the report I was able to copy and read.

Open Space: A memo from Frederick P. Clark Assocs. dated Sept. 3rd 2003 states the DEIS report says a “sizable contiguous areas on lots 1-8 and 11-19 would remain undisturbed, but would not be dedicated as open space”; and a review by Clark Assocs. recommended that the DEIS be revised to state that the conservation areas owned by the Homeowners Assn. will not be able to be changed without the consent of the town. The applicant’s response was “Sizable areas of undisturbed open space *are anticipated* at the rear of lots 1-8 and 11-19. The applicant *will consider* placing a portion of these lots into a conservation easement...” (my italics)

Since the applicant stated these areas of open space are *anticipated*, then the DEIS report stating the acreage of open space is erroneous and bogus (see p. 3.4-17). I respectfully ask that the Board not accept this response from the Applicant. This answer indicates to me that the developer has not addressed this concern, nor has any intention of placing restrictions on individual lots so they can maximize their sales. A homeowner having a view of water or a stream is considered a luxury and is considered prime land—please don’t think a homeowner will not tear down trees on their property to

2-1

view it. I live in a “Hudson River” town, and anyone can see how much a homeowner feels just to have a “view”.

Wildlife: The DEIS report on p. 3.4-6 mentions the Furnace Dock site is surrounded by a “highly urbanized landscape”, and therefore “the diversity and abundance of animal species is *likely limited*”. If you read this paragraph, you will notice ambiguous words such as “animal species is *likely limited*”; “contiguous blocks of habitat or several unique habitat types are *probably uncommon*”; “The most abundant species *are likely those which utilize relatively smaller patches of habit.*”

5-1

This section of the report **proves assumption was reported**, not investigative nor raw scientific data or effort. How? First, p. 3.4-10 states “Due to the linear nature of the site and the limited number of access points, a truly random sampling design could not be used effectively.” Secondly, this is proved by the reported sightings of animals. There is an extremely healthy and diverse population of all kinds of species, many of which were not reported because I do walk by this area and I see many different species of birds, and reptiles, including turtles all the time—none of which were reported in this report. How could you have wetland areas, such as streams, lakes and ponds, and not see turtles or salamanders?

The bird sighting list only shows 11 species that were seen at the site. On any given day, I have at least 14 different species at my bird feeder (I live across the road from the site), so there must be scores of many different species in that site. The table “Known or Expected Birds and Their Habitat Associations” on p. 3.4-13 **doesn’t even list** some species of birds that I get at my feeder or that I see walking by, such as red-bellied woodpeckers, cowbirds, Baltimore orioles, and cedar waxwings.

5-2

The DEIS described a “highly urbanized landscape which surrounds the property”. **The report downplayed the significant wooded areas nearby to justify the minimalized numbers of species and wildlife present.** Here, again, this report grossly underreports the hundreds of wooded acres right nearby and adjacent to the site, such as Furnace Brook Lake; large tracts of open space that encompass the Con Ed power line property; Brinton Brook Wildlife Sanctuary of approx. 150 acres across Furnace Dock Rd.; nearby Graff Wildlife Sanctuary of over 40 acres, and then you have Oscawana Park owned by Westchester County; not to mention the abundance of wooded areas surrounding this site along Furnace Dock Rd., and nearby W. Mt. Airy. That is why there is more diverse and wildlife in this area.

Location of entrance to subdivision: The planned entrance to this subdivision is on Furnace Dock Road, is on a curve in a wooded area over a beautiful stream. Cars go down this road pretty fast—an entrance on a curve is very dangerous. If this goes forward, the applicant, I’m sure, must destroy all the roadside trees on their property to give better visual sight to the drivers (which has already been noted in the drawings). It’s a bad place for an entrance, and everyone loses here, the environment due to loss of trees, the birds and animals, and we lose a precious scenic area that will never again appear.

8-1

Building Site: This odd-shaped parcel shows development on every conceivable piece of land, except where there's actual ponds ("Proposed Stormwater Magmt Facilities", Fig. 3.2-8), including private lots that will go through areas of designated wetland according to the Map "Vegetative Community Types, Figure 3.4-1; such as lots #11, 10, 8, 7, 6, 22, 23 (maybe more); and the proposed public road going through (over?) part of the southern wetland area "B", as well as over the Furnace Brook Stream.

4-1

Mr. Kessler, I'm not an engineer, but building homes in a wetland area doesn't seem like a good plan as it will most definitely put them in jeopardy of certain flooding during heavy rains, hurricanes and nor'easters.

Historic Archeological Site: The report says the privately owned homes "will provide permanent protection of these significant historic resources", but the applicant's response in the memo addressing the open space issue from Clark Assocs. states the protection of open space is only "anticipated"; therefore, permanent protection is not guaranteed.

2-2

Tree Decimation: Somewhere in the report (I cannot locate it now) an estimated 670+ trees will be decimated. I'm not sure if this count is only pertaining to trees over 12" in diameter, but I wanted to compare that a proposed building of a 3-car garage with driveway in a wooded area nearby may destroy approx. 50-60 trees, overall—all different diameters (my estimate). The Furnace Dock Rd. project with the projected homes, lawns, roads, driveways, etc. will probably destroy **thousands** of trees of all sizes and widths.

5-3

Traffic and traffic signal: I believe the increased traffic the DEIS report mentions resulting from this subdivision has been greatly understated, but it states another "benefit" (p.2-3) will be "helping to mitigate traffic congestion by contributing to the future signalization of Furnace Dock Road and 9A." There has never been a traffic congestion problem at that intersection and I was unaware we were having a problem by *not* having a signal there.

6-1

Proposed New Road: The applicant has also stated they will "offer for dedication to the Town" (p. 2-2) the proposed 2,604' long, 24' wide road they will be building through this development (not make it private). That is very generous of them as then it will be the Town's responsibility--not the homeowners--to maintain, and since this will be a one-way in, one way out development, the only ones using this road will be the homeowners and their guests. Again, where's the benefit?

2-3

Tax Revenue: As I stated at the public hearing, one of the reported "benefits" (p 2-3) in this DEIS report the proposed subdivision will bring is increased tax revenue. I am sure with 24 homes on a 42 acre parcel, the \$77,000 in town tax income will not be sufficient to meet the needs of lighting, garbage and recycle collection, sewage and street repair, road maintenance, winter sanding, salting and snow plowing, lighting, police protection, etc. The increase in school-age children (where they get only 21, I don't know—3-5 bedrooms x 24 = approx. 75-150 bedrooms = lots of children), with only \$191,000(?) in school taxes a year will not be enough to cover additional teachers, services such as books, lunches, supplies, school bus transportation, etc.

7-1

At present the parcel now brings in a total of over \$19,000 in town and school tax revenue, which the Town gets to keep all of it **free and clear without expenses.** *Benefit?* I believe if this subdivision is built, the Town will be *subsidizing* this development.

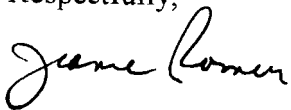
If you have gotten this far, I am very thankful to you. This property is unsuitable for building the kind of proposed construction that is being planned. I believe the homes will be in jeopardy of flooding and/or sinking as this is a designated wetland/watershed area. The water presently flowing though the property will be disturbed, thereby causing unforeseen problems for the town, homeowners, environment, as well as the habitat that will be destroyed, not to mention the potential adverse effects on the marsh downstream by Oscawana Park.

4-2

This is a parcel of land that is an extremely environmentally sensitive ecosystem. Once this is destroyed, the results will be stark and permanent.

I hope this letter is beneficial to the Board, and thank you for your time.

Respectfully,



Jeanne Romeu
29Q Scenic Drive
Croton-on-Hudson, NY 10520

Ken Verschoor

OCT 27 2003

LETTER # 2

From: Jeanne Romeu [robin.rome@verizon.net]
Sent: Saturday, October 25, 2003 5:07 PM
To: cac@townofcortlandt.com
Cc: kenv@townofcortlandt.com

CopiesPlanning Boe
.....Zoning Board
.....Town Board
.....C.A.C.
.....Attn
.....Eng
.....Tim Miller
.....Cynthia
.....Chris
SENT 10/27/03

PB9-99

Dear Committee and Mr. Verschoor:

This is in regard to Planning Case #9-99 Furnace Dock Inc. subdivision which will be again on the Planning Board agenda November 5th.

A) I have looked at the DEIS in the Planning office, and am quite concerned at the number of lots which will be built on wetland buffer open space which is in an area, I believe, the Town of Cortlandt has recognized in their biodiversity report as a sensitive ecosystem. If you please refer to the DEIS Report Map Figure 3.2-8 "Proposed Stormwater Mgmt. Facilities", you'll see the wetland area and buffer spaces, with the footprints of the proposed lots. House lot numbers 1, 5, 6, 7, 8, 10, 11, 20, 21, 22 and 23 show the homes built right up against the wetland buffer zone open space, and lots # 12, 15, 16, 19, 21 encroaching on it.

5-4

I notice a memo on file dated Sept. 3rd from the firm of Frederick P. Clark Assocs. regarding their concerns of undisturbed open space, and the applicant's response was "sizeable areas of undisturbed open space are anticipated at the rear lots of 1-8, and 11-19. The applicant will consider placing a portion of these lots into a conservation easement..." (P. Clark's and my italics)

I believe since the applicant has stated these open spaces are anticipated, the acreage on the report indicating open space left undeveloped is false. The applicant would not want any restrictions on their properties which would hinder the potential sales of individual lots. Even more, once these lots are sold, an individual homeowner having the possibility of a water view--stream, pond, whatever--will down any trees necessary to have it, or to put in a pool, etc.

2-4

B) Furthermore, they state the historic and archeological sites (see p. 1-21 of the DEIS) "will be located on privately owned house lots will provide permanent protection of these significant historic resources without adverse and unnecessary disturbance". Here again, since there are no open space easements, this, too, is false as home owners will have the freedom to build on or clear their property as they wish. The applicant has already stated they will destroy the industrial staging area for lots #3 and 4.

2-5

C) The proposed entrance to this site is on a curve in the road on Furnace Dock Rd. Page. 1-21 of the DEIS states "wooded rural character of Furnace Woods area will be maintained by the wooded stream corridor preserved at the front of the site". Committee, how can this be when they are going to build a road with a 50' wide right of way, with utility easements, etc. as well as bridge over the stream, right through this area? This is a false statement and contradiction! They will destroy this scenic area forever, and what's more, there's an old dirt road which went directly to the furnace, or grist mill, that is still there. They claim a guardrail is blocking it, but that is not so, plus a small portion of that guardrail, if necessary, can be removed. This would be a much better entrance way as a bridge will not need to be built over the stream, and the road will not destroy the woods at this spot. At present, the present proposed entrance on the curve will necessitate the downing of many roadside trees for sight vision. This old dirt road can be widened and is a better entrance just south of the stream bridge on Furnace Dock Rd. You can see this also on the site maps 3.2-8 referred to above.

8-2

Committee and Mr. Deputy Director, please look into these matters. This is an important and sensitive wetland area, beautiful wooded area, with lots of wildlife.

Sincerely,

Jeanne Romeu

27 Spice Hill
Croton, NY 10520

November 5, 2003

Copies ... 7 ... Planning Board

NOV - 6 2003

.....Zoning Board

.....Town Board

Planning Board
Town of Cortlandt
1 Heady Street
Cortlandt Manor, NY 10566

.....C.A.C.

.....Attorney

Re: Furnace Dock Subdivision

.....Engineer

Dear Members:

PB 9-99

..... Tim Miller
..... Linda Whitehead
..... Clutz

After review of the DEIS the following ~~incomplete or inaccurate~~ statements need to be addressed:

- The DEIS does not contain a lists of areas to be blasted. Instead, in section 5.0 ADVERSE ENVIRONMENTAL IMPACTS THAT CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED 5.0 the developer states "a project blasting program will be designed prior to commencement of blasting activities in order to identify the particular needs of this project...". The rock located in the turnaround at the end of Road B would appear to be a target for blasting. My house, built on a concrete slab and containing several large plate glass windows. is less than 100 yards from this rock. Can the developer or this Board assure me that there will be no adverse effect to my home or property?

3-1

- Existing Wells on Adjacent Properties/Groundwater, Executive Summary 1.2.2 Water Resources "None of the nearby residential properties obtain water from wells."
This is **untrue**. My property is adjacent to Subdivision 18 and 19. My well is less than 95 yards from the rock located in the Road B turnaround. Other large rocks are less than 63 yards from my well. Without a blasting plan how can this Board determine the impact on either my home or my water supply? Considering the developer either did not know that I had a well or chose to ignore this fact, how can they indicate there will be no impact?

3-2

The plans also include a perforated pipe with crushed stone surrounds. This pipe is located 183 feet directly uphill from my well. Please provide clarification on the purpose and the implications of this pipe of the quality of sole source of water.

2-6

- The stone wall running NE-SW on Lot 18 is not shown on the map and is not included in the list of stone walls to be removed. However, a proposed sewer line appears to be located in its current location.

2-7

- Water Resources, Table 3.2-9. Data for Design Point 2 is missing from the Table. 4-3
- Section 3.4.3 Potential Impacts, Impacts to Adjacent Ecosystems The DEIS Indicates that “Furnace Dock Lake is located upgradient of the subject site. Nearly all stormwater runoff from the developed portions of the Furnace Dock site would drain away from this surface water feature.” However, their drawing shows Furnace Dock Lake at a level of approximately 148’. The eastern property lines of lots 3,4,5,6,7,8,9, vary from 150’ to 200’, a level that would ensure stormwater drainage, including herbicides and pesticides used on the proposed lawns, would flow to Furnace Dock Lake and ultimately Brook. 4-4
- The DEIS does not mention that in addition to school busses from the Henrick Hudson School District. There are a number of busses from the Croton School District who make multiple trips on this Road. The DEIS indicates 21 school age children but only 20 are listed as attending Henrick Hudson School. It is implied, but not stated, that 1 child will attend private school. This would result in another school bus missing from the calculation. 7-2

The submitted DEIS raises concern in the following areas:

Sewer line: according to the plans the sewer line will include a 20-foot wide swath. 5-5

- It will be within 81 feet of my well
- It will cross, and unavoidably alter, Wetland C, a wetland which is described in the DEIS as “forested with well developed tree cover”.
- It will be located immediately adjacent to an existing stone wall for approximately 310 feet along my property line. All trees will have to be removed for the construction and storm water runoff will further damage the wetland
- Soil will be compacted by trucks and other heavy equipment necessary for the project under the canopy of trees located on my property. The health of these trees will be adversely affected by this compaction.

•
Steep slopes

The developer indicates that “35% of the site must be graded to accommodate the proposed development.” This appears to be a very high percent of the property. It also appears that it can only be accomplished by blasting and major grading. However, clarification is needed regarding exactly what would be graded and by what means. They indicate that the houses would be built on the most level portions of the property, yet refer to grading for homes and surrounding water gardens. 3-3

Wetlands and Buffer zones:

The buffers are located in the yards of many homes. The developer cannot hold the future home owners of the “9.74 acres of undisturbed acreage in the backyards” to continue to 2-8

maintain what is claimed “to mitigate potential fragmentation of existing wildlife habitat in the area after the construction of the project.” (Executive Summary 1-2). Conversions of buffers into lawns does not protect the buffer. It does not support biodiversity. Landscaping and the use of herbicides and pesticides are left at the homeowners discretion

Road

The developer proposes a single entry/exit road from the property. The proposed road is 2000 feet, far exceeding the 500’ maximum established by the Town. In addition to the safety concerns raised by entering or leaving Furnace Dock Road, the Planning Board must evaluate the potential risk to the safety of the residents and emergency personnel. A storm the size of Hugo, which did not even warrant hurricane status, flooded Furnace Brook in several areas. The residents of the development would be stranded without access to emergency services by such a storm or even a single downed tree.

8-3

Social Services

The DEIS contains the names of several child care facilities. However, in most communities in Westchester there are long waiting lists for childcare. The shortage is especially true for infant care. I request clarification on availability of child care for the proposed community.

7-3

After-school care, which is especially important to working parents, is not addressed. The after-school care in our community is very limited. The situation is exacerbated for middle school age children for whom after-school programming is almost non-existent.

Traffic Impacts and Education Facilities

The developer has produced numbers that could only have been arrived at by “voodoo mathematics.” The developer proposes 24 single residences with 3 and 4 bedrooms and states that 87 people will live there. That will leave a lot of empty bedrooms!

7-4

According to the DEIS these 24 homes will produce a maximum of 20 students. This is less than 1 per house. At the same time, the developer projects only 28 trips during the AM peak traffic hour and 32 during the evening. This is far less than the 12 per household standard adopted by other towns in Westchester.

This voodoo math raises serious question to the projected revenue and costs to the town, the traffic study, use of recreational facilities, social services, and projected school enrollments and related costs. I respectfully request that the Planning Board recalculate the statistics based on a realistic expectation of residency. I suggest that instead of calculations utilizing average household size in Cortlandt which includes numerous apartments and condominiums, the calculation be based on residency in other 3 and 4 bedroom homes.

Recreation

Is the proposed fee of \$4,000 per sub-divided lot in line with fees for other equivalent homes paid by other subdivision developers? Is this fee based on the number of people in the home? If so, the fee should reflect a realistic occupancy number.

7-5

Will the remaining open space only be available to the subdivision residents?

2-9

In conclusion, I urge the Planning Board to deny the request for this residential subdivision. I urge the board to uphold the regulations that have been established by the town in regards to preservation of wetlands and buffer zones, steep slopes and single access roads.

Sincerely,

Catherine J. Marsh

Andrew J. Spano
County Executive

Department of Health
Joshua Lipsman, M.D., M.P.H.
Commissioner

NOV 14 2003

- Copies ... 7 ... Planning Board
- Zoning Board
- Town Board
- C.A.C.
- Attorney
- Engineer
- *Tim Miller*
- *Binda Winter*
- *L. Morris*

October 28, 2003

Mr. Kenneth Verschoor, Deputy Director for Planning
Town of Cortlandt Department of Technical Services
Town Hall
1 Heady Street
Cortlandt Manor, NY 10567

PB9-99

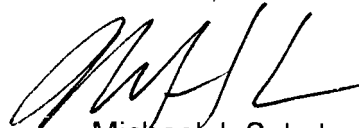
SENT 11/19/03

Re: Furnace Dock DEIS
Cortlandt (T)

Dear Mr. Verschoor:

The Westchester County Health Department has reviewed the Draft Environmental Impact Statement dated September 3, 2003 for the Furnace Dock subdivision and has no comments at this time.

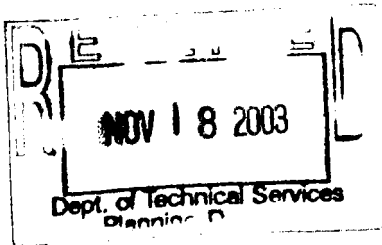
I remain,



Michael J. Sakala, P.E.
Assistant Commissioner
Bureau of Environmental Quality

MJS:LD:ld

Cc: file



Arthur Rich
27 Spice Hill
Croton, NY 10520

Copies ... 7 ... Planning Board

.....Zoning Board

.....Town Board

.../...C.A.C.

.../...Attorney

.....Engineer

.../... *Tim Miller*
.../... *Tinda Whitehead*

.../... *b. schms*

SENT 11/19/03

November 14, 2003

Planning Board
Town of Cortlandt
1 Heady Street
Cortlandt Manor, NY 10566

PB 9-99

Re: Furnace Dock Subdivision

Dear Members:

The proposed subdivision is typical of poor suburban planning. Once again we see a developer eager to maximize the number of homes on a piece of property in order to increase profits while ignoring all the principles of Smart Growth.

Traffic: By virtue of a 2000 foot road with no sidewalks for walking, (constructed through wetlands, rock outcroppings and buffers) the future residents will be required to drive for every errand. Small children will have to use their bikes on the sole roadway. Emergency access and egress for the entire development is dependent on this single road which can easily become blocked by a woodland fire, downed tree or flooded stream overflowing it banks onto the roadway.

6-3

Destruction of habitat: By not clustering homes, the developer's plan maximizes the destruction of the natural habitat. The ONLY land the developer is willing to NOT use is the wetlands, which, unless drained, could not be developed. The development requires using the buffers as backyards in order to meet the R40 required lot size.

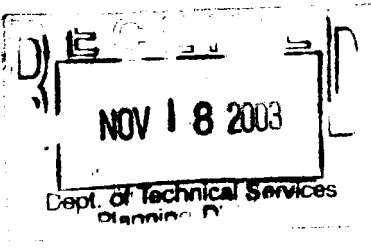
2-15

The wetlands and the buffers will, at the least be negatively impacted. At worst, they will be destroyed by the downhill storm-water run off containing lawn herbicides, pesticides and fertilizers..

4-7

I urge you to deny the permits requested to implement this poorly designed project.

Sincerely,



LETTER # 6

Gertrude Bush
26 Spice Hill
Croton, NY 10520

Copies 7 Planning Board

..... Zoning Board

..... Town Board

..... CAC

..... Attorney

..... Engineer

..... *Tim Miller*

..... *Linda Whitehead*

..... *Chris*

DATE 11/19/03

November 14, 2003

Planning Board
Town of Cortlandt
1 Heady Street
Cortlandt Manor, NY 10566

PB 9-99

Re: Furnace Dock Subdivision

Dear Members:

I am concerned about a number of issues raised by the proposed Furnace Dock Subdivision:

Blasting: The plan calls for an unspecified but, according to the plans, massive amount of blasting to both outcropped rock and bedrock in order to turn this natural landscape into another poorly planned suburban development. This blasting has the potential to damage my home and that of my neighbors. It may also change the quality and quantity of water in the area.

3-5

Length of Road: The proposed 2000 foot wall is quadruple the length allowed by Town regulation for a single access road. The road travels through wetlands and will require extensive blasting to avoid Town of Cortlandt steep slope restrictions.

2-16

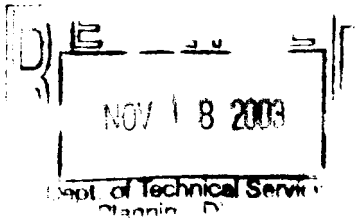
Traffic: The plan does not portray a realistic accounting of the potential traffic entering or leaving Furnace Dock Road. The proposed entrance, as well as the entrance from Furnace Dock onto 9A, are dangerous.

6-4

I strongly urge the Planning Board to deny the requested permits.

Yours truly,

Gertrude Bush



Catherine Marsh
27 Spice Hill
Croton, NY 10520

Copies ... ? ... Planning Board

.....Zoning Board

.....Town Board

.../...C.A.C.

.../...Attorney

.../...Engineer
Tim Miller

.../...*Linda Whitehead*

.../...*Chris*

SENT 11/19/03

November 13, 2003

Planning Board
Town of Cortlandt
1 Heady Street
Cortlandt Manor, NY 10566

Re: Furnace Dock Subdivision

PB 9-99

Dear Members:

I am writing in response to comments made by the developer at the recent open hearing on the DEIS for the Furnace Dock Subdivision. These comments are in answer to questions and concerns raised at the hearing and are in addition to the letter I previously submitted.

The proposed subdivision will require, by the developer's own statement, extensive grading and an unspecified amount of blasting to remove rocks. The DEIS does not specify which rocks will require blasting. The submitted plans depict only the visible outcropping of large rock formations. Presumably, many of these will be blasted. However, as brought out at the hearing, bedrock is located near the soil surface. It is therefore probable that blasting will also be required for construction of homes, driveways, drain fields, catch basins, and sewer lines.

3-6

Such massive alteration of the land will affect the geology, hydrology, and the supply of well water to nearby residences. In addition to our property which is immediately adjacent to the proposed project, there are other homeowners on Spice Hill who are dependent upon wells for their water. Since DEIS incorrectly states there are no wells in the vicinity, it would be prudent to survey all surrounding properties regarding this issue and potential negative impacts.

In response to expressed concerns regarding the buffer areas, the developers suggested a revision to the DEIS. I strongly disagree with the stated solution involving restricted covenants on the homeowners wherein the homeowners association would be responsible for monitoring and enforcement of governing regulations. This can only be termed a "quick fix" by a developer whose interest in the land will disappear as soon as the last home is sold. Their proposed arrangement does not ensure the long-term preservation of the buffers. While restrictions can be made regarding obvious things such as construction of

2-17

buildings, they will not protection against degradation of the buffers from their natural purposes to standard suburban backyards. The far corners of these backyards will become like most backyards – areas for storage, wood piles, dumping areas for grass clippings or for children to play—and the buffer will cease to exist. Further degradation will occur as homeowners landscape the area with the help of herbicides, pesticides, fertilizers and non-native plants.

The homeowners association cannot enforce restrictions. It is questionable if they would even want to enforce such restrictions as, by definition, the members will be the very homeowners on whom the restrictions will need to be applied.

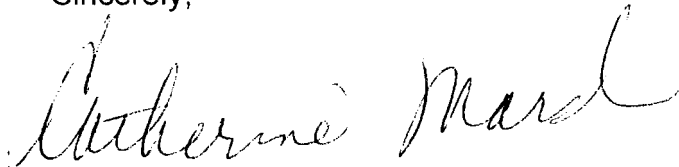
Even assuming the best intentions of the homeowners association, how would the association monitor the individual practices of each homeowner? Would they be required to do regular water quality assessment of the wetlands and the Brook? How would they determine which homeowner(s) were responsible? What actions could they take to remediate?

I also predict that West Nile and other mosquito or tick born diseases will prompt nearby homeowners to use insecticides on their property, including the buffers, and the wetlands.

4-8

I strongly urge the Planning Board to reject the developer's request for permits.

Sincerely,

A handwritten signature in cursive script that reads "Catherine Mard". The signature is written in black ink and is positioned below the word "Sincerely,".

Ken Verschoor

From: LJMSW@aol.com
Sent: Tuesday, November 25, 2003 5:02 PM
To: kenv@townofcortlandt.com
Subject: re: proposed development on Furnace Dock Rd.

PB 9-99

Hello-

My name is Lisa Moir, and I am a resident of Cortlandt. I could not attend the most recent Public Hearing on the proposed development on Furnace Dock Rd. South (bordering the Furnace Brook Lake)- although I did attend the first meeting.

I am very concerned about the development of this fragile and ruggedly beautiful piece of property. The steep slopes, wetlands, proximity to a large body of water and active stream/river.....all lead me to believe that the less this property is developed: the better.

That said, I am not sure if anyone has brought up the issue of the Millennium Pipeline. The current proposed route is marked to cross the Furnace Brook Lake adjacent to the Con Ed towers. The right of way will be significant, and the demolition to complete that project and bury the 36 inch pipe under the lake will be tremendous. Obviously, there will be blasting - although no one knows how much. In addition, the proposed housing development is said to need blasting as well. To blast AFTER the pipeline is in.....could be risky. And the area around the houses will endure blasting should the pipeline come after.

3-10

I spoke with Christopher Letts, a resident of Cortlandt and a Hudson river specialist, and he stated how important this body of water is to the local ecosystem that feeds into the Hudson and the Daniels' Island marsh.

Should there be any more Public Hearings on this property- I would love to be informed.
thank you for your time-
Lisa Moir 271- 1035

- Copies7.....Planning Board
-Zoning Board
-Town Board
-/.....C.A.C.
-/.....Attorney
-/.....Engineer
-/.....Tim Miller
-/.....Linda Whitehead
-/.....Chris

SENT 12-03-03



**TOWN OF CORTLANDT
DEPARTMENT OF TECHNICAL SERVICES
PLANNING DIVISION**

LETTER # 9

LINDA D. PUGLISI
Town Supervisor

Town Board Members
JOSEPH D. CERRETO
FRANCIS X. FARRELL
ANN LINDAU
JOHN E. SLOAN

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chrisk@townofcortlandt.com

EDWARD VERGANO, P.E.
Director

KENNETH VERSCHOOR
Deputy Director

MEMORANDUM

To: Town of Cortlandt Planning Board Members

From: Ed Vergano, PE, Director, Technical Services *EV*
Ken Verschoor, Deputy Planning Director *KV*

Re: PB 9-99 Furnace Dock Subdivision

Date: November 20, 2003

Based on a review of the subject application and Draft Environmental Impact Statement entitled "Furnace Dock Subdivision" prepared by Tim Miller Associates, Inc. dated October 7, 2003, the following comments are made at this time:

1) It is recommended that the proposed lots be redesigned to remove proposed lawn areas and other disturbance from wetland buffer areas on the subject property. 5-17

2) As indicated in our prior memorandums on this application the Town Wetland Consultant for this application (paid for by the applicant) should also review the proposed subdivision after completion of the DEIS to further advise the Planning Board. Paul Jaehnig will be taking over the wetland review of the subject application from the late Irwin Potter. When completed, Jaehnig's report should be responded to in the FEIS. 5-19

3) It is recommended that the industrial complex be preserved as part of the proposed open space as recommended by the NYS ORPHP May 30, 2003 letter which, among others, recommends that the entire industrial complex be avoided and that an APE Area of Potential Effect be defined so that testing can be undertaken for the remaining areas where impacts may occur during construction. 2-30

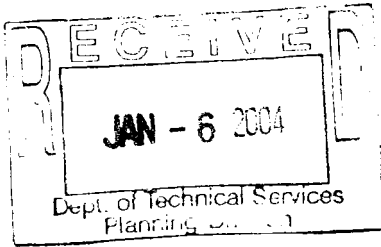
4) It is recommended that an alternate site access road from Furnace Dock Road immediately west of the existing Furnace Dock Road Bridge be evaluated in the FEIS. This evaluation should include a schematic plan of the proposed road and sight distance on Furnace Dock Road. This alternative road will eliminate the need to cross Furnace Brook.

8-12

5) The minimal wetland crossing alternative is favored since it reduces the length of the proposed road and results in less site disturbance and less impact on woods, wildlife habitat, steep slopes and wetlands and preserves more open space. This alternative plan should also include the alternate access road suggested in #4 above if possible, additional preservation of the historic resources and potential clustering of the proposed housing units.

8-13

cc: Linda D. Puglisi, Town Supervisor
Ann Lindau, Town Board Liaison
John Klarl, Esq. Deputy Town Attorney
Lewis Leslie, CAC
David Stolman, AICP, Frederick P. Clark Associates Inc.
Linda Whitehead, Esq.
Tim Miller, AICP, Tim Miller Associates, Inc.



LETTER # 10

Bob Milano
Croton, New York 10520

Copies 7 Planning Board January 3, 2004

- Mr. Steven Kessler
- Ms. Loretta Taylor
- Mr. Bob Foley
- Ms. Susan Todd
- Mr. John Bernard
- Mr. Thomas Bianchi
- Mr. Ivan Kline

.....Zoning Board

.....Town Board

.../...C.A.C.

.../...Attorney

.../...Engineer

.../... Linda Whitehead

.../... Jim Miller

.../... Chris

SENT 1/6/04

Town Hall,
1 Heady Street
Cortlandt Manor, NY 10567

PB 9-99

Dear Town of Cortlandt Planning Board Members,

I have just recently learned that there is a sub-division proposal before the board that if approved would sub-divide a 40+ acre of wooded and wet land property located off of Furnace Dock road into 24 house lots. I am very disappointed that I may missed the first public meetings on the matter. I can only hope that there were other community minded people who attended the meetings and pointed out some aspects of the proposal that you may not have been informed about by the parties working on behalf of the property owners.

The property in question is an environmentally sensitive habitat. Just some of the animals that live and nest on this property are Pileated Woodpeckers, turtles, Wild Turkey, Great Horned Owls, Carolina Wrens, and Red-bellied Woodpeckers just to mention a few, in addition to the more common wildlife. Coyote and fox have also been seen in the area.

5-18

The property has a robust stream running through it which empties into the marsh land of Oscawana, which in turn empties into the Hudson River. It is also my understanding that there are fresh water wells of neighboring houses located adjacent to the property line of the property in question. Obviously the wholesale destruction of trees, erosion of soil and use of pesticides for lawns, etc, that accompany a large housing development will have a negative effect on the surface water and the water resident in the water table.

4-12

It is also my understanding that; a larger number of the lots are considered wetlands and therefore should require Wetland Buffer Zones. That perhaps as much as 40% of the property falls under Steep Slope rulings and that the proposed road is 2000+ feet whereas there is a Town Code restriction of 500 feet for a road leading into a cul-de-sac.

2-31

I understand that the property owner has certain rights and reasonable expectations of what they can do with their property. Those rights, however, have to be balanced against the

better good, especially if certain proposed actions by the property owner would damage other nearby properties, down stream water sources or the environment and wildlife in general. Such damages, if they occur are almost certainly irreversible and permanent. I think the owner should also be aware that there are other ways to make a profit off their land. They can sell their land to environmentally conscious groups such as The Nature Conservancy, The Saw Mill River Audubon Society, perhaps the Westchester Land Trust or other land trust organization. Also, through the use of Conservation Easements they could reap large tax advantages. By agreeing to permanently forego the development of 24 houses on this property and preserving it as it is, they stand to get a tremendous tax benefit through a Conservation Easement.

I understand that a revised "final" environmental impact assessment is being completed on behalf of the property owner and that this assessment will be reviewed at an upcoming planning board meeting. I see from the agenda posted on the Town of Cortlandt's website that this sub-division is not scheduled for the meeting on 1/7/04. Hopefully, whenever this sub-division comes before the town board for a vote, you will have the long term vision to vote it down in favor of the local environment and community.

Thank you



Bob Milano

CC. Westchester Land Trust
Croton Watershed Clean Water Coalition
Gannett

**TOWN OF CORTLANDT
DEPARTMENT OF ENVIRONMENTAL SERVICES**



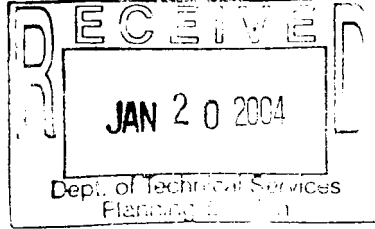
LINDA D. PUGLISI
Town Supervisor

Town Board Members
JOSEPH D. CERRETO
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ANN LINDAU
JOHN E. SLOAN

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KATHLEEN A. BURLISON
Director

MICHAEL SELLAZZO
Assistant Director



January 19, 2004

To: Ken Verschoor, Deputy Director, Planning

From: Kathleen A. Burlison, Director D.E.S.

Re: PB9-99 Furnace Dock, Inc.

Please accept the attached two memos for comments concerning Recreation impacts of this project and the Sanitation issues as well.

The following comments refer to this project as it impacts the Highway Division of D.E.S.:

- Highway vehicles vary up to 32.5 tons empty, both roads and box culverts much be weighted rated to accept this tonnage at a minimum. 2-32
- The proposed site plan designated Road A and Road B. We request that the site plan be revised for one continuous road with a loop at the interior end of the site rather than two cul-de-sacs. This would avoid the necessity of Town vehicles backing up while servicing the homeowners. 2-33
- In the current site plan, the driveway for lot #8 needs to be re-located to the opposite property line due to the need for snow storage. 2-34
- While the D.E.I.S. contains a letter from Jeff Tkacs (10/02) stating that this proposed sub-division will have no impact to roads or sanitation services, this sub-division and all other proposed additional sub-divisions are driving the need to create additional Sanitation and Snow Plow routes, thus adding both personnel (5 F/T - \$234,000.) and equipment (2 trucks - \$287,000.) to the Town's budget process. 7-9

Enc.
Cc: Linda D. Puglisi, Town Supervisor
Town Board Members
Ed Vergano, Director D.O.T.S.
Michael Sellazzo, Assistant Director D.E.S.
Sam Carcova, Working Supt. of Highway D.E.S.
Vinny Letteri, Sanitation Forman

Copies ... 7 ... Planning Board

-Zoning Board
-Town Board
- ...!...C.A.C.
- ...!...Attorney
- ...!...Engineer
- ...!...Linda Whitehead
- ...!...Chris



TOWN OF CORTLANDT
DEPARTMENT OF ENVIRONMENTAL SERVICES
RECREATION DIVISION



LINDA D. PUGLISI
Town Supervisor

Town Board Members
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 FRANCIS X. FARRELL
 ANN LINDAU
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Assistant Director, D.E.S.
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JEFF TKACS
Coordinator for Safety & Security
(914) 737-0100

PB 9-99

TO: Kenneth Verschoor, Deputy Planning Director

From: John Palmiotto, Asst. Supt. Recreation *John Palmiotto*

Date: September 29th, 2003

I'm responding to the proposed Furnace Dock subdivision PB 9-99, with potential impacts which would effect recreation programming. The estimation of 105 people including 35 school-age children of unknown age/grade levels would have an impact on recreation. Two areas of major concern would be our youth sport leagues and our summer day camp programs.

7-10

Our sports leagues include basketball, soccer, softball, baseball, and roller hockey. Use of school ball fields and gyms are already at peak numbers due to increasing numbers of school children in the Town of Cortlandt. The Hendrick Hudson High School is undergoing a 50,000 square foot addition, but there are no plans to add any ballfields or gyms. The Recreation Dept. looks towards the school districts in the Town of Cortlandt for the majority of field and gym use.

Our summer day camp which serves kindergarten through eighth grade, fills up very quickly with a wait list of over 100 campers. Due to a shortage of facilities, and even larger numbers, we would see a greater demand on our existing facilities.

Memorandum

PB 9-99

To: Kathleen Burlison
 CC:
 From: Mike Sellazzo
 Date: 1/14/2004
 Re: Furnace Dock Subdivision

In reviewing the information on the new subdivision with Vinny Letteri and Joe Comolli, we have come up with the following figures and concerns.

It should take approximately 20 minutes to collect the regular garbage from the 24 homes. The additional time for paper should be about 10 minutes, commingle 8 minutes, bulk 10 minutes once a month, and organic 15 minutes during November. 7-11

Using 165 pounds, 2 ½ pails, as a guideline for regular garbage per new home of the proposed size, the weekly weight would be about 4200 pounds. The monthly estimate would be 16,800 pounds or 8.4 tons and the annual weight would be 218400 pounds or an additional 109.2 tons.

Weekly paper pick-up would weigh an estimate 15 pound per household. That comes to 360 pounds per week for the development. Monthly paper would be 1440 pounds, .72 tons and annual would estimate to be 18,700 pounds or 9.36 tons. Commingle would be less per week, estimating only about 5 pounds per household or 120 pounds per week for the development. This estimates to a monthly total of 480 pounds, .24 tons and 6,240 pounds annual or 3.12 tons of commingle for the year. Organic waste in November could be between 25 and 50 bags. It is difficult to estimate organic since some are done privately and some are just blown into the woods behind the homes.

The only two concerns that we have are the weight limit on the bridge over the stream and the sight distance exiting the development. I could not find the weight rating for the proposed bridge but we would need to a minimum of 25 tons, which would allow our trucks on the road half loaded. If the rating could be 33 tons in would allow any of our vehicles on the road at anytime during its route. 2-35

Also the sight distance looking east is only 100 feet, which does not allow much stopping distance for vehicles when our truck is exiting. The sight distance looking west is 400 feet and should be sufficient.



CHAS. H. SELLS, INC.

Consulting Engineers, Surveyors & Photogrammetrists

CIVIL, STRUCTURAL AND TRANSPORTATION ENGINEERING

LETTER # 14

August 18, 2003

Town of Cortlandt
Department of Technical Services – Planning Division
Town Hall
One Heady Street
Cortlandt Manor, New York 10567

ATTN: Mr. Edward Vergano, P.E.

RE: Furnace Dock Subdivision Draft Environmental Impact Statement
Dated July 18, 2003

Dear Planning Board:

Chas H. Sells, Inc. has reviewed the above referenced Draft Environmental Impact Statement (D.E.I.S.) and the following comments are offered:

Documents Reviewed:

- Draft Environmental Impact Statement (dated July 18, 2003)
- Letter of correspondence from Frederick P. Wells, Senior Planner, Tim Miller Associates, Inc., dated July 24, 2003
- Letter of correspondence and Site Drawings from Frederick P. Wells, Senior Planner, Tim Miller Associates, Inc., dated July 24, 2003 (Via Airborne)
- Facsimile Transmittal from Frederick P. Wells, Senior Planner, Tim Miller Associates, Inc., dated July 29, 2003

We have reviewed the latest Draft Environmental Impact Statement for conformance with our last letter of correspondence, dated March 17, 2003, and offer the following comments. Our comments cover both the completeness and substantive issues raised in our previous review letter. At this time we feel all completeness issues have been addressed and that the project may be scheduled for a Public Hearing. For clarity sake, each comment herein is referenced with the specific comment number contained in our last letter of correspondence.

1. *(Substantive Comment #1)* Reference is made to a statement made on page 1-25 of the DEIS, regarding NYSDEC Article 15 Coverage, "The NYS DEC requires an Article 15 permit for stream or bank disturbances in streams designated as Class C (t) or higher (trout streams). Because Furnace Brook has a Class C designation, the project does not require an Article 15 permit from the NYS DEC." Given that Furnace Brook has been designated a Class C stream, and that NYSDEC permitting is required when a Class C stream or higher is affected, it would seem that the project *would* be required to seek coverage under Article 15. Regardless, further clarification is warranted with regard to this topic.

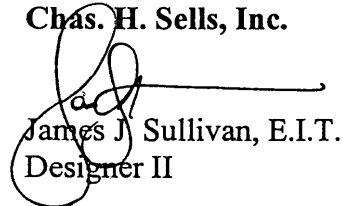
2. **(Substantive Comment #3)** The applicant states in a footnote to Table 2-1 found on page 2-6 of the DEIS the following: *"Post-dev't woods area excludes 0.55 acres utilized for wetlands creation.....Numbers may not total due to rounding."* While the majority of discrepancies have been addressed, the values for "Total/Created" and "Woods (upland)/Post-Dev't" appear to be off by 0.55 acres. The applicant should revise Table 2-1 to indicate how the footnote applies to this apparent discrepancy, which is clearly independent of the errors associated with rounding. 2-36
3. **(Substantive Comment #8)** The applicant should revise the following sentence found on page 3.2-3 of the DEIS for clarity, *"A review of the Groundwater Resources map contained within the 1990 Town of Cortlandt Master Plan (See Figure 3.2-1A) shows that the project site is not located in a "Fractured Bedrock Area Favorable for Groundwater Development"."* 2-37
4. **(Substantive Comment #30)** In response to Comment 30, the applicant states (Reference: Facsimile Transmittal from Frederick P. Wells, Senior Planner, Tim Miller Associates, Inc., dated July 29, 2003) the following: *"All design points, which encompass all identified watersheds, are discussed."* In addition to the narrative description for Design Point 2 offered within the text of the DEIS, the applicant should also provide Flow results for this Design Point in Table 3.2-6 (Design Point Peak Discharges – Existing Condition) and Table 3.2-9 (Design Point Peak Discharges – Existing and Proposed Conditions). 2-38
5. **(Completeness Comment #2c)** The applicant should revise the following sentence found on page 2-3 of the DEIS, *"A total of 2,604 linear feet of roadway is proposed to be offered for dedication to the Town (no proposed private roads), 24 feet in pavement width, constructed with 6 inches asphaltic concrete and 8 inches gravel base within a 50-foot right-of-way, per Town of Cortlandt roadway regulations."*
6. **(Completeness Comment #6b)** Regarding the proposed Construction Sequence presented on page 2-11 of the DEIS, it is recommended that the Bridge Installation occur during month one, as it's construction and use during construction is integrally related to the development of the northern portions of the site. While initial construction traffic will make use of the existing dirt drive according to Figure 2-6, due to the prevalence of steep slopes, and in consideration of its relative proximity to Furnace Brook, it is recommended that the Bridge be replaced initially, so as to reduce detrimental impacts to the environment that could be generated by a more prolonged use of said dirt drive.
7. **(Completeness Comment #7c)** The applicant states the following on page 2-11 of the DEIS, *"Funding and enforcement of monitoring and maintenance activities will be the responsibility of the developer as a part of the cost of construction."* The applicant should provide actual costs to be incurred by the Town of Cortlandt in maintaining the proposed roads, water mains and stormwater features. The applicant should also indicate that the NYSDEC, pursuant to SPDES, shall be the enforcer of stormwater maintenance subsequent to the Town of Cortlandt taking control of said features.
8. **(Completeness Comment #36, #42)** The applicant states the following on page 3.2-3 of the DEIS, *"The locations of the mapped FEMA floodways on the project site are described in Section 3.2.2.3 and illustrated in Figure 3.2-5."* The Figure referenced here appears to be missing from this office's copy of the DEIS. The applicant should revise the DEIS to include said figure.

9. **(Completeness Comment #43)** Upon receipt of the referenced materials from Stephen W. Coleman, the applicant is to include said materials into the DEIS, as agreed upon by the applicant.

Because the project involves disturbance to approximately fifteen (15) acres of land, the applicant and Town are hereby advised that the project will necessitate compliance with the Rules and Regulations promulgated by the Federal Phase II Program recently enacted by the New York State Department of Environmental Conservation (NYSDEC). Pursuant to these regulations, the Town of Cortlandt will be the responsible agency in enforcing these laws. Figure 1, taken from the NYSDEC SPDES General Permit For Stormwater Discharges Guide, is attached to this letter for use in substantiating our claim that the project will require the preparation of a full Stormwater Pollution Prevention Plan and Report (SWPPP), along with an Erosion and Sedimentation Control Plan. We offer this comment because the plan and report, as currently prepared, do not address the specific Qualitative measures outlined within the NYSDEC Phase II Guide. While several qualitative measures have been proposed, and will most likely be incorporated into a plan that is in compliance with Phase II, the applicant should, however, be advised that further data will be necessary. It is assumed by this office that the coordination of said data will be the responsibility of the Town of Cortlandt, during the preparation of the Final Environmental Impact Statement (FEIS) for this project.

If you should have any questions, please call Susan K. Fasnacht, P.E. or me at (914) 747-1120.

Very truly yours,
Chas. H. Sells, Inc.



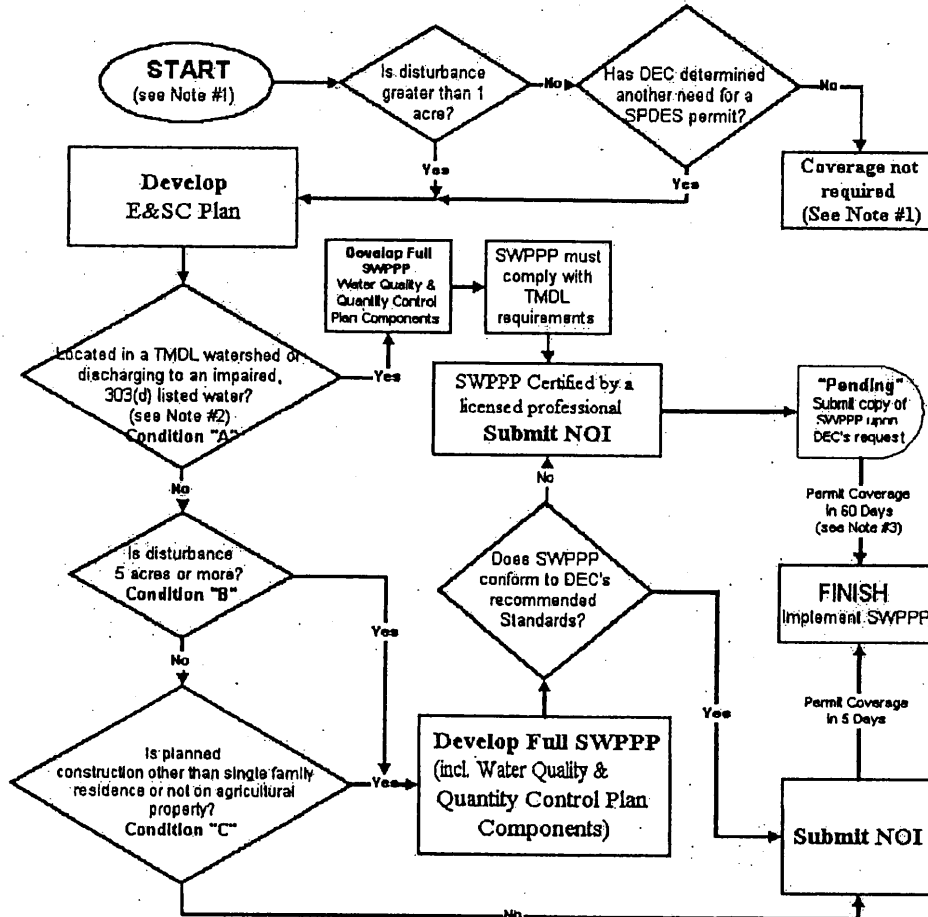
James J. Sullivan, E.I.T.
Designer II

jjs/jjs

Cc: L. Whitehead, Esq., McCullough, Goldberger & Staudt, LLP
~~F. Wells, Tim Miller Associates, Inc.~~
R. Mastromonaco, PE, Ralph G. Mastromonaco, PE, PC
S. Fasnacht, PE, Chas. H. Sells, Inc.

FIGURE 1

SWPPP and Stormwater Permit Process



NOTES:

1. Under any of the above conditions other environmental permits may be required. DEC may require permit for construction disturbance < 1 acre on a case by case basis.
2. and the following exists: construction and/or stormwater discharges from the construction or post-construction site contain the pollutant of concern identified in the TMDL or 303(d) listing.
3. After receipt by DEC of completed application.

Appendix D

STAGE 2 ARCHAEOLOGICAL
INVESTIGATION ABSTRACTS

STAGE 2
ARCHAEOLOGICAL INVESTIGATION

**FURNACE DOCK ROAD
SUBDIVISION SITE**

**Furnace Dock Road. Town of Cortlandt.
Westchester County, New York**

Prepared For:

Blitman Development Corporation
222 Grace Church Street
Port Chester, New York 10573

Prepared By:

CITY/SCAPE: Cultural Resource Consultants
166 Hillair Circle
White Plains, New York 10605

January 2004

ABSTRACT

A Phase 2 Archaeological Investigation was conducted on August 6 and 7, 2003 at the *Furnace Dock Road Subdivision* site, Furnace Dock Road, Town of Cortlandt, Westchester County, New York to recover data that would permit the evaluation of two historic sites identified during a Phase 1B Archaeological Field Reconnaissance Survey. These sites were 1) a privy feature associated with the Ramsey House, and 2) a complex interpreted as an industrial staging area associated with the Hasenclaver Ironworks, one of the early iron smelting sites in North America. The privy and industrial staging areas were evaluated in the Phase 1B in an attempt to establish their cultural affiliations, function and degree of integrity. Based on the materials sampled in the Phase 1B, the privy feature was an apparently unstratified and relatively impoverished household deposit dating to the late 19th and early 20th century. The industrial staging area, shovel tested in a dense 20' grid pattern, yielded virtually no cultural material. However, based on consultations with OPRHP, a Phase 2 Data Recovery excavations was recommended for each of these features in an attempt to answer the following questions:

The Privy Site

1. Does the Privy deposit contain cultural materials dating from the Hasenclaver phase of occupation?
2. What can the excavation of the privy feature tell us about the following socioeconomic characteristics of the Ramsey House inhabitants: ethnicity; occupation and trade networks; economic status of the residents; buying patterns of the residents; dietary profile; health and hygiene; and religion?

The Industrial Staging Area

1. In the absence of significant cultural material can further, more comprehensive testing, recover significant material?
2. If cultural material can be recovered, will evaluation and assessment of the material allow for the interpretation of distinct activity areas within the stonewalled compound?
3. Is cultural material present in the sealed and capped well that was identified within the compound?

In the industrial staging area, the excavation of six 4-foot wide trenches failed to uncover additional artifacts, features or other evidence that would contribute to our interpretation of the site. The well located in the interior of this locus was uncovered and completely excavated. Excavation consisted of removing large fraction rock debris inside the circular ashlar stone feature, which proved to be void of soil or artifact deposits. The privy feature was excavated to the bottom, removing 100% of the materials present. Laboratory analysis and assessment of the artifact collection obtained from the privy confirmed the conclusion of the Phase 1B Field Reconnaissance Survey that the contents represent a non-stratified, single episode deposit.

Due to the paucity of material recovered in the Phase 2 investigation, it is unlikely that additional information can be gained from further investigation on the *Furnace Dock Road Subdivision* site and no further work is recommended.

***SUPPLEMENTAL STAGE 2
ARCHAEOLOGICAL INVESTIGATION***

**FURNACE DOCK
SUBDIVISION SITE**

**Furnace Dock Road. Town of Cortlandt.
Westchester County, New York**

Prepared For:

Blitman Development Corporation
222 Grace Church Street
Port Chester, New York 10573

Prepared By:

CITY/SCAPE: Cultural Resource Consultants
166 Hillair Circle
White Plains, New York 10605

June 2004

ABSTRACT

On March 29 and 30, and April 4 and 10, 2004 CITY/SCAPE: Cultural Resource Consultants completed supplemental field investigations on the *Furnace Dock Subdivision* site, Furnace Dock Road, Town of Cortlandt, Westchester County, New York. In addition, further research and collection of census data were completed, and at the request of OPRHP the catalog for the artifact collection recovered in the initial Phase 2 investigation was reformatted.

The additional investigation followed the completion of a Phase 2 Archaeological Investigation that was conducted by CITY/SCAPE: Cultural Resource Consultants at *Furnace Dock Subdivision* site on August 6 and 7, 2003.

The initial Phase 2 investigation was conducted to recover data that would permit the evaluation of two historic sites previously identified during a Phase 1B Archaeological Field Reconnaissance Survey. These sites were a privy feature associated with the Ramsey House foundation, and an industrial staging area associated with the Hasenclaver ironworks, which date to 1765-1774.. The privy and industrial staging area were evaluated in the Phase 1B in an attempt to establish their cultural affiliations, function and degree of integrity. Based on the materials sampled in the Phase 1B, the privy feature included an apparently unstratified and relatively impoverished household deposit that was primarily associated with the mid-19th century ownership of the property by the Odell family. The industrial staging area, which was shovel tested in a dense 20' grid pattern, yielded no cultural material of any kind. Despite the paucity of the material recovered from the privy site and the industrial staging area and based on consultations with OPRHP, a Phase 2 Archaeological Investigation was completed on each of these two features.

In the industrial staging area, the excavation of six 4-foot wide trenches spanning the interior surface of the compound, failed to uncover additional artifacts, features or other evidence that would contribute to our interpretation of the site. The well located in the interior of this locus was uncovered and mechanically excavated to the bottom. Excavation consisted of removing large fraction rock debris inside the circular ashlar stone feature, which proved to be void of soil or artifact deposits. The privy feature was systematically excavated to the bottom, with the field crew removing 100 percent of the materials it contained. Laboratory analysis and an assessment of the artifact collection confirmed the conclusion reached from the sample acquired in the Stage 1B Field Reconnaissance Survey, that the privy contents are a non-stratified, single episode deposit.

The conclusions drawn from the Phase 2 Archaeological Investigation were as follows: Due to the lack of material recovered in the Phase 2 investigation, it appears

unlikely that additional information can be gained from further investigation of the features on the *Furnace Dock Subdivision site*. At the time that the Stage 2 investigation was completed, no further work was recommended.

After reviewing the conclusions of the Stage 2 investigations, Cynthia Blakemore of OPRHP, requested that the scope of the Stage 2 be expanded to include the following:

1. The re-cataloguing of the artifact collection using the system provided to us by Ms. Blakemore in an attachment to her letter of March 5, 2004.
2. The area indicated on the map attached to the same March 5th letter (See Map of Area of Potential Impact/APE) was to be further tested at 7.5 meter (25') intervals. Since the APE contains areas of extreme slope and wetland, it was agreed that if a slope was steep to a degree that a field technician could not comfortably balance and excavate a shovel test, the area could be eliminated. It was also agreed that areas of standing water and wetland could be eliminated. It was noted that some of the wet conditions on the site might be the result of spring melt water and run-off. As a result, all areas of surface pooling and wetland that were eliminated were to be documented with photos and such supporting evidence as the presence of wetland flora and documentation of wetland soils in the form of clays and other fine particle sediments deposited through water suspension.
3. The excavation team would expose the entire length of the cobble road associated with the Ramsey house and re-photograph it. This road had previously been delineated, mapped and photographed during the Stage 1B Field Reconnaissance Survey.
4. By each of the two shovel tests on Transect 21 and 22, where cultural material was recovered, a 1-meter square unit would be excavated.
5. Additional unit excavation would be undertaken should cultural material be recovered during the supplemental shovel testing.
6. Shovel testing would be undertaken along the entry corridor for the primary access road to the site to further document the disturbance that was noted during the 1B Stage of testing.

In addition to the investigations outlined above, CITY/SCAPE: Cultural Resource Consultants undertook extensive census research pertaining to all residents of the *Furnace Dock Subdivision* site, dating from the first Federal census in 1790 to the 1920's, when it appears the property was vacant. The results of this research are presented in Appendix D.

A total of 330 shovel tests were excavated along 30 transects, effectively forming a grid over the area delineated by OPRHP for further investigation (i.e., the APE). Three

hundred and seventeen of the tests were excavated across the APE, and an additional 13 shovel tests were excavated in conjunction with unit excavations near STP 12. Since this area had already been subjected to tests at 50' intervals during the Stage 1B Field Reconnaissance Survey, the percentage of surface area tested was extremely high. Of the 317 shovel tests excavated across the APE, 27 yielded cultural material. Eight of these positive tests yielded only a fragment of modern window glass, several yielded small fragments of brick and two yielded charcoal, leaving a total of 16 tests positive for other types of cultural material of a historic nature. Of these positive tests, 14 produced whiteware (some of which was identified in the laboratory as creamware and pearlware) fragments, three produced blue transfer print (two vessels), one produced a piece of rusted metal and one produced a very corroded metal buckle. A small late 19th-20th century artifact scatter was encountered at STP 12.

After consultations with Ms. Blakemore, two additional units and 13 additional shovel tests were excavated over this small, single episode dumping locus. A small scatter of mid 19th-early 20th century artifacts was recovered at a shallow depth in a single lens, confirming the conclusion that this locus was the site of a single dumping episode.

At the request of OPRHP, four additional transects with a total of 13 shovel tests were excavated around the large stone wall near shovel test 12 to confirm that the scatter did not extend below the wall. Since the scatter post-dated the construction of the wall by more than a century, the investigators did not anticipate nor did they find a deeply buried deposit extending under the wall.

The two units placed along Transects 21 and 22, where several fragments of ceramic had been found during the Stage 1B Archaeological Field Reconnaissance Survey, were excavated to sterile soil. The field team recovered an extremely sparse collection of artifacts (33 total for the 2 units). One fragment of a kaolin pipe bowl was from Unit 4. The fragment was, however, too small to provide further information as to maker or date, and since use of these pipes extended into the 20th, this artifact would not be anomalous in a deposit of this date. (See Appendix D, p. 14) A rim sherd of green shell edge pearlware was also recovered from Unit 4. Pieces of the same type of plate were recovered from the Ramsey House privy and from the bank of Furnace Brook. (See Photo 47) There were, as would be expected, no cross-mends. This pattern dates to 1780-1830 and likely is associated with the occupation of the site by the Ramsey family.

The cobbled road, which had been identified and mapped in the initial Stage 2 Archaeological Investigations was uncovered along its entire length and mapped. As indicated in the Stage 2 report, the road is small fraction cobble with no significant sub-paving. It is ephemeral in nature, and would not have supported the heavy weight of a cart or the percussion stress of shod horse hooves. It remains a somewhat enigmatic feature, probably landscaping or garden related.

Finally, as per the agreement with OPRHP, the entire access route to the site, which had been assessed as disturbed, was tested at 25' intervals. In some tests, the soils yielded black tar inclusions, and others were churned. No cultural material of any kind

was recovered along the corridor, and the conclusion that this area was disturbed, was confirmed.

Supplemental testing on the *Furnace Dock Subdivision* site was completed in accordance with the scope of work delineated by OPRHP. No foundations or other sub-surface structures were encountered. An extremely sparse scatter of ceramic fragments, consistent with the results of the initial Stage 1B and Stage 2 investigations was documented on the site.

A single small and ephemeral dumping episode, dating to the late 19th-early 20th century was documented near STP 12. The artifact catalogue was reconfigured in the format requested by OPRHP. A complete body of census data on the residents of the project area was researched and is presented in Appendix D.

In addition to the work performed for the Supplemental Stage 2 Archaeological Investigations, and as agreed to between OPRHP and the client, an interpretive exhibition is planned for the area in which the Ramsey House and gristmill are located. This area will not be disturbed by the proposed development. The exhibition will consist of a series of interpretive signs arranged along a walking trail that will outline the history of the site. The exhibit will focus on the identified remains of the Hasenclever ironworks, which include the millrace leading to the wheel pit, the wheel pit, the stone-lined tailrace, the charging bridge, and, perhaps, some elements of the furnace, bellows house and casting house. All of these elements are located in an area that will be preserved. The other Hasenclever era feature is the industrial staging area, which will be demolished to permit development. While it has been suggested that the portion of the house foundation nearest Furnace Brook may date to the Hasenclever era, we propose, for reasons outlined in Appendix D that the house foundation on the *Furnace Dock Subdivision* site dates to the period of time when the Ramsey family occupied the site. Maps, drawings and photographs, as well as text, will be used to present the findings of the *Furnace Dock Subdivision* site Stage 1B, Stage 2 and Supplemental Stage 2 investigations.

The intensive field investigations completed in the Supplemental Stage 2 Archaeological Investigation of the *Furnace Dock Subdivision* site confirmed the results of the initial Stage 2 investigation. No significant sub-surface features were identified. No evidence for the industrial buildings and workers housing from the Hasenclever ironworking epoch was encountered. The cobble road identified in the Stage 2 continues to be identified as an ephemeral landscape feature. The single, sparse artifact scatter identified, proved to be, based on the presence of the machine-made goblet or ice cream dish, a one-time early 20th century dumping episode. As indicated in the earlier reports, the access corridor for the site has been significantly disturbed by large earth moving equipment when the current roadway was constructed.

Based on these results, it is the opinion of CITY/SCAPE: Cultural Resource Consultants that no further archaeological investigations be undertaken on the *Furnace Dock Subdivision* site.

Appendix E

AVOIDANCE PLAN &
SITE INTERPRETIVE PLAN

AVOIDANCE PLAN

Plan for the Protection of Historic Resources

at

Furnace Dock Subdivision

Furnace Dock Road, Cortlandt NY

August 10, 2004

This report outlines the protective measures that are to be put in place at the site of a proposed residential subdivision development on Furnace Dock Road in the Town of Cortlandt, New York. The project site has been the subject of extensive cultural resources investigations relative to historic iron furnace and grist mill operations. Based on the review of the project archaeologist's reports, New York State Office of Parks, Recreation and Historic Preservation (OPRHP) has recommended that an Avoidance Plan be put into place by the project sponsor that will specify protective measures for the preservation of the resources found on the site.

Resources to be Preserved

The proposed project plan includes preservation of an open space area along Furnace Brook at the southeastern portion of the property that will be offered for dedication to the Town of Cortlandt as open space/park land. The open space area will encompass the stone foundation remains of buildings and facilities in their immediate vicinity associated with the operation of the furnace/mill site. (A portion of the historic remains extend northeast from the project site on land owned by others (ConEdison utility right-of way) and are not considered in this Avoidance Plan.)

The proposed project plan includes installation of a small parking area adjacent to the subdivision road, wood chip or gravel pedestrian trails circulating the historic site, interpretive signage and benches. No tree cutting, construction or other disturbance is planned other than hand grubbing of understory vegetation, tree pruning for safety, and soil stabilization that may be necessary to accomplish the interpretive trail plan.

The following notes regarding measures to protect the historic site will be placed in the construction documents and put into place by the project sponsor.

Short Term Protections

1. The project construction plans and specifications will designate a line called the Area of Potential Effect (A.P.E.) that will define the absolute limit of site disturbance at the site. The A.P.E. will be as shown on the "Map Showing Area of Potential Effect" dated 2/20/04 as submitted to OPRHP. The A.P.E. will define the absolute extent of tree removals and ground disturbing activities, and the absolute boundary of erosion control fencing and construction fencing associated with construction of the residential subdivision and appurtenant facilities. The A.P.E. will not encompass any work proposed as part of the installation of the interpretive trail plan associated with the historic site.
2. The A.P.E. will encompass all temporary access areas into the site, utility construction, tree clearing, material stockpiling, vehicle storage, grading and construction on the site.
3. Prior to the commencement of site clearing and construction activities at the site, the A.P.E. line will be located and flagged in the field by a licensed land surveyor. The site contractor shall

install silt fencing and orange construction fencing along the A.P.E. line and maintain such fencing throughout the construction period.

4. Tree protection will be installed around any tree or group of trees intended to be preserved. Tree protection will provide a physical means of protection of the tree trunk and tree roots within ten feet of the trunk. The orange fencing for the A.P.E. may be used for tree protection if staked at least ten feet from tree trunks.
5. No construction operations will be allowed outside the A.P.E. All sitework contractors will be made aware of the location of the A.P.E. line and the requirement that no disturbance outside of the line will be allowed.
6. The construction contractor shall use utmost care during construction to avoid disturbing or damaging any area designated on the plans to remain. Any such damage from construction activities will be the contractor's responsibility and must be restored at the contractor's expense to the satisfaction of the Owner.
7. The contractor shall immediately notify the Owner upon discovery that intrusion beyond the A.P.E. will be necessary. The Owner must inform OPRHP and obtain its approval prior to commencing with the intrusion.
8. All fencing and tree protections at the A.P.E. will be removed when site development activities are complete.

Long Term Protections

1. An interpretive trail plan is proposed to be implemented by the project sponsor that includes installation of a small parking area adjacent to the subdivision road, wood chip or gravel pedestrian trails circulating the historic site, interpretive signage and benches. Such plan will be intended to be an educational community resource that would discourage vandalism at the site.
2. The open space lots in the project will be offered for dedication to the Town of Cortlandt as open space/park land. Until such time as the offer is accepted, the homeowners association for Furnace Dock Subdivision will be responsible for maintaining this area.
3. All lands on the property located outside of the A.P.E. will have restrictions in the deeds (see attached draft language). A protective Archaeology Covenant with language acceptable to OPRHP will be added to the deeds for the open space lots and all house lots having land outside of the A.P.E. that will require prior OPRHP approval of any proposed change in land use that would result in ground disturbing activities.

Prepared by Tim Miller Associates, Inc., Cold Spring NY

FS: Furnace Dock\Archaeology\Avoidance Plan 3.doc

Deed Restriction

Draft language to be placed in deeds for lots (including Open Space Lots) with areas outside the A.P.E, and also to be included in the Declaration of Covenants and Restrictions filed against the property –

The Premises are conveyed subject to a restriction that all disturbances shall be limited to the areas within the designated Area of Potential Effect (“A.P.E.”) as shown on the Filed Map. No disturbance, including tree removal, ground disturbance, or the placement of any structures, shall take place outside of the A.P.E without the express written permission of the New York State Office of Parks, Recreation and Historic Preservation.



02/20/04, Updated for 23-lot plan 12/10/04

TMAwordpro: furnace dock\drawings\turndock ExConditions.dwg

Area of Potential Effect Map
Furnace Dock Subdivision
Town of Cortlandt, Westchester County, New York
 Project Design: Ralph G. Mastromonaco, PE, PC
 Scale: 1" = 200'

Tim Miller Associates, Inc., 10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

Appendix F

ROCK EXCAVATION
SPECIFICATION

ROCK EXCAVATION SPECIFICATION

FURNACE DOCK SUBDIVISION
Town of Cortlandt, NY

It is anticipated that bedrock will be encountered during site development, particularly in excavations for the installation of utility lines. This Rock Excavation Plan has been prepared to provide for the possible encounter with bedrock during construction.

Soil excavation or other investigation will be conducted to confirm the actual depth to bedrock in the construction area. Where rock excavation is necessary, other excavation methods will be evaluated for use in lieu of blasting, such as cutting, ripping, or chipping. The contractor will first attempt to remove the rock to the desired grade by mechanical means, including such machinery as bulldozers, backhoes, grade-alls, and hoe rams. If these means are unsuccessful, rock blasting will be utilized. All blasting will be conducted in accordance with the following "Blasting Plan":

General Requirements

- Blasting operations will be conducted under the direct control and supervision of competent and licensed persons. The blasting contractor must be fully insured in accordance with Town requirements.
- Blasting operations must comply with applicable Federal, State (incl. 12 NYCRR Part 39) and Town regulations regarding the use, transport and storage of explosives.
- A blasting permit will be obtained from the Town for blasting operations prior to commencement of blasting.
- The quantity of explosives used or stored at the site will be limited to the amount necessary to fracture the rock without endangering persons or property.
- The blasting contractor shall perform pre- and post-blast surveys of structures within 500 feet.
- The blasting contractor shall perform blasting only during times of day agreed upon by the project sponsor, contractor and the Town Engineer.
- The blasting contractor shall use warning flags or other approved means to provide warnings to the public at a reasonable distance on all sides of the blast at least three minutes in advance of firing.
- Before firing, the blasting contractor shall cover all blasts scheduled to take place near any highway, public place, or area possibly occupied by any person with a suitable protective device of sufficient size, weight and strength to prevent escape of broken rock or earth material in a manner liable to cause injury or damage to persons or property.
- The blasting contractor will be liable for any damage to off-site property resulting from blasting activities.

All blasting at the project site will be conducted in accordance with the following regulations and specifications, as appropriate:

Project-Specific Requirements

- Hours of blasting are limited to between 8:00 AM and 4:00 PM on weekdays only.
- The blasting contractor shall conduct a pre-blasting survey of all off-site residences/structures located within 500 feet of the blasting area, if authorized by the property owner. These inspections will be documented with a written record and may include photographic or video documentation.
- Prior to blasting, necessary precautions for the protection of persons, adjoining property and completed work shall be established.
- Protective mats or other measures must be used for all blasts.
- Blasting contractor will provide the services of an independent seismologist to monitor all blasting on the site if required by the permitting agency.
- Contractor may conduct test blasting and seismographic monitoring, if necessary, prior to any other blasting to determine appropriate on-site blasting techniques.
- When conducting blasting within 500 feet of existing off-site residences or structures, seismographic monitoring will be conducted throughout the period of blasting, and daily logs of seismographic data, explosive use and field conditions will be recorded.
- The applicant will arrange to place data loggers in wells within 500 feet of blasting sites to obtain data on water levels, before, during and after blasting, if required by the Town and authorized by the property owners.

Town of Cortlandt Regulations

Comply with local regulations regarding rock removal, including the following specific paragraphs of Town Code §161, Explosives & Blasting:

§161-2. Permit required; insurance. No person shall blast or cause to be blasted any rock or other substance with any explosive or store explosives in the Town of Cortlandt without having first obtained a permit therefor from the Director of Code Enforcement upon written application on an approved form. Before such permit is issued, the persons shall submit evidence in the form of a certificate of insurance issued by an insurance company authorized to do business in the State of New York and in a form acceptable to the Town Attorney, guaranteeing that the applicant has in full force and effect a policy of public liability insurance, including a specific endorsement covering the liabilities arising from blasting and storage of explosives, and providing bodily injury and property damage coverage in an amount as set by resolution of the Town Board from time to time. Such policy shall also provide to save the town harmless from all claims, actions and proceedings brought by any person, firm or corporation for injury to persons or property resulting from or occasioned by such blasting operations or storage of explosives. Such policy shall name the town as an additional insured and shall also contain the provision that the policy shall not be canceled, terminated, modified or changed by the company unless ten (10) days' prior written notice is sent to the Town Clerk by registered mail. Such policy shall also provide that the presence of an Inspector from the Department of Code Enforcement on

the site of the operations shall not affect the obligation of the insurer under its policy. No permit shall be valid unless such insurance is in full force and effect.

§161-3. Permit fee; issuance; revocation. Such permit, when approved and signed by the Director of Code Enforcement and upon payment of a fee as may be fixed from time to time by resolution of the Town Board, shall be issued and signed by the Director of Code Enforcement, who shall keep a record thereof. Each permit shall specify the name of the permittee, the date of expiration [which shall not be later than three (3) months from the date of issue] and the particular place where the blasting is to be done or explosives are to be stored. The Town Board may revoke any such permit at any time.

§161-4. No person shall use or store a quantity of explosives greater than that amount which is generally accepted to be reasonable for the use intended nor use or store such an amount as will endanger persons or property. The Director of Code Enforcement may limit the maximum quantity of explosives to be used or stored, but no action by the Director of Code Enforcement shall relieve or exempt any person or insurance company from liability for damage caused by the use or storage of explosives.

§161-5. Blasts to be covered. All blasts, before firing, shall be covered with rope or metal matting, heavy timbers chained together or other suitable screens of sufficient size, weight and strength to prevent the escape of broken rock or other material in a manner liable to cause injury or damage to persons or property.

§161-6. Flagging required. No person shall fire or explode or direct or cause to be fired or exploded any blast in or near any highway or public place in the Town of Cortlandt unless competent men, carrying a red flag, shall have been placed at a reasonable distance on all sides of the blast to give proper warning thereof at least three (3) minutes in advance of firing.

§161-7. Blasting prohibited during certain hours. No person shall conduct blasting operations within the Town of Cortlandt after the hour of 5:00 p.m. and before 8:00 a.m., or at any time on Sunday, except under authority of a special permit issued by the Town Board.

Blasting Survey

Identify all potentially sensitive or impacted structures and other facilities in proximity to the blasting site. Conduct a pre-blasting survey of each structure and facility located within 500 feet of the blasting area, when authorized by the property owner. Pre-blasting inspections will be conducted by the blasting contractor or its representative and will include written, photographic or video documentation of the physical conditions of each structure and facility. Existing "defects" as well as features without "defects" may be recorded for the purpose of comparison with post-blasting conditions. A written log will accompany the photo or video record. The owner may be asked to sign and date the written log.

Conduct a post-blasting survey of each structure and facility that was surveyed prior to blasting. This survey may be performed in the company of the owner or owner's representative. Areas of potential damage due to the blasting operation will be inspected, evaluated, and recorded.

Precautions

Storage of any and all explosive materials on the project site shall be located as approved by the blasting contractor. Caps and other detonating devices will not be stored with Class A explosives. The blasting contractor shall provide security for explosives and blasting materials stored on the site.

The delivery and transportation of explosives from the powder magazines to the blast areas will be by vehicles specifically designed or approved for this usage by the criteria set forth in the referenced safety regulations. Only authorized personnel will transport and handle the explosives as designated by the authority of those individuals licensed for blasting activities.

Federal, State and local ordinances will be followed at all times with respect to the handling, transportation and storage of explosives.

Prior to blasting, necessary precautions for the protection of persons, adjoining property and completed work shall be established, which may include the following:

- Appropriate signage will be erected and used in the area of blasting activities.
- Contractor will sound a warning signal in advance of each blast. An air horn will be sounded in a manner to give proper warning, once at least three minutes in advance of firing, and two times at the conclusion of the blast.
- A storm alert monitoring device shall be used by the blasting contractor to detect any electrical buildup in the atmosphere at the blasting areas while using electrical caps.
- Special precautions and care shall be taken with the detonation cords and connectors to protect from the impact of falling rocks and other debris and impending objects.
- Vehicles equipped with radio transmitters and portable two-way radios will not be permitted within 250 feet of blasting operations.

Monitoring

If required by the permitting agency, the blasting contractor shall monitor the blasting operation with a seismograph as follows:

Sufficient electronic delays will be utilized to minimize air blast and vibration impacts. Peak particle velocity will be limited to 2.0 inches per second, with an air blast not to exceed 135 dB, at 100 feet from the source or the property line, whichever is farther. Blasting in proximity to residences will be monitored for vibration and sound pressure levels at the property line or closest occupied structure to the blast site.

The seismic record of the initial recorded blast(s) will be compared to that of subsequent blasts and appropriate modifications to the blasting technique made, if necessary to minimize off-site effects.

Appendix G
WETLAND MITIGATION
SPECIFICATION

Wetland Mitigation Specification
Furnace Dock Subdivision
Furnace Dock Road, Town of Cortlandt, NY

Notes

1. Prior to commencement of site work, silt fence is to be placed at limit of disturbance.
2. Regrade area and spread topsoil prior to seeding and planting. Final grading is to be generally completed as shown on the mitigation plan. Some field adjustment to achieve desired microtopography is acceptable.
3. Trees greater than 8" in diameter will be preserved wherever possible; some adjustment to grading plan is acceptable for tree preservation. These trees will be flagged in the field prior to the commencement of any clearing or excavation. Leave smaller existing trees in assumed area of disturbance to the extent practicable.
4. Hay and seed area of wetland expansion with Ernst Conservation Seeds FACW Wetland Meadow Mix or equivalent. Companion seed with annual ryegrass as per grower's recommendations.
5. Trees and shrubs will be planted within the proposed wetland creation area as specified on the plan and the table below.

Grading Details

The mitigation sites for impacts to regulated wetlands at Furnace Dock Subdivision are upland areas adjacent to existing wetlands (referred to herein as Wetland B and located within Conservation Easement "A" identified on the engineer's drawings). It is proposed to excavate the areas identified on the Wetland Mitigation plans to expand the existing wetland. This area will be accessed for purposes of the wetland mitigation construction from the proposed subdivision road. A total of 0.45 acres will be so treated, resulting in a 2:1 ratio of wetlands creation to wetlands impacted.

Soil erosion and sediment control fencing will be installed at the outer and down slope limits of the proposed wetland expansion. The location of the proposed mitigation will be cleared as necessary, but with an eye toward preserving any trees or shrubs adjacent to the work area; some may be removed and stockpiled for re-planting after completion of grading.

Where available, the upper one foot of topsoil will be stripped from the site and set aside from other site grading materials. The temporary storage area will be an upland location either removed from wetlands by 100 feet or separated from same by a soil erosion and sediment control fence.

All excavations will be to finished grade elevations as indicated in the mitigation drawings. Per the above, topsoil will be stripped from the site and stockpiled for use in finishing grading. The stockpiled topsoil will be returned to the site to create a planting surface for the wetland mitigation plantings as described above. Finished soils at the invert of the mitigation sites will be of landscape quality.

The finished surfaces of the planting area will be smooth within specified tolerances in uniform levels or slopes between points where elevations are indicated or between such points and

existing grades. The accepted grading tolerance will be a smooth and even surface, free of voids, and within 0.25 feet of the specified elevation. Leaving the surface rough, crating mounds and kettles for a variable microtopography can be beneficial. During the course of earthwork, inspections will be schedule at a frequency to be determined by the engineer/environmental consultant but no less than weekly. Some changes to the grades may be appropriate to establish flow paths and preserve trees. These determinations will be made by the wetland specialist supervising the grading.

Planting Details

Plant choices for the wetland expansion were made according to existing site conditions and locally common species.

Plant List - Furnace Dock Wetland Mitigation				
	Key	Qty	Common Name	Scientific Name
Lot 5/6	CSe	40	Redosier Dogwood	<i>Cornus sericea</i>
	CA	23	Summersweet	<i>Clethra alnifolia</i>
	VT	19	Highbush Cranberry	<i>Viburnum trilobum</i>
	VC	21	Highbush Blueberry	<i>Vaccinium corymbosum</i>
	SF	175	Skunk Cabbage	<i>Symplocarpus foetidus</i>
	CSt	175	Tussock Sedge	<i>Carex stricta</i>
	ST	175	Softstem Bulrush	<i>Scirpus tabernaemontanii</i>
Open Space B	CSe	23	Redosier Dogwood	<i>Cornus sericea</i>
	VT	29	Highbush Cranberry	<i>Viburnum trilobum</i>
	VC	23	Highbush Blueberry	<i>Vaccinium corymbosum</i>
	OS	175	Sensitive fern	<i>Onoclea sensibilis</i>
	OC	175	Cinnamon Fern	<i>Osmunda cinnamomea</i>
	CA	19	Summersweet	<i>Clethra alnifolia</i>

All planting will proceed by hand. Materials will be brought to the site in good condition (see below) and then placed in central drop locations. The materials will then be hand-carried to their planting locations and in turn, planted by hand. Only rounded, shallow planting shovels will be used in this effort.

Criteria for selecting plant material will include (1) the plant's ability to withstand the expected light and saturation conditions; (2) its demonstrated survival on this site and other nearby sites; (3) the plant must be native and non-invasive; and (4) whether the plant material is available at nurseries in the same region as the site. See Table 1 for complete plant species list. Seed mix was chosen based on the species' ability to survive in moist areas adjacent to the road with some sun.

Planting will be done in spring or early summer (between April 1 and July 1). Shrubs may also be planted in the late summer to early fall (September 1 to October 30). In all cases, a hole will be dug twice as deep as the root ball. The only shovels allowed are rounded, shallow spades. The hole will then be backfilled with a thin layer of rich, organic topsoil, the plant placed inside, the hole backfield to the top and then gently tamped down.

Container-grown plant material delivered to the job site will be inspected to assure moist soil/root masses. Any dry and light weight plants will not be accepted. If not planted immediately the container will be stored out of the sun and wind and kept moist (i.e., a means of watering will be provided and watering will occur daily). When removed from the containers, the plants will be the size of the specified container. If in leaf, the plants will appear healthy with no spots, leaf damage, discoloration, insects or fungus. If not in leaf, the buds will be firm and free of damage, discoloration, insects or fungus. Containers will be a minimum of quart size for shrubs and gallon size for trees.

Plants not having an abundance of well developed terminal buds on the leaders and branches will be rejected. The stems and branches of all plants will be turgid and the cambium healthy or the plants rejected.

Seeding within wetland areas should not be completed when there is more than two inches of standing water, or in areas that are likely to be flooded. Seeds should be broadcast by hand or knapsack seeder using the proper seeding rate (15 pounds per acre), and carefully proportioning seed for the entire area. Cover with a light layer of straw mulch following seeding.

Monitoring and Maintenance

At least one pre-construction meeting will occur between the chosen grading and/or planting contractor/subcontractor and the site environmental monitor prior to beginning construction on site. The construction monitor will have experience in wetland construction and a Bachelor of Science degree in Natural and/or Physical Resources.

Monitoring and maintenance efforts for the mitigation plantings will take place over a three year period following construction. This will include bi-weekly visits for the first growing season, and then twice a year for the next two years, with additional inspections as required depending on conditions. The applicant's environmental monitor will conduct a survey of the site and site conditions will be noted and adjusted as necessary. An annual report will be provided to the Town of Cortlandt at the end of the growing season for each of the three years.

**ZONING COMPLIANCE CHART
FURNACE DOCK, INC.**

18 LOT LAYOUT DATED SEPTEMBER 28, 2005 ZONE: R-40																			
	REQUIRED	PROPOSED																	
	R-40 (CLUSTER)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
LOT NUMBER																			
MINIMUM LOT AREA	40,000 SF	49,687	41,207	40,985	42,162	78,891	58,378	90,987	45,140	45,710	40,656	51,630	110,285	41,776	40,676	53,347	96,741	44,895	43,782
MINIMUM LOT WIDTH	150'	155	172	174	162	213	195	325	167	176	214	191	208	174	163	381	346	219	292
LOT DEPTH (No Requirement-Used to Calculate Width)	N/A	320	240	236	260	370	300	280	270	260	190	270	530	240	250	140	280	205	150
MINIMUM YARD DIMENTIONS																			
FRONT	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'
SIDE	20% WIDTH, 30' (MAX)	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'
REAR	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'
MAXIMUM BUILDING COVERAGE	15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%
MINIMUM LANDSCAPE COVERAGE	60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%
MAXIMUM HEIGHT																			
IN STORIES	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
IN FEET	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'
OFF-STREET PARKING SPACES	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU

17 LOT ALTERNATE LOOP ROAD PLAN DATED JANUARY 9, 2006 ZONE: R-40																			
	REQUIRED	PROPOSED																	
	R-40 (CLUSTER)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
LOT NUMBER																			
MINIMUM LOT AREA	40,000 SF	49,687	41,207	40,985	42,162	52,576	54,141	50,235	40,902	40,891	41,688	75,527	68,668	40,841	47,820	44,226	44,895	43,782	
MINIMUM LOT WIDTH	150'	155	172	174	162	160	164	183	172	164	160	152	189	235	159	340	219	292	
LOT DEPTH (No Requirement-Used to Calculate Width)	N/A	320	240	236	260	328	330	274	238	250	260	496	364	174	300	130	205	150	
MINIMUM YARD DIMENTIONS																			
FRONT	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'	50'
SIDE	20% WIDTH, 30' (MAX)	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'
REAR	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'
MAXIMUM BUILDING COVERAGE	15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%
MINIMUM LANDSCAPE COVERAGE	60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%	>60%
MAXIMUM HEIGHT																			
IN STORIES	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
IN FEET	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'
OFF-STREET PARKING SPACES	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU	2/DU