

APPENDIX 16.1
SEQRA Documentation

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Planning Board
Village of Tarrytown, New York
Jardim Estates East Scoping Outline
Adopted July 23, 2007

With clarifications approved by Planning Board at the September 24th meeting.

Note: Scoping Outline in its entirety to be distributed by project sponsor to all consultants (project sponsor and village) involved in preparation of DEIS.

DEIS Scoping Document for Proposed Jardim Estates East Subdivision

A. PROPOSED ACTION

The Proposed Action is subdivision approval for an approximately 46-acre parcel of land located in the R60 Zoning District into not more than 17 single-family lots, three of which would contain existing uses and the remaining would be developed for single-family residences. The DEIS is based on a conventional plan conforming with Zoning and other code requirements, and providing mitigation to adverse impacts. One alternative is a cluster plan, as allowed by the Tarrytown Zoning Code, to preserve additional open space around existing water bodies, whether seasonal or permanent, including vernal ponds, steep slopes, wetland buffers and existing significant vegetation. Pursuant to §305-

52.B of the Village's Zoning Code, this project will require Subdivision approval by the Village Planning Board.

REQUIRED REVIEW / APPROVALS

- ? Subdivision approval (Tarrytown Planning Board)
- ? County Planning Board §239-m referral (Westchester County)
- ? NYSDEC General Stormwater SPDES Permit (NYSDEC)

B. REQUIRED ELEMENTS OF THE DEIS

GENERAL GUIDANCE

The DEIS is intended to convey general and technical information regarding the potential environmental impacts of the Proposed Action to the Village of Tarrytown Planning Board (acting as Lead Agency). The DEIS is also intended to convey the same information to the interested public. The Preparer of the Draft Environmental Impact Statement is encouraged to keep this audience of the DEIS in mind as it prepares the document. Enough detail should be provided in each subject area to ensure that most readers of the document will understand and be able to reach informed opinions based upon the information provided.

As the DEIS will become, upon acceptance by the Lead Agency, a document supporting objective findings for approvals requested under the subdivision application, the Preparer is requested to avoid subjective statements regarding potential impacts. The DEIS should contain objective statements and conclusions based upon technical analyses. Subjective evaluations of impacts where evidence is inconclusive or subject to opinion should be prefaced by statements indicating that "It is the project sponsor's opinion that...". The Village of Tarrytown Planning Board reserves the right, during review of the document, to request that subjective statements be removed from the document or otherwise modified to indicate that subjective statements are not necessarily representative of the findings of the Board.

REQUIRED ELEMENTS

The DEIS shall contain an analysis of environmental impacts in the subject areas outlined below and an identification of any significant adverse environmental impacts that cannot be avoided if the Proposed Action is implemented. Information for each of the subject areas shall be provided describing existing conditions, conditions in the future without the Proposed Action (the "No Build" action), potential impacts of the Proposed Action, and mitigation measures for any significant adverse impacts identified. An Executive Summary describing the Proposed Action and all significant adverse impacts identified shall be included.

The current conditions on the site shall be considered the existing conditions throughout the technical analyses.

ORGANIZATION AND EXPECTED CONTENT OF DEIS

COVER SHEET AND GENERAL INFORMATION

The Cover Sheet shall identify: the Proposed Action; its location; the name, address, and phone number of the Lead Agency; the name, address, and phone number of the Preparer of the DEIS including a Contact Person; the document as a Draft Environmental Impact Statement; the Date of Acceptance of the DEIS by the Lead Agency; and the date of the Public Hearing and the closing of the Public Comment Period.

Additional information, to be provided on pages following the Cover Sheet, shall list: the name(s) and address(es) of the project sponsor and its representatives; the name(s) and address(es) of all consultants involved in the project and their respective roles.

The DEIS shall include a list of all Involved and Interested Agencies, Village Departments, and Village Consultants to whom copies of the DEIS and supporting material will be distributed. Provide a list of neighbors who will be advised by letter that two copies of the DEIS and supporting material will be available for review.

A Table of Contents followed by a List of Tables and List of Figures shall be provided.

EXECUTIVE SUMMARY

- A. Introduction
- B. Description of the Proposed Action
- C. Description of Prior Approvals, if any; Site History
- D. List of all Local, County, State, and Other Approvals Required
- E. Summary of Significant Impacts Identified in Each Subject Area
- F. Summary of Mitigation Measures Proposed for Significant Project Impacts
- G. Description of Alternatives Analyzed

CHAPTER 1: PROJECT DESCRIPTION

A. Introduction

The introduction should identify the document as the Draft Environmental Impact Statement for the proposed action and describe the location of the proposed action.

B. Project Description

1. Location and Site Definition – Include local and regional geographic descriptors, tax map designations, names of owners of abutting parcels, size of parcels affected by proposed action, existing zoning designation, adjoining streets and land uses, and natural features or habitats on-site or contiguous (physically, hydrologically, or otherwise) to the site.
2. Project Description – Include all information necessary to describe the project and its component parts based on the proposed standard and cluster layouts. Information to be provided should include a description of: the proposed site layout; proposed building envelopes within subdivided lots; vehicular access; documentation of all limitations on widening, extension or use of

the private driveway for utilities, particularly but not limited to sections of the private driveway in wetlands, wetland buffers or other restricted areas; improvements to the private driveway and the physical and legal effect on any access easements as a result of the proposed action; site improvements including grading, new and extended private driveways, utilities under existing driveways, and drainage features; methods of stormwater management, including quality and quantity, intended ownership of subdivided lots; conservation or other easements, land proposed to be dedicated to the Village or other public entities, ownership and maintenance responsibilities of any common areas; the construction/phasing schedule for the Proposed Action including a statement regarding the anticipated number of houses to be built per year. Describe proposed access to and circulation within the site for emergency vehicles and school buses or alternatively, pathways and routes to be used by students to get to and from school bus stops and safety at bus stops based on school district policies or preferences. Describe development phasing and implications for soil and erosion control, stormwater management, vehicular access and circulation, emergency access, school bus or student routing in a phased development, mail delivery effects on wetlands, vernal ponds and any other impacts.

C. Summary of Site History and Neighborhood Setting

This section will describe the history of development and use of the site and surrounding area, any prior approvals for development, and zoning changes that have affected the site.

D. Summary of Approvals Required

Provide listing of agencies from which approvals/permits are necessary.

E. Project Purpose and Need

Describe the purpose and need for the Proposed Action and the objectives of the project sponsor.

CHAPTER 2: LAND USE, ZONING, AND PUBLIC POLICY

A. Introduction

B. Land Use

1. Existing Conditions--Describe existing conditions on the project site and in the vicinity of the project and current or prior occupation of portions of the project site. The study area for the land use survey

shall extend north to Route 119, east to Taxter Road, south to Sunnyside, and west to the Hudson River. This study area will also apply to the zoning study area. Include a description of the use, age, condition and architectural/historic attributes of the existing residential structures currently on the site. Locate and identify remnants of prior use of the site, including junk cars, appliances, construction debris, and any hazardous residue associated with these items.

2. Future Without the Project--Describe any changes in land use within the study area in the future without the Proposed Action distinguishing those before the Planning Board or other agencies, approved, in construction, etc.
3. Potential Impacts as a Result of the Proposed Action--Describe the relationship of the Proposed Action with adjoining uses and discuss the effects of the Proposed Action on the general land use pattern within the study area, and particularly large privately owned properties. Indicate disposition of the remnants of prior use identified in #1 above.
4. Relationship to Taxter Ridge Park – Summarize the status and context of the Taxter Ridge Park Management Plan, and the effect

of the project on the Park and its sensitive habitat area as defined by the Michael Klemens report. Include discussion of vehicular and pedestrian access to the Park and its trails as may be affected by the Proposed Action and the effect on park elements such as viewsheds, parking or rest areas on or adjacent to the project site.

C. Zoning

1. Existing Condition--Describe the existing zoning and environmental regulations for the project site and the study area described above. Include information in narrative and tabular form on allowed uses and building bulk and setbacks required within the district.
2. Potential Impacts as a Result of the Proposed Action--Describe how the Proposed Action would conform to applicable zoning regulations with respect to use and bulk and setback requirements or describe what variances might be requested. Describe consistency with zoning of any proposed "flag" lots. Describe the proposed lot sizes and the benefits of clustering. Describe the maximum potential house footprints and impervious surfaces such as roads or walkways, or the gross square feet of potential residential and impervious surface development on each lot.

Describe gross house and impervious footprint impact on all trees to be protected as defined by the Village Code.

D. Environmental Regulations

Describe the effect of environmental regulations on the portion of the property where disturbance is to be avoided and on the portion to be developed. Examine additional steps that may be necessary to protect wildlife and vegetation between natural resource regulated areas, such as travel corridors, loss of woodland to meadow edges, interior forests, stream and water clarity, disturbance to upland habitat, etc. Include direct and indirect impacts of environmental regulations on vernal ponds and other unique features.

E. Public Policy

1. Existing Conditions-Identify existing public policy and legislative enactments by village, county, regional or state agencies intended to protect the resources of the environment. These should include for example, but not be limited to the Tarrytown Local Waterfront Revitalization Program, the Tarrytown Comprehensive Plan, and the Taxter Ridge Park Management Plan. Identify those portions of

the property that cannot be developed because of governmental regulations.

2. Potential Impacts-Describe how the proposed action would affect the policies of each of the identified public policy and legislative enactments.

CHAPTER 3: CULTURAL RESOURCES

A. Introduction

B. Historic Resources

1. Existing Conditions

- a. Identify and locate any eligible or designated historic resources on the project site including remnants of prior development and within the project study area.
- b. Identify and locate the extent of any Native American remnants on the project site

2. Potential Impacts of the Proposed Action--Describe any direct impacts to identified historic or Native American resources on and off the project site.

C. Visual Resources

1. Existing Conditions--Describe the visual character of the project site within the context of its surrounding area. Include a description of existing structures, prevalent landforms, and vegetative cover. Describe the visual character of the structures. Describe the existing view from and towards the following vantage points:

- the southern end of Woodlawn Street
- the Walnut Street neighborhood
- the neighborhood south of the pond
- the western perimeter of the property looking east
- the Nigerian Embassy
- Sheldon Avenue looking south
- From prominent locations in Taxter Ridge Park
- All locations in the Bagarotti property

Use pictures, sketches, or other illustrations to portray the existing conditions. Portray the existing and proposed conditions as defined by SEQR/DEC regulations for visual impact.

2. Potential Impacts of the Proposed Action--Describe the Proposed Action in context with the existing visual character of the surrounding area. Use sketches, renderings, pictures, or illustrative diagrams to portray the impacts, as defined by SEQR/DEC regulations for visual impact. The graphic representations should describe the placement of structures and how ridge lines will be protected to minimize views of structures and to avoid adverse views from the vantage points identified above.

CHAPTER 4: NATURAL RESOURCES

A. Introduction

B. Existing Conditions

1. Topography--Describe the topography of the project site. Identify areas with slopes of 0 to 9.99 percent, 10 to 14.99 percent, 15 to 19.99 percent, 20 to 24.99 percent, and 25 percent and above. Provide a tabular and

summary of the areas covered by each slope category. The proposed site layout should be shown in context with any slopes of 25 percent or more.

2. Soils--Identify underlying soil and bedrock conditions within the project site. Use information collected from on-site soil and geology borings supplemented by the United States Department of Agriculture Soil Conservation Service *Soil Survey of Putnam and Westchester Counties*. Describe the locations of different soil types on the project site. Identify any limitations on building site development for each soil type on the project site. Describe the depth of bedrock and any bedrock outcrops as well as depth to the water table. Analyze the potential need for blasting, how and where it may be necessary, and precautions to be taken to protect neighboring properties and wildlife.
3. Wetlands and watercourses—Identify all watercourses including seasonal and occasional and wetland areas on the project site and/or immediate vicinity, their characteristics and function, the agency having jurisdiction and the limitations on disturbance of the wetland or watercourse or adjacent regulated area. Wetlands evaluation should recognize that indicator vegetation may have been nearly eliminated by deer and that other indicators may become more important. Describe the effect on plants and animals of proposed disturbance to travel corridors. Identify manmade alterations to natural water courses (dams, reroutings, etc.);

changes in the extent of wetland areas (from recent records); comment on the implications and effect of water table fluctuations, whether seasonal or over extended time periods. Identify the location of vernal ponds, their role in the area's biodiversity and the effect of disturbance on species needing vernal ponds. Describe the infrastructure and maintenance problems identified at Gracemere Lake and recommend improvements. Do the same for Turtle Pond, including removal of any deleterious introduced elements.

4. Vegetation and Wildlife--Provide a complete description of the landscape features of the site, including vernal ponds. The site survey should include all plant species and indicate the location, condition and size of any "specimen trees" as defined by the Village of Tarrytown code. Any tree of a diameter greater than 10 inches (diameter at breast height) should be included on the site survey and site plan.

Provide a complete description of animal life on the site. Identify any species that are protected-native plants, State-listed threatened or endangered plants or animals, unique or locally rare plants or animals, and significant habitat areas on or in the vicinity of the project site. Site surveys should supplement record searches. Vegetation and wildlife surveys should be multi-seasonal, depending on the breeding, migration or other patterns of the species being studied and should include

nocturnal animal life. For each season, surveys should be done over a period of at least three days, and should be performed, at minimum, in the early morning and late afternoon, and include at least one day of sunny weather. To adequately survey migrating birds, studies should be done from the second week in April through the last week in May.

Surveys should also encompass areas outside the designated development area if there is a possibility that wildlife corridors exist that extend outside the proposed development (e.g., turtles or salamanders might move from a wetlands to a terrestrial area that is outside the proposed development).

Include a description of the methods used to survey plants and animals. These methods should follow generally accepted protocols. See attached Wildlife and Plant Biodiversity Assessment outline, which is part of this document.

Note: Various documents with existing Natural Resource information should be consulted. At minimum, these include Natural Resources Inventory report for HSA property by Klemens & Coleman, September 2001; Conserving Pool – Breeding Amphibians in Residential and Commercial Developments in the Northeastern U.S., Wildlife Conservation Society, by Klemens &

Coleman, 2002; Open Space Analysis and Development scenarios by Buckhurst, Fish & Jacquemart, August 2001; Taxter Ridge Park Management Plan by Hudson & Pacific Designs.

C. Potential Impacts of the Proposed Action

1. Assess the potential impacts to existing topography, soils, watercourses, wetlands, watercourses, vernal ponds and vegetative communities or habitat as a result of the Proposed Action on the property, on Taxter Ridge Park and Bagarotti property. Assess any other anticipated impacts on Taxter Ridge Park. In particular, describe the cumulative effect of placing a series of homes along a stretch of wetland (south of the private road). Indicate any areas of likely disturbance from construction on each lot and the effect on fauna and flora elements of the overall development on and off-site, including winter uses/wildlife (including the effect of the displacement of deer). Any specimen trees that would potentially be removed during construction must be indicated. Any specimen trees that need to be replaced per §305-61(C)(3)(f)[13] of the Zoning Code must be indicated. Describe sediment and erosion control measures to be included in site construction. Identify areas of the property that should not/cannot be developed due to physical or environmental constraints.

2. The assessment of all potential impacts shall include Jardim Estates East and West.
- D. Describe all proposed measures that will avoid the clear cutting of trees. Identify how the use of indigenous plantings and non-deer-food trees in the landscaping/screening plan for the development can be beneficial. The loss of habitat for various species, particularly deer, has resulted in increasing intrusions into residential areas in a search for food. Research methods of mitigating the impacts of loss of habitat for various species, and their effect on landscaping materials, forest undergrowth, etc. Develop a deer management plan, preferably in cooperation with adjoining communities, including proposals for implementation and funding.

CHAPTER 5: TRAFFIC

A. Traffic Capacity Analysis

1. Existing Conditions

- a. The traffic impact study (TIS) will describe the physical conditions of the street network in the vicinity of the project site including pavement, surface and edge conditions, based on visual observation. Physical conditions of the street network including roadway and sidewalk widths and other control data and traffic flow

conditions (i.e., effective roadway width, etc.) will be inventoried. Particular attention will be given to radii and turning movements at intersections and the meandering effect of the roadway on speed and through-traffic.

b. Manual traffic counts shall be conducted during the weekday AM and PM peak hours while school is in session at the following intersections:

- Route 9 and Walter Street
- Route 9 and the private driveway/Kraft Foods driveway
- Browning Lane and Sheldon Avenue
- Sheldon Avenue and the existing right-of-way
- Route 9 and Sunnyside Lane
- Route 9 and the I-87/287 Eastbound ramps
- Route 119 and Meadow Street

c. Describe the character of the site's private road and the physical condition factors as identified in Paragraph 1.a. above, as well as capacity. Describe the ownership, maintenance, easements, and access to and from the site. Conduct a sight distance analysis at the intersection of Browning Lane, Walnut Street and the private road.

2. Capacity Analysis--Perform a capacity analysis for each of the peak periods for which manual counts were collected at each of the study area intersections using methodology in the Highway Capacity Manual and the latest version of the Highway Capacity Software. Present HCS results (Levels of Service) tabularly for each peak period. Adjust capacity analysis based on the results of the physical condition analysis.
3. Future without the Proposed Action
 - a. Background Traffic Growth--Estimate traffic volumes in the study area in the future without the project (No Build). Future traffic volumes will be estimated using existing volume information and by adding a background growth factor of two (2) percent per year up to the "no-build" year of 2009. Projects known for consideration by the Village of Tarrytown or adjoining communities, their status and their traffic and transportation effects must also be included in this "No Build" analysis, as well as impacts from surrounding development.
 - b. Network Improvements--Identify any proposed or potential improvements to Route 9 or Sheldon Avenue including those for which the Village recently applied to the State for funding.

- c. Capacity Analysis--Perform a capacity analysis for the Future Without the Proposed Action for each of the peak periods for which manual counts were collected at each of the study area intersections using methodology in the Highway Capacity Manual and the latest version of the Highway Capacity Software. Present HCS results (Levels of Service) tabularly for each peak period. Include in the analysis any improvements to the local network that are likely to occur in the Future without the Proposed Action.

4. Potential Impacts of the Proposed Action

- a. Trip Generation--Use a composite of ITE trip generation data and actual traffic counts from similarly-sized subdivisions in the area to estimate future traffic volumes resulting from the Proposed Action. Overlay the project-generated traffic on the future No Build network to determine future Build traffic volumes.
- b. Capacity Analysis--Perform a capacity analysis for each of the peak periods for which manual counts were collected at each of the study area intersections using methodology in the Highway Capacity Manual and the latest version of the Highway Capacity Software. Present HCS results (Levels of Service) tabularly for each peak period. Identify potential significant adverse impacts of

the Proposed Action. For locations where significant adverse impacts are identified, the feasibility of potential mitigation measures will be evaluated.

- c. Comparative Analysis – Perform a comparative analysis using the proportional increase in traffic volumes at each of the studied intersections as a percentage of the traffic generated by all identified area developments through these intersections.
- d. Sight-line Analysis/Safety Analysis--Evaluate sight-lines at the entrances to the project site. Evaluate stopping-sight distance for vehicles traveling to and away from the project site. Describe the accident experience over the last three (3) years on Sheldon Avenue in the vicinity of the existing right-of-way. Discuss the status of the Village's request to have the speed limit on Broadway reduced and its potential impact on sight distance.
- e. Jardim Analysis – Perform an analysis of the effect of Jardim East traffic on Jardim West. Analyze potential for cut through traffic from the Kraft building and others from Browning Lane to Broadway. Examine need for appropriate signage, traffic calming, or other measures that may be needed.

- f. Pedestrian Impact – Evaluate the effect on the level and safety of pedestrian activity including students walking to bus stops based on the proposed street pattern and particularly on the existing developed area accessed from Sheldon Avenue. Evaluate the effect of increased traffic on narrow streets on bicycle riding and other activities (roller skating, skate boarding, etc.).
- g. Islamic Cultural Center – Discuss the effect of development of the Jardim Estates East property on the future access to the ICC property to allow development as a permitted use.

CHAPTER 6: INFRASTRUCTURE

A. Introduction

- B. Stormwater--Describe existing stormwater flow rates and patterns on the site. Provide stormwater flow volumes and peaks using *Technical Release Number 20* (TR-20), by the United States Department of Agriculture, Soil Conservation Service. Flow volumes should be provided for the 2-, 10-, 25-, and 100-year storm events using site-specific runoff coefficients.

Using the TR-2- methodology and storm events analyzed in the existing conditions assessment, quantitatively describe the expected stormwater flows

and peaks with the Proposed Action for the 2, 10, 25, and 100-year storm events. Describe measures to ensure that post-development stormwater peak flows will be below existing peak flows. Describe measures to ensure that stormwater runoff from the site in the post-development condition will not adversely affect adjacent and downstream properties and existing off-site drainage facilities. Address the condition of the existing pond located on the northwest portion of the site. When possible, design measures to reduce flooding at nearby intersections including, but not limited to Walnut and Woodlawn, Walnut and Browning, Browning and Sheldon. Impervious surfaces likely to be created through development on the subdivided lots must be included in the analysis. As possible, design stormwater control measures that will reduce off-site drainage problems. Describe measures to provide for water quality management. Compare data and measures for this study with any stormwater studies prepare for nearby properties. Address all stormwater conditions downstream of the site including the Sheldon Brook drainage channel. Indicate whether the property is located in and has been paying toward the Sheldon Brook Drainage District. The stormwater analysis should assess any seasonal variations that could affect the proposed management approach, and should include any impacts on roadway safety, along with any environmental and health considerations created by excess runoff and standing water. Evaluate alternatives based on the Mankiewicz approach to stormwater management. The stormwater analysis should consider the apparent increasing frequency of major storm events and propose mitigation that takes this pattern into account.

Given the biological diversity and sensitivity of the site, and the richness of its wildlife, the natural stormwater drainage methods of Dr. Paul Mankiewicz and his GAIA Institute should be at the core of the final stormwater/drainage plan.

Some more conventional methods will also be needed (e.g. in dealing with stormwater/drainage when the ground is frozen).

- C. Water and Sanitary Sewer--Describe the location, condition and capacity of existing water and sanitary sewer lines serving the project site. Assess the capability of existing water and sanitary sewer lines to serve the proposed single-family houses. Address water pressure at the highest locations for both sprinkler systems and fire hydrant flows. Analyze the physical, legal and environmental effect of extending existing infrastructure under the existing access road where there would be disturbance to the wetland buffer. Analyze the effect of new utility services either under the access road or a new or realigned access road within the wetland buffer. Identify any proposed lots that would not be served by central water and sanitary sewer facilities and describe proposed treatment methods and permitting requirements.
- D. Describe how and when responsibility for infrastructure elements will be transferred from the present owner to new owners, for maintenance, enforcement and subsequent capital expenditures.

- E. Describe how the interface/interconnection will be handled between private and Village systems.
- F. Describe how public access can be provided to Taxter Ridge Park.
- G. Examine the effect on the Proposed Action of the potential addition of the Esposito property or others on Taxter Ridge Park.

CHAPTER 7: COMMUNITY FACILITIES

- A. Describe the potential demand for community facilities (recreation facilities, police and fire protection, generation of school-age and nursery/pre-school and day care children) from the proposed subdivision.
- B. Identify whether any increase in police and fire services would be required as a result of the Proposed Action and what costs would be incurred by the village. Describe the fiscal impacts including the costs versus the anticipated taxes generated to all affected taxing jurisdictions.

Identify the anticipated number of nursery/pre-school, day care and school-age children each year from the phased construction of the new single-family houses. Assess whether the increase resulting from the full build-out of new houses would have any impact on the Irvington School District with respect to anticipated

enrollment increases; or on other service providers for nursery/pre-school and day care programs and facilities.

- D. Describe how such services as school buses (or student access to buses), mail, etc., will be accommodated. In particular, how will mail be delivered (remote boxes, at each home, etc.); where will mail trucks park safely if boxes are ganged; where will residents park to pick-up mail?

CHAPTER 8: ALTERNATIVES

- A. Each alternative should include the cumulative effects of the Jardim Estates East subdivision. Provide a description of each impact issue for each of the alternatives identified below. The description should include written, graphic and tabular information as necessary to fully examine each alternative.

- B. Alternatives

- 1. No action
- 2. A cluster subdivision in accordance with Village regulations
- 3. Adding the property to Taxter Ridge Park

CHAPTER 9: MITIGATION

Summarize all proposed mitigation for significant adverse impacts identified in the environmental impact statement. Because these measures, once recommended, would become part of the Proposed Action, their formulation and analysis of their effectiveness would be undertaken in close coordination with the lead agency and other agencies, if necessary. Specifically address vegetation, wetlands, watercourses, vernal ponds wildlife, stormwater management, traffic mitigation efforts, visual impact and impact on Taxter Ridge Park. In order to properly protect wetlands and nearby upland the Planning Board may require the redelineation of wetlands and modified or additional mitigation at time of preliminary subdivision approval and/or individual plot plan approval.

CHAPTER 10: UNAVOIDABLE ADVERSE IMPACTS

Describe any unavoidable adverse impacts that cannot be addressed through appropriate mitigation measures.

CHAPTER 11: GROWTH-INDUCING ASPECTS

CHAPTER 12: ENERGY USE AND CONSERVATION

Incorporate recommendations of the Tarrytown Comprehensive Plan regarding energy saving techniques and materials. As Village codes are amended incorporate changes into building design.

CHAPTER 13: COMMITMENT OF NATURAL RESOURCES

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**WILDLIFE AND PLANT BIODIVERSITY ASSESSMENT OUTLINE
PART OF SCOPING OUTLINE FOR JARDIM ESTATES EAST
VILLAGE OF TARRYTOWN, NEW YORK
FOR REVIEW BY THE PLANNING BOARD**

Background and Purpose

Undeveloped and formerly developed estate properties and smaller parcels of land in the Village of Tarrytown contain a wide diversity of plant and wildlife species. The Planning Board has been concerned for some time with the brief and narrow evaluation of plant and wildlife surveys undertaken by development applicants seeking Planning Board approval. Often these evaluations have consisted of relatively brief observational walkovers and lists of plants and wildlife typical of the area, but not necessarily observed, directly or indirectly.

All development has some impact on plant and wildlife species. This may take the form of direct loss of habitat, or may result in the loss of: travel pathways, woodland edges, interior forests, stream and water body clarity, or other features necessary for survival of a species. Alternatively, impacts may include sedimentation of water bodies, temperature changes, nutrient loading or other negative effects.

The survival of plants and wildlife species is affected by soil conditions, wind and weather, available food and water, conditions suitable for mating and raising young and other factors, including the inter-relationships of plants and wildlife species and the adequacy of plant life necessary for wildlife survival.

In order to more fully address the shortcomings in the analysis of the effect of development on plant and wildlife species, the Planning Board will require, as necessary, Wildlife and Plant Biodiversity Assessments.

Each property is unique in some way. The Board anticipates that assessment requirements will be tailored somewhat to the particular biodiversity characteristics of each property. Generally, the properties with the following characteristics will be most likely to require biodiversity assessments: large properties with relatively undisturbed natural features (most of which were large estate properties in the past), potential travel corridors; wetlands; stream corridors; forest to meadow edges; interior forests; areas adjacent to those noted.

In general, the following protocols are to be followed. The Board may modify these protocols based on the characteristics of the properties proposed for development.

Species To Be Assessed

Surveys must be conducted for the entire range of species that are known to respond to development. At a minimum, surveys should be conducted for amphibians, reptiles, birds, fish, fungi and plants. These taxa contain species that respond measurably to development-related impacts at varying landscape scales. As time and resources allow, surveys should also be conducted for additional taxa (e.g. benthic macroinvertebrates, area-sensitive mammals) and plant species. Although this includes State and Federally threatened and endangered species,

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it also includes a wide array of currently unlisted, “focal” species that indicate habitat quality. The presence of habitat specialists (e.g., wood frogs, spotted salamanders, box turtles, wood turtles, Canada warblers) may indicate high-quality habitats where development-related impacts should be avoided, minimized, or mitigated. The presence of certain “subsidized” species (i.e., those that are often affiliated with landscape disturbances), coupled with the absence of more specialized taxa indicates previously disturbed habitats that may be more suitable for development.

Methods

Biodiversity assessments must be conducted and interpreted by biologists trained in the concepts of conservation biology and landscape ecology, and who have a demonstrated competence in surveying target species within Westchester County. They will be paid for by the applicant and contracted as consultants to the Village of Tarrytown the same as the Village sometimes contracts with other natural resource consultants.

Surveys must be conducted during appropriate seasons, according to the life cycles of the surveyed taxa. Surveys must also follow standardized protocols, to ensure that detectability is maximized and results are reliable. For example, bird surveys must occur during the spring breeding season (mid-May through early July) in the early morning hours (within 1 hour of dawn through 9:30 A.M.) under relatively fair weather conditions. Results of such breeding bird surveys reveal the suitability of on-site habitat: surveys conducted at other times or in poor weather conditions are much less informative. Reptile and amphibian surveys must be conducted between March and October, with concentrations in March – April, May, June, mid-summer, and September. Survey techniques include night searches, minnow/turtle traps, turning of cover objects, and larval dip-netting and identification. For all taxa in question, surveys must be conducted within all habitats on site (e.g., grasslands, vernal pools, forest uplands, forested wetlands), regardless of where proposed construction activities would take place. Many species utilize a complex of habitats within the course of their life cycles; therefore developments may attempt to avoid disturbance of breeding habitat, but destroy foraging, roosting, or wintering habitat. Attention should be given to timing and seasonal constraints, such as, breeding, migration and germination.

Where appropriate, surveys may have to extend beyond the properties for which development approval is requested in order to more fully understand the effect of development upon particular species.

Reports

A final report must be submitted containing a description of current-on-site habitats for wildlife and vegetation, the value and condition of those habitats for wildlife, and a discussion of the potential impacts of the proposed development on wildlife and vegetation resources. Data collection methods should be detailed in the report. Wildlife and vegetation occurrence data must be location-specific; lists of probable species occurrence, alone, are not acceptable. Alternatives should be recommended where proposed alterations to habitats place wildlife and vegetation resources in jeopardy. The report should also discuss site context (e.g., proximity and connectivity to other habitats), and should relate to the importance of on-site habitat

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relative to other habitats within the Village. The report should contain detailed maps compatible with standardized GIS systems so that the survey information may be easily incorporated into a Village-wide wildlife habitat database.