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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.