3.5 Critical Environmental Areas

3.5.1 Hudson River Critical Environmental Area

The 4.4 acre project site is separated from the most proximate water resource, the Hudson River and its immediate shoreline, by the Metropolitan Transit Authority Metro-North (MTA) rail line, to the west, and is outside the limits of the river's 100 year flood plain as depicted on the Federal Emergency Management Agency Flood Insurance Rate Map, Figure 3.2-1.

The Hudson River in Westchester County is rated a Class C water body by the New York State Department of Environmental Conservation (NYSDEC), indicating that the river is suitable for fish propagation and survival. Class C waters are also suitable for primary and secondary contact recreation (New York State Code Part 701), although other factors, such as accessibility and stream flows or depths, may, according to the State, limit their use for these purposes.

As described in New York State's Environmental Quality Review Act (SEQRA), a Critical Environmental Area (CEA) is land that has earned special protection under SEQRA. To be designated a CEA, an area must have an exceptional or unique character with respect to one or more of the following:

- a benefit or threat to human health;
- a natural setting (e.g., fish and wildlife habitat, forest and vegetation, open space and areas of important aesthetic or scenic quality);
- agricultural, social, cultural, historic, archaeological, recreational, or educational values;
 or
- an inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any change.

In 1989, the Westchester County Board adopted a local law (16-1989) pursuant to SEQRA that established the Hudson River, and its "immediate shoreline" as a CEA (effective January 1990). The intent of the law is to protect areas of the County that contained, or bordered on, significant natural resources. Since the Hudson River was established as a CEA, the potential impact on it, and on its immediate shoreline, from any Type I SEQRA action, such as the Waters Edge at Dobbs Ferry residential subdivision, are considered a relevant area of concern and must be evaluated in a determination of significance prepared pursuant to SEQRA. Though the Proposed Action is separated from the Hudson CEA by the Metro-North railway line, potential environmental impacts on the Hudson River CEA anticipated from the Proposed Action are analyzed in this DEIS.

Untreated stormwater from the largely developed drainage area in which the project site is located, currently discharges directly onto the 4.4 acre project site, then through an existing drainage system and overland flow, under the MTA rail line and into the Hudson River. With the exception of catch basins and the improperly constructed and ineffective conveyance system, no constructed stormwater controls or treatment facilities, such as detention basins exist on the site, or in the drainage area. Nor is any stormwater that discharges onto the site treated prior to entering the site.

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The Village of Dobbs Ferry in its entirety, including the project site, has been designated by the NYSDEC as a Small Municipal Separate Stormwater System (MS4). As a State designated MS4, the Village is required to prepare a Stormwater Management Program (SWMP), and submit a Notice of Intent (NOI), pursuant to New York's January 8, 2003 Pollution Discharge Elimination System *General Permit for Stormwater Discharges from Municipal Separate Stormwater Systems (GP-02-01)*, to gain authorization to discharge stormwater into "waters of the United States", including the Hudson River. The specific purpose of the SWMP is to address pollution found in stormwater. The NOI "outline[s] how [the Village] will adopt appropriate measures to address stormwater within the MS4 area." The overall purpose of the designation, and preparation and implementation of the SWMP, is to reduce pollutants in stormwater that are currently discharged from the Village to the river.

3.5.2 Local Waterfront Revitalization Program Consistency Review

On August 9, 2005, the Dobbs Ferry Village Board adopted the Local Waterfront Revitalization Program (LWRP). The LWRP is a comprehensive plan for the local waterfront and downtown areas in Dobbs Ferry and is intended to serve as a guide for the future enhancement, protection, preservation and development of Dobbs Ferry's waterfront areas.

The 4.4 acre Waters Edge project site is located within the Village of Dobbs Ferry Waterfront Revitalization Boundary and New York State Coastal Area Boundary, as defined in the LWRP. However, it is separated from the Hudson River waterfront by the existing and active MTA railroad line. This condition precludes any "water dependent use", as defined in the LWRP, of the Waters Edge site. The LWRP recommends that the project site be developed for "residential low density". The LWRP appropriately acknowledges the visual resources in the Village and particularly properties that afford views of the Hudson River. The LWRP also discusses the Village's regulatory and governmental actions to preserve and enhance those resources.

To advance the goals set forth in the LWRP, it includes an inventory and analysis of existing conditions in the Village that identifies "important resources [including the Hudson River], problems and opportunities" and establishes thirteen distinct coastal management polices and standards applicable to waterfront revitalization efforts, including development and environmental protection in the Village.

The categories of policies set forth in the LWRP include: Developed Coast Policies; Natural Coast Policies; Public Coast Policies; and Working Coast Policies. These policies are used to guide any federal, state, county, town or local activity occurring within the local LWRP boundary. The applicant notes that the LWRP also includes detailed explanations of these policies and clarifications of the applicability of the policies to the Village of Dobbs Ferry, which were used by the applicant to conduct the consistency review below.

Both State and Federal coastal management laws require State and Federal agencies to determine that a proposed action, which they directly approve within the boundaries of an approved LWRP, is consistent with the policies and purposes of the LWRP. Any action that is not consistent may not be undertaken. The Village must make a similar commitment to ensure local consistency with the LWRP. This is achieved, in part, by ensuring that local laws implementing the program, such as the zoning law, reflect the provisions of the LWRP.

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The Village adopted a local LWRP Consistency Law, as part of the local environmental review process, to review local actions for consistency with the LWRP. This approach incorporates the consistency determination process into the SEQRA process as applies to approved actions. The Village of Dobbs Ferry Local LWRP Consistency Law seeks to provide a mechanism for Village of Dobbs Ferry agencies, under the direction of the Planning Board, to consider the policies and purposes contained in the LWRP when reviewing applications for actions such as Waters Edge at Dobbs Ferry and to ensure that such actions are consistent with the policies and purposes of the LWRP.

Pursuant to the adopted scope, and the Village of Dobbs Ferry LWRP Consistency Law, the applicant has analyzed the policies applicable to the Proposed Action for purposes of determining the action's consistency with the LWRP. A summary of that analysis follows:

Certain Village LWRP policies are directed to waterfront areas and are related to the portion of the Village near the Hudson River where the project site is located. Those policies (or portions of policies) that are relevant to the project site, and the degree of consistency of the proposed project with these policies (shown in *italics*), are as follows:

Policy 1.3: Maintain and enhance Dobbs Ferry's natural areas, recreation and open space lands: Improve infrastructure and implement protective measures to prevent erosion and stormwater runoff into the Hudson River and its tributaries.

The low scale of the proposed project and anticipated landscaping, are expected to limit the visual effects of the project from the Hudson River and from the western bank of the Hudson River in Rockland County. The visibility of the project is not considered to be a significant concern for users of the River or its immediate shoreline. The visibility of the project is also not likely to impact views of site from public vantage points or roads along the western bank of the Hudson River. Please refer to Section 3.4, Aesthetic and Cultural Resources of this document for further discussion.

The Proposed Action includes measures to eliminate existing erosion in the existing on-site ravine and subsequent sedimentation of the Hudson River. The ravine is to be filled completely with Proposed Action. The installation of new stormwater infrastructure will further reduce contaminants being conveyed to the river. The anticipated maintenance of vegetation, replanting plan, selection and placement of landscaping materials, and placement of structures and massing of roof lines are compatible with this policy. Further, the improvements in infrastructure, anticipated selection of lighting fixtures and use of lighting shields, as well as the environmental protection measures are compatible with this policy.

Policy 1.4: Minimize potential adverse land use, environmental, and economic impacts that would result from proposed development: This policy includes recommendations to segregate incompatible uses; to provide buffers or other design measures to reduce conflict between incompatible uses; to promote steep slope protection and use of Best Management Practices for storm water management; to protect the surrounding community from introductions of or increases in odor, noise or traffic; to preserve viewsheds to the maximum extent possible; and, to preserve natural areas by avoiding expansion of infrastructure into steep slopes.

The proposed residential project is a compatible use in the existing single family residential neighborhood and would potentially enhance the land values of the neighborhood

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by completing the road network, improving the appearance of the site, and building eleven (11) future homes of similar character. The Proposed Action has been designed to limit impacts to steep slopes, and preserve viewsheds, to the maximum extent feasible and incorporates New York State Standards and Specifications for Erosion and Sediment Control to control erosion and sedimentation during construction and measures to improve existing stormwater management. Further, the Proposed Action will not generate any meaningful increase in traffic, or any significant change in odor or noise.

Policy 3.0: Enhance visual quality and protect outstanding scenic resources.

Policy 3.1: Standards and guidelines are proposed in sub-policy 3.1 including minimizing introduction of elements of discord with existing scenic components and character; screening elements that detract from visual components; use appropriate siting, scales, forms, and materials to ensure that structures are compatible with and add interest to existing scenic elements; preserve existing vegetation and add new vegetation to enhance scenic quality, and, consider the impacts of new development on existing visual resources. The local policy relates to tree preservation, and to developing scenic view preservation regulations and policies. The Hudson River is considered to be an open space resource by the Village of Dobbs Ferry.

The size, design and scale of the proposed residential use of the Waters Edge site is expected to blend with the Fairmead neighborhood of the Village, and the appearance of the future homes will be compatible with the existing character of the neighborhood. The eleven (11) future homes are expected to reduce the apparent scale of the buildings through the use of steeply sloping roofs and eaves above the first story. Material selection and colors chosen for the proposed homes are intended to be compatible with the eclectic nature of the existing homes in the vicinity of the project site. The selection of and placement of landscaping material is expected to suitably screen the new homes without unnecessarily blocking views of the Hudson River and points west. Adequate buffering is also proposed to minimize visual effects of the Proposed Action from the Hudson River. Refer to Section 3.4, Aesthetic and Cultural Resources for further Visual discussion.

Policy 4.0: Minimize loss of life, structures, and natural resources from flooding and erosion. This policy refers to erosion problems along the Hudson River.

The proposed project includes the elimination of the existing eroding ravine and subsequent sedimentation of the Hudson River and the installation of new stormwater infrastructure that will reduce existing erosion on, and adjacent to, the project site. Further, the proposed project includes a detailed, site specific Erosion and Sediment Control Plan that will prevent an increase in erosion along the Hudson River.

Policy 4.1: Minimize potential loss and damage by location development and structures away from flooding and erosion hazards.

The proposed project is located well above the shoreline of Hudson River. The Waters Edge subdivision is not expected to impair protective capacities or natural protective features that would result in damage from flooding or erosion associated with the River or other natural features.

Policy 4.2: Preserve and restore natural protective features.

The Proposed Action incorporates an Erosion and Sediment Control Plan developed in accordance with New York State and Westchester County standards and specifications. It will also eliminate existing erosion of the ravine and sediment discharges to the Hudson. As noted above, the ravine is filled in the Proposed Action.

Policy 4.3: Protect public lands when undertaking erosion and flood control projects.

The erosion control and stormwater remediation elements of the Proposed Action will not threaten public lands by flooding or erosion. No adverse effects from flooding or erosion are expected on the Hudson River.

Policy 5.0 Protect and improve water resources.

Policy 5.1: Prohibit direct discharges that would contribute to lowering water quality standards.

The proposed project will be constructed in adherence with applicable rules and regulations, including those related to water resources. Practices taken from the NYSDEC's and Westchester County's Erosion and Sediment Control design manuals that are appropriate to the proposed project have been incorporated into the SWPPP. These measures are expected to prevent the direct discharge that would contribute to lowering water quality in the Hudson River.

Policy 5.2: Minimize indirect or non-point pollution of water resources, and manage activities causing non-point pollution.

Elements of the Proposed Action that will significantly contribute to the mitigation of impacts to the Hudson River include temporary erosion and sediment controls to be employed site during construction (e.g., sediment barriers of silt fencing, or other approved measures); adherence to the approved construction sequence; construction of hooded catch basins with sumps; maintenance of the permanent measures, including removal of sediments and debris, making repairs, and sweeping of specified paved areas; and, establishing permanent soil stabilization. By minimizing indirect or non-point pollution of water resources, these measures will protect off-site water resources and make the project consistent with this policy.

Policy 5.3: Protect and enhance water quality.

The proposed lots and future homes have been located on the upper, flatter portions of the project site to the maximum extent possible, minimizing impacts to steep slopes. This proposed layout and the proposed measures described above are expected to protect water quality.

Policy 6.0: Protect and restore ecological resources including significant fish and wildlife habitats, wetlands, and rare ecological communities.

The Proposed Action will not impact any significant ecological resources or significant fish and wildlife habitats. Please refer to Section 3.3, Terrestrial and Aquatic Ecology for further discussion.

3.5.3 Potential Impacts

The proposed project complies with existing land use policies and zoning regulations of the Village of Dobbs Ferry. The density and character of the project is compatible with other residential development in its surrounding areas and would be an appropriate use of the site.

The project is not expected to have an adverse impact (effect) on the adjacent residential and institutional uses, on the Hudson River CEA, or the LWRP. The proposed residential development of the 4.4 acre property would be compatible with the adjoining residential and institutional uses.

Impacts on Critical Hudson River Environmental Area

The Proposed Action includes the subdivision of land into eleven (11) lots and the future development of eleven single family residences on the 4.4 acre project site. The Proposed Action is consistent with nature and scope of land uses in the vicinity of the site and within the Village. The project site is separated from the Hudson River by the active MTA rail line, and as such, its development with single family units that are common to the area is not expected to have a significant impact on the CEA. Further, the proposed project will correct existing conditions that now compromise the quality of stormwater discharging to the Hudson River CEA and will comply with the stormwater management requirements of NYSDEC GP-02-01.

Impacts on Local Waterfront Revitalization Program

The Proposed Action is consistent with the LWRP and will adhere to the Implementation strategy set forth in the LWRP by complying with the Village of Dobbs Ferry Master Plan and Zoning Ordinance, Subdivision Regulations, Flood Damage Regulations, Steep Slope Ordinance, Architectural Review Board Law, and Westchester County CEA Regulations as cited in the LWRP. Accordingly, the Proposed Action is not expected to have a significant adverse impact on the LWRP.

Stormwater Impacts

During an August 31, 2006 site visit, visual observations of existing runoff from the roads, and dwellings, in the project site's drainage area during rain events revealed that significant quantities of particulate, both organic and inorganic, become suspended during these rainfall events and are conveyed across private properties and into the Hudson. This condition results in particulate being discharged into the Hudson River.

While not required by GP-02-01, the applicant has assessed existing and proposed stormwater water quality conditions. As described above, untreated stormwater currently discharges directly from the site, and the entire drainage area in which the site is located, to the Hudson River by way of an ineffective stormwater drainage system and overland sheet flow.

The project engineer proposes to collect stormwater run-off discharging from the site with a collection and conveyance system that includes interconnected catch basins with sumps and hooded outlets. The system will collect stormwater from the existing roads in the neighborhood, and the proposed development, and remove sediment and debris, from the runoff now being discharged to the Hudson River. The system will provide stormwater quality improvement

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functions. Further, post-development stormwater flow rates, as wells as peak flow rates for the 1, 5, 10, 25, 50, and 100 year storms, are provided in the SWPPP (see Appendix B). The calculations indicate that post-development peak stormwater run-off rates will be substantially the same as current (pre-development) run-off rates.

3.5.4 Proposed Mitigation Measures

While the proposed project is consistent with land uses surrounding the project site, and the action will remedy existing drainage problems that result in off site discharges of pollutants, additional measures have been incorporated into the project design to mitigate potential impacts associated with project layout and future home sitings.

The project has been designed to be in harmony with the existing residential development that abuts the project site. The proposed layout of this property is organized around a newly designed road system, which complements the existing road system of Fairmead. Ten of the eleven lots will front on a new looped road which will connect to Fairlawn Avenue. Three of the proposed lots are located along the western ridgeline of the property. Lot 11 is located in the northeastern portion of the site and fronts on the northern section of Atilda Avenue, which runs perpendicular to the western portion of Fairlawn Avenue.

The siting of the future homes has not been decided upon at this time. The design of the future homes of the Waters Edge subdivision would be subject to the review and approval by the Village of Dobbs Ferry Architectural Review Board and consistent with the provisions of the Dobbs Ferry Architectural Review Law. The review and approval process will ensure the harmony of the homes with the surrounding homes, the character of Dobbs Ferry, and land uses overlooking the Hudson River. This approval will further ensure that the character of the proposed community is in keeping with the surrounding areas

Further, the Landscape Plan for the new homes will provide revegetation throughout the site to achieve several objectives. The new plantings will provide street trees (species of street trees will comply to the Village Code, if applicable) along the new roads, foundation plantings around the homes, side and rear yard plantings to buffer between new homes and existing homes, buffer planting along the northerly boundary with St. Christopher's, infill planting in the ravine area, and areas of lawn for remaining open spaces around the homes.

To further mitigate potential impacts on the Hudson River CEA, the Proposed Action includes a SWPPP with an Erosion and Sediment Control Plan to prevent erosion and sedimentation during construction. Because the Proposed Action will not result in the disturbance of five acres and will not discharge to a NYSDEC designated priority waterbody list, nor is it in a Total Maximum Daily Load Watershed, the SWPPP does not include post construction stormwater controls. However, the Waters Edge SWPPP does propose a properly designed stormwater infrastructure system that includes eliminating the existing ravine and the erosion associated with uncontrolled runoff in the ravine.

Because the Proposed Action is a residential subdivision that results in the disturbance of less than five acres, and that is neither in a Total Maximum Daily Load watershed or discharges to a water segment on the NYSDEC priority water body (303d) list, the State does not require the SWPPP to include stormwater management practices to detain post construction increases in the rate and volume of stormwater or possible increases in pollutant loading in stormwater.

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Mitigation of potential impacts on the Hudson River CEA is also provided by the proposed Conservation Easement on the bank that lies between the developed portion of the site and the Metro North Railroad tracks. This easement would function as a buffer between the Metro North tracks and the proposed lots.	
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