

*Draft Environmental Impact Statement*

***Ferry Landings***

Village of Tarrytown  
Westchester County, New York

July 9, 2004

**Applicant:  
Ferry Landings LLC  
485 West Putnam Avenue  
Greenwich, Connecticut 06830**

## **EXECUTIVE SUMMARY**

### **A. Introduction**

This Draft Environmental Impact Statement (DEIS) is being prepared in accordance with the requirements of 6 NYCRR Part 617.8. to assess potential environmental impacts regarding the adaptive redevelopment of a 30± acre parcel on the Tarrytown Waterfront.

### **B. Description of the Proposed Action**

The Applicant, Ferry Landings LLC (herein referred to as the “Applicant”), is proposing a mixed-use development of townhouses, offices, professional offices with apartments on upper floors, parking areas and one restaurant on a 30± acre site bounded by West Main Street to the south, the Metro-North railroad track to the east, Division Street to the north, and the Hudson River to the west (see Figure ES-1, “Site Location Map”). The site currently contains a variety of heavy and light industry, open storage, and small office uses.

The property is shown on the Village of Tarrytown Tax Maps as Sheet 1, Block 0000, Parcels 13, 14, 15, 20, 21, 23, 24 and 24A (see Figure ES-2, “Tax Map”), and is located in the Waterfront General Business and Water-Related Industry Overlay Zoning Districts (see Figure ES-3, “Zoning Map”).

The proposed reuse of the property will include the following uses:

- Construction of 88 townhomes;
- 40 loft apartments;
- Offices
- Professional offices
- One new restaurant; and, a
- Parking garage.

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## **Figure ES-1 Site Location Map**

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**Figure ES-2 Tax Map**

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## **Figure ES-3 Zoning Map**

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### **C. Description of Prior Approvals, if any; Site History**

#### *Prior Approvals*

On surrounding land parcels, the Village has commenced construction or is in the pre-construction phase of a new Department of Public Works, Village Hall, Court House, and Police Headquarters. The Asphalt Plant is in the process of being relocated to fulfill the community's long-range goals of public access to the Tarrytown Waterfront. Each action was subject to an environmental review, evaluated by the Village Planning Board, and each received Negative Declarations pursuant to the State Environmental Quality Review Act (SEQRA). Site Plan approval was received for each of the actions on May 25, 2004.

#### *Site History*

Much of the project site and surrounding area is land reclaimed from the Hudson River beginning in the early-19<sup>th</sup> century and expanded throughout the early to mid 20<sup>th</sup> century. Filled land includes sections of the western portions of the project site and the entire area south of Main Street, including Losee Park and the area west of River Road. Appendix J contains a set of Sanborn Library historic maps, which show specific uses of the site over the past century. The subject site has been used primarily for industrial purposes since at least 1887.<sup>1</sup> Other historic uses include taverns, inns, and other civic meeting places. Please refer to Chapter 1.C, "Summary of Site History" for additional information.

### **D. List of all Local, County, State, and Other Approvals Required**

At this time, it is anticipated that the following approvals and permits to authorize the proposed project will be required:

| <u>Type of Approval</u> | <u>Agency</u>                          |
|-------------------------|--|
| Site Plan Approval      | Village of Tarrytown Planning Board    |
| Special Permit          | Village of Tarrytown Board of Trustees |

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<sup>1</sup> Tarrytown Waterfront Redevelopment GDEIS. May 1996.

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|   |   |
|---|---|
| Possible Zoning Variance(s)                         | Village of Tarrytown Zoning Board                                   |
| Waterfront Consistency Review                       | Village of Tarrytown Waterfront<br>Advisory Committee               |
| County Planning Board §239-m<br>Referral            | Westchester County Planning Board                                   |
| Water and Sewer Connections                         | Westchester County Health Department                                |
| Coastal Zone Consistency Review                     | New York State Department of State<br>(NYSDOS)                      |
| NYSDEC General SPDES Permit                         | New York State Department of<br>Environmental Conservation (NYSDEC) |
| Air Pollution Control Permits                       | NYSDEC  |
| Protection of Waters/<br>Excavation and Fill Permit | NYSDEC  |

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## E. Summary of Significant Impacts Identified in Each Subject Area

### Land Use, Zoning and Public Policy

#### *Land Use*

The Ferry Landings development will transform an industrial area into a mixed-use community. The proposed project will open up the Hudson River shoreline to public access, provide open/green space for passive and active recreation, and attract people to the site during both daytime and nighttime hours, which is currently not the case. This is a very important element in the process of reuniting Tarrytown with its waterfront, a goal evidenced in its *Local Waterfront Revitalization Plan* (LWRP) and *Draft Waterfront Master Plan* documents, intended land use policies for the Waterfront General Business District (WGBD), as well as goals set forth in Westchester County's *RiverWalk Program* and *Greenway Compact Plan*, and by the work of organizations such as Scenic Hudson.

The impact of Ferry Landings on surrounding land uses will be a positive one in that it eliminates an industrial area from the riverfront. The project will once again make the Hudson River the focal point of the community. In addition to removing acres of asphalt paving, the open space and RiverWalk promenade components of the plan will provide civic amenities, which will be enjoyed by the greater population.

Overall, the project calls for a significant improvement to the Tarrytown riverfront, one that is consistent with the goals of the Village, County, and State, and one that will benefit existing and future residents of the surrounding area and of the Village as a whole.

#### *Zoning*

**WGBD Zoning District Area and Bulk Compliance**

|                            | <b>WGBD Zoning</b> | <b>Proposed Action</b> |
|----------------------------|--------------------|------------------------|
| <b>Acres</b>               | 25                 | 25                     |
| <b>Square Feet</b>         | 1,089,000          | 1,089,000              |
| <b>Building Coverage</b>   | 25%                | 21%                    |
| <b>Number of Floors</b>    | 2.5                | 3.0                    |
| <b>FAR</b>                 | 0.625              | 0.624                  |
| <b>Developable Density</b> | 681,000            | 670,000                |

#### *Public Policy*

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The proposed project is consistent with the *Village of Tarrytown 1962 Comprehensive Plan*, the *1971 Tarrytown Riverfront Area Development Plan and Rezoning*, the *1973 Tarrytown Development Plan*, the *Westchester County Greenway Compact Program*, the Regional Planning Association's (RPA) *Third Regional Plan, A Region at Risk*, and the *Tarrytown LWRP*. All of these planning initiatives include recommendations for the development and use of the Hudson River waterfront in and around the Village of Tarrytown. Similarly, the proposed Ferry Landings development is consistent with the surrounding land use pattern, and the proposed action will adaptively redevelop an underutilized section of land along the Hudson River. The project will increase green and open spaces, provide public access to the Hudson River, and offer passive and active recreational opportunities.

## Natural Resources

### *Topography*

On-site topography will not change significantly as a result of the proposed project, as the site is predominantly flat and will remain so. The most important change is that the topography will need to direct stormwater runoff to appropriate treatment systems.

### *Soils*

The proposed development will disturb one soil type (urban land). The location of this soil is illustrated on Figure 3.B-1, "Soils Map". See Appendix M, "Engineering Drawings" for the Conceptual Grading and Utility Plans to illustrate the proposed grading for the project site.

The largest single soil type that will be disturbed is UF, urban land. The majority of the soil disturbance will be associated with the construction of the proposed buildings and roads. No blasting will take place, and the project does not impact agricultural soils. Disturbance associated with construction of the project would consist of the following:

- Disturbance to soils and geology, primarily due to the construction of roads, stormwater control structures, and the excavation of foundations.
- Removal and stockpiling of topsoil.
- Potential erosion and the resulting sedimentation within storm runoff.

### *Vegetation and Wildlife*

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As the site is almost entirely paved, there is currently no significant vegetation, wildlife, or natural habitat on the site. The project will improve vegetation and wildlife conditions, as the proposed project includes 64% coverage area, with 11 acres devoted to green space. After construction and landscaping, the project will include more than 200 trees of numerous native species, which are expected to attract forms of wildlife including birds and small mammals. Thus, the project will positively affect vegetation, as it will greatly reduce impervious surface area and provide greenery.

With respect to aquatic organisms, the project is not expected to have any significant direct or indirect effect on the fish found in the Tappan Zee area of the Hudson River or on their habitats, especially with regard to the most critical habitat parameters, salinity and temperature.<sup>2</sup> Additionally, the project will include landscaping and buffer plantings of native species along the shoreline, which will provide additional benefits for the river's aquatic species.

### *Water and Waterfront Resources*

The development will largely occur inland of the existing shoreline, with building set back from the River by about 80 feet. The project will not alter the shoreline, and it is not anticipated that the project will require any alteration to the existing bulkhead or fill material. Additionally, the project will not involve or interfere with the Hudson River in any way. Therefore, there will be no impact on temperature, turbidity, depth, or salinity of the river. As there are no submergent aquatic vegetation (SAV) beds, there will be no affect on them.

### *Wetlands*

The project presents no threat to existing wetlands, as there are none on the project site.

### *Bedrock Depth and Water Table*

As the proposed project will utilize municipal water, no impact to the water table is anticipated. The project site is relatively level, however placement of fill materials will be required to regrade the site. Disturbance to soils and geology will be due primarily to the construction of roads, stormwater control structures, and the excavation of building foundations (see Section 3.B, "Soils"). No bedrock disturbance or removal is anticipated during construction, therefore no impacts are anticipated.

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<sup>2</sup> Keene, Charles I. "Essential Fish Habitat Assessment for the Tarrytown Former MGP Site Remediation Project Tarrytown, New York." New York: Haley & Aldrich. December 2003. Pg. 17.

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## *Air Quality*

The proposed project is expected to have a minimal impact on air quality.

Construction of the proposed Ferry Landings site will involve redevelopment of the land, construction of roadways for heavy equipment access, and excavation for building foundations and roadways. Such disturbance and removal of surface soils would generate airborne soil dust. Dust particles may be generated from open sources, such as land clearing and vehicle travel on unpaved roads. The amount of dust actually released as a result of land clearing, vehicle travel on unpaved roads, and soil excavation for building foundations and roadways will be dependent on the composition of the impervious area and silt content of the predominant surface soils. Some of the dust released during construction activities could potentially be carried off the proposed site.

Despite projected increases in traffic volumes at the relevant intersections, vehicle-related carbon monoxide emissions are projected to decrease over time, due to the elimination of school bus storage, auto distribution, and other surface transportation uses which include a high number of vehicle trips.

The proposed Ferry Landings site will be connected to the existing municipal sewer system, and, is therefore not expected to result in the potential for adverse odor impacts resulting from wastewater disposal.

Peckham Materials operates a hot mix asphalt (HMA) plant on approximately 3 acres adjacent to the project site. An epidemiological study was performed on the impact of an HMA facility on the health of local residents, including future residents of Ferry Landings, as well as those living within the vicinity of the project site and HMA facility (see Appendix G, "Asphalt Plant Relocation Environmental Review").

The epidemiological study utilized a Risk Assessment Analysis to determine the health risk posed by the plant. The study concluded that "the environmental impacts resulting from the operation of the asphalt facility at the proposed location will not pose (as determined by generally accepted methods) an unacceptable health risk to the community at or beyond the property lines."<sup>3</sup>

An addendum to the epidemiological study was also conducted that assessed the impact of the HMA facility on respiratory health. The study concluded that the Asphalt facility will operate well below the 1% of occupational exposure levels

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<sup>3</sup> Gunkel, Kathryn O.C. *Environmental Impact Analysis for the Proposed Relocation of a Hot Mix Asphalt Facility on the Same Property in Tarrytown, New York*. Wildwood Environmental Engineering Consultants Inc. May 2004.

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considered by many state toxics programs to be an acceptable exposure for the general public.<sup>4</sup>

### Hazardous Materials

The layout of the proposed action is designed to comply with deed restrictions set in place due to the current remediation effort and oversight by the NYSDEC. By limiting the redevelopment to areas identified by the NYSDEC and the remediation plan, remediation measures will remain unaffected. Buildings and excavation will not occur in these “no build” zones so as not to impact the remediation and monitoring instruments installed on-site. Groundwater will not be used, as the site has access to municipal sources of water.

Ferry Landings will redevelop a formerly industrial site, consistent with smart growth policies established by state and federal environmental policy.

### Stormwater Management

The stormwater conveyance system for the project will include the use of shallow channels, catch basins, and corrugated plastic culvert pipe. Stormwater runoff from impervious surfaces will be collected and conveyed to the treatment facilities prior to discharge.

The stormwater runoff rates for the post-development conditions will be lower than that of the pre-development rates, as pre-development conditions contain a large amount of impervious area (pavement and buildings), which does not allow stormwater to infiltrate into the ground. Thus, stormwater runoff is conveyed more quickly than it would through vegetated areas. The post-development conditions for the site contain a greater amount of vegetated area than does the pre-development site, resulting in greater stormwater infiltration. These vegetated areas will also slow the rate in which the stormwater travels through the site, resulting in a lower peak runoff rate, and less erosive velocity. Due to these factors, post-development flow rates will be less than that of the pre-development flow rates for stormwater runoff.

According to the NYSDEC “Stormwater Management Design Manual”, dated August 2003, under “Section 4.5, Extreme Flood Control Criteria”, a 100-year stormwater runoff attenuation requirement may be waived if the stormwater is directly discharged into a fourth order or larger stream or a tidal river. The Hudson River is a tidal river at Tarrytown, therefore BMPs will be designed so that runoff from 100-year storm events will discharge directly from the stormwater treatment facilities to the river

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<sup>4</sup> Ibid.

without attenuation. Downstream properties and existing off-site drainage facilities will not be affected by the proposed development stormwater runoff because the anticipated rates from the site are proposed to be lower than that of the existing stormwater runoff rates.

### Traffic

A Traffic Impact Study (TIS) was performed by John Collins Engineers, P.C. to determine existing and future traffic operating conditions at relevant area intersections (as identified in the Final Scoping Document). The TIS used a design year of 2007, as this is when construction of the project is expected to be completed. A copy of the TIS is provided in Appendix C, "Traffic Impact Study."

The capacity analysis was conducted based upon the *Year 2000 Highway Capacity Manual*. Based on the results of the analysis and the implementation of the improvements outlined below, the construction of the proposed Ferry Landings development will result in some additional peak-hour traffic volumes in the vicinity of the project site. However, the amount of traffic will not significantly change the level of operation at any of the intersections studied. Current traffic flows in the vicinity of the site were identified through a collection of traffic count data which includes school bus traffic, as well as traffic to the DPW and other light industrial uses in the area. This data was supplemented with detailed turning movement counts at various intersections to determine peak hour turning movement traffic volumes.

To estimate the potential impacts of the proposed project to local area roadways, a capacity analysis was undertaken at each of the intersections for each of the weekday AM and PM peak and Saturday peak hours utilizing 2007 No-Build and 2007 Build Traffic Volumes. Results of the capacity analyses and any recommended improvements are described below. (A summary of the capacity analyses and Levels of Service is provided in Table 6-2.)

- At the H-Bridge Ramps visibility and conflicting turning movements reduces the efficiency and capacity of the H-Bridge Ramps. Therefore it is recommended that new interconnected traffic signals be installed at the H-Bridge Ramp intersections to control traffic flow.
- At the unsignalized intersection of US Route 9 and Franklin Street, the Franklin Street westbound approach is currently experiencing peak hour delays. In order to improve the operation of this intersection a Traffic Signal should be installed subject to NYSDOT approval. Associated with this installation, the restriping of the existing pavement should be completed to provide a separate left turn lane on

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U.S. Route 9 northbound. Some pavement restriping on Franklin Street may also be required. These changes will result in a more efficient operation.

- Several of the Village roadways south of Franklin Street (from Church Street to Riverview Avenue and Independence Avenue and Park Avenue to Miller Avenue) are used by traffic to/from U.S. Route 9. The improvements identified for the U.S. Route 9/Franklin Street intersection would alleviate traffic in these areas during peak hours.
- At the unsignalized intersection of U.S. Route 9 and Church Street, the Church Street approach is currently experiencing peak hour delays. It should be noted that it is common for the side road approach (minor movements) to operate with delays while the major road is operating at better Levels of Service. If a Traffic Signal is installed at the U.S. Route 9/Franklin Street intersection as discussed above, there should be increased gaps in the traffic stream along U.S. Route 9, which will benefit unsignalized intersections such as Church Street, Independence Avenue, and Park Street.
- The signalized intersection of U.S. Route 9 and Main Street/Neperan Road is currently experiencing peak hour delays. However, due to site constraints, such as the presence of on-street parking, there are no significant improvements which can be easily implemented to increase capacity with the exception of signal timing modifications. Therefore, improving traffic flow by instituting more signal timing would require removal on-street parking near the intersection or modifying portions of other local streets to function as one-way roadways. Improvement of this intersection would benefit traffic flow both north and south along U.S. Route 9.
- The U.S. Route 9/Beekman Avenue and U.S. Route 9/Bedford Road intersections are dependent on each other. The signal phasing and timings should be modified to improve the efficiency and operation of these two intersections.
- As shown on Table 6-3, signal timing modifications at other area intersections may also be required under future conditions.
- Install new signing along U.S. Route 9 and the various approach roads to efficiently direct traffic to and from the new Ferry Landings development.

### *Consideration of Lighthouse Landing*

The Lighthouse Landing Development is a major mixed-use development proposed on the former GM property in the Village of Sleepy Hollow. The development consists of a mix of residential units with retail and commercial space. In order to account for this

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development, estimates of the traffic associated with this project were made and are summarized in Table 6-3. It is anticipated that this development will occur over a longer period of time than the Ferry Landing project, which will allow for a gradual introduction of additional vehicle trips.

## Socioeconomic

### *Population and Housing*

At full buildout, the proposed Ferry Landings development is expected to introduce approximately 287 new residents to the Village of Tarrytown,<sup>5</sup> which would represent an increase of 2.2 percent to the total Village population. Based on current statistics provided by the U.S. Census Bureau, the estimated population generated by the proposed project is consistent with the demographic growth of the Village, which is expected to continue to increase at a slow, and steady rate.

The proposed design and layout of Ferry Landings development will be planned to complement the aesthetic character of the area and the desired development plan for the waterfront. Ample landscaping and vegetative buffering will be provided (see Appendix K, "Illustrative Architectural Drawings of Dwellings and Visible Site Improvements"). The architectural style of the buildings in Ferry Landings will reflect that of the historic buildings along Broadway (Route 9) and Main Street in Tarrytown. Thus, many of the buildings will be fashioned in brick with gabled mansard roofs (see Appendix K, "Illustrative Architectural Drawings of Dwellings and Visible Site Improvements").

## Fiscal

The development of Ferry Landings will result in new costs incurred by the municipality and by the school system due to new demand. However, the project will also generate annual property tax revenues of \$481,897 to Westchester County, \$26,902 to the Town of Greenburgh, \$1,100,337 to the Village of Tarrytown, and \$2,689,039 to the School District (see Chapter 7.B, "Fiscal"). This 821% increase in taxes will produce tax revenues greater than the municipal and school district costs incurred due to extra demand for their services.

## Community Facilities and Services

### *Solid Waste*

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<sup>5</sup> The 1994 Urban Land Development Impact Handbook, Exhibit II.1 Regional and National Demographic Multipliers for common configurations of standard housing types for total household size (Northeast Region).

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The NYSDEC<sup>6</sup> estimates that residential solid waste production is approximately 2.4 pounds per person per day, while *The 1994 Urban Land Institute Development Impact Assessment Handbook* estimates office/commercial solid waste production to be approximately two pounds per day, per employee. Based on these multipliers, it is estimated that the proposed development will generate approximately 15,273 pounds of solid waste per week, or approximately 30.5 tons per month.

It is anticipated that Tarrytown's Department of Public Works (DPW) will provide both residential and non-residential pick-up of solid waste two times per week with a maximum of two 32 gallon containers of garbage per pick up. Should commercial waste exceed the DPW limits, commercial tenants will employ a private hauler for solid waste disposal.

### *Water Supply*

The estimated water demand for the project is 75,500 gallons per day (gpd). The Village of Tarrytown Engineer, Mr. Scott Weaver, indicated that the Village has sufficient water capacity and the water mains are capable of serving the proposed Ferry Landings project, and therefore no impacts are anticipated.<sup>7</sup>

### *Sanitary Sewer*

The proposed wastewater generation for the project is similar to the water usage rate which is 75,500 gpd. The Westchester County Sewer Authority has adequate capacity in gravity sewer trunk lines, pump stations, and the Yonkers Wastewater Treatment Facility to treat the additional 75,500 gpd that will be generated by the proposed project.<sup>8</sup>

### *Emergency Services (Ambulance, Police, and Fire)*

The proposed mixed-use development will generate approximately 287<sup>9</sup> new residents. As such, an increase in demand may be placed on police, fire, and emergency medical services due to the increased population.

According to the Village of Tarrytown Police Department, "based on the proposed residential density of the project and the anticipated 'daytime' population, the

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<sup>6</sup> William R. Troutman Associates. 1972. *NYSDEC Comprehensive Solid Waste Study. Final Report (CSWP-21)*. William R. Troutman Associates, Poughkeepsie, NY.

<sup>7</sup> Personal communication, June 23, 2004.

<sup>8</sup> Personal communication, John Devany, Westchester County Sewer Authority.

<sup>9</sup> The 1994 Urban Land Development Impact Handbook Exhibit II.1 Regional and National Demographic Multipliers for common configurations of standard housing types for total household size (Northeast Region).

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department should be able to provide adequate police coverage.<sup>10</sup> Although numerous attempts to obtain additional information regarding specific Fire Department and emergency medical resources and capabilities have been unsuccessful, the Ferry Landings development is similar to existing land uses throughout the Village of Tarrytown, and, it is therefore unlikely that the development will create unique or unusual public safety considerations. The proposed project is not anticipated to have a significant impact on the Police Department, or on the fire or EMS services offered to the residents of the Village of Tarrytown. It is anticipated that some of these new residents may volunteer for the Tarrytown Fire Department or the Tarrytown Volunteer Ambulance Corps, thereby providing additional fire and EMS services to all residents of the Village.

### *Schools and Day Care for Children*

Upon full build-out, the proposed Ferry Landings development is expected to generate approximately 30 new school age children, 15.5 percent of which are anticipated to attend private schools (four students).<sup>11</sup> As a worst case scenario, however, if all 30 students were to attend public school, they would be distributed among the Union Free School District of the Tarrytowns (UFSDT) as follows: 20 new students to the Elementary School, 0 to the Junior High School, and 10 to the High School.<sup>12</sup>

These 30 additional students would bring the current School District enrollment to 2,639 students, which is an increase of approximately one percent of the total 2003 – 2004 student enrollment for the District. Although the total enrollment is currently above total capacity, the School District will begin construction on an extensive renovation and expansion project by the Spring of 2005 that will increase the School District enrollment to at least 2,900 students. Furthermore, the UFSDT anticipates a decrease in student enrollment by the 2009 – 2010 school year.

The introduction of 4 additional students from the proposed project will bring the enrollment at the two existing private schools in Tarrytown to a total of 1,037 students. As the current enrollment capacity of these schools is 1,060 students, even with the additional 4 students, Tarrytown's private schools will have an excess capacity of 23 students.

The proposed project is expected to generate approximately \$2,689,039 in annual property tax revenues and an annual net surplus of \$2,282,299 to the UFSDT (which is \$2,400,119 more than the annual revenue the site currently generates).

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<sup>10</sup> Based on correspondence received from Chief Scott W. Brown of the Tarrytown Police Department, dated January 6, 2004.

<sup>11</sup> The Public Schools of the Tarrytowns Demographic Analysis and Enrollment Forecast, Lloyd Bishop Associates, April 2002.

<sup>12</sup> Based on multipliers provided in The 1994 Urban Land Development Impact Handbook, Exhibit II.3 Regional and National Demographic Multipliers for common configurations of standard housing types for school aged children (Northeast Region by grade category).

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The proposed Ferry Landings development will generate approximately 24 children that will require the use of day care facilities. Although most of the child care centers are at or near capacity, there are currently several openings in school age programs and family child care providers throughout Tarrytown with adequate capacity to support the additional 24 preschool age children that may require the use of day care facilities as a result of the proposed Ferry Landings development.<sup>13</sup>

## Cultural Resources

### *Cultural Resources*

The ongoing industrial operations at the site, including construction, demolition, and redevelopment, manifests significant ground disturbance within the proposed development area. The mapping and photographic inventory provided in Appendix J also evidences a lack of historical significance of on-site structures. Therefore, as the project site is largely comprised of fill material, and has been subject to substantial prior ground disturbance, the proposed action will not impact archaeological or historical resources.

### *Visual Resources*

The project site currently hosts industrial uses that blight the waterfront and non-conforming to surrounding land uses. The Hudson River provides a terrific natural landscape, however, viewsheds from the surrounding area are all tainted by the industrial nature of the site, which impedes views of the River and the Hudson River Valley.

The proposed action will significantly improve the visual resources by provided a mixed-use development designed according to the "Tarrytown Hudson River vernacular" style, which respects and conforms with historic Hudson River architectural styles seen in downtown Tarrytown and Sleepy Hollow. A buffer of green space will enhance visual resources to and from the Hudson River, as it will prevent buildings from being sited directly on the river. Any remaining industrial uses, including the Department of Public Works and the relocated asphalt plant will both be screened from the project site and the surrounding area with 12-16 foot high "courtesy wall."

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<sup>13</sup> Based on a conversation with Nicole Modaferrri at the Child Care Council of Westchester County on April 27, 2004.

## **F. Summary of Mitigation Measures Proposed for Significant Project Impacts**

The following summary outlines all of the proposed mitigation for significant adverse impacts identified in the environmental impact statement.

### Land Use, Zoning and Public Policy

#### *Land Use*

The proposed action will adaptively reuse 30± acres of underutilized commercial and industrial land along the Tarrytown waterfront in a manner that will advance the *Village of Tarrytown LWRP's* recommendations for development and use of the Hudson River waterfront in and around the Village. The project will incorporate design measures that evoke a traditional feel and provide public access to the Hudson River, a sharp contrast to the vacant paved landscape that the site currently offers.

As the proposed project will improve conditions along the waterfront, no adverse impacts to existing land uses or activities are anticipated, and therefore no mitigation measures beyond those described above are proposed.

#### *Zoning*

As the proposed development is consistent with existing land uses and activities in the area, and will comply with the requirements set forth in the Village of Tarrytown Code, no mitigation measures are required.

#### *Public Policy*

The proposed project complies with requirements set forth in the Village of Tarrytown Code, is compatible with existing land use in the surrounding area, will utilize public water and sewer, and will revitalize an underutilized portion of the Hudson River Waterfront. As this furthers the goals and objectives of local and regional planning initiatives, no further mitigation is proposed.

### Natural Resources

#### *Topography*

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Based on the relatively flat nature of the terrain at the proposed building locations, there will be minimal impacts to topography associated with construction, and therefore no mitigation measures are necessary.

### *Soils*

Impacts to soils and geology will be minimized through erosion control measures and the establishment of Best Management Practices (BMPs).

All BMPs will be inspected upon installation and maintained to continue to function properly. In order to do so, the following list of procedures will be followed during the construction phase of the project:

- All erosion control devices will be inspected at least once a week and following any storm event of 0.5 inches of rain or greater.
- All erosion control devices will be maintained in good working order. If a repair is necessary, it will be initiated within 24 hours of a reporting.
- Sediment will be removed from silt fences when the sediment has reached one-third the height of the fence.
- Silt fences will be inspected for depth of sediment, tears, and to see if the fabric is securely attached to the fence post. Additionally, an inspection of each individual fence post will be performed.
- Diversion swales and dikes will be inspected; any and all breaches will be repaired.
- Temporary seeding will be inspected for bare spots, washouts, and healthy growth; additional seeding will occur as required.
- A maintenance report will be prepared after each inspection and will be kept on file at the project site.
- All individuals performing on-site inspections of the control devices will be familiar with the Erosion Control Plan. Inspectors will be trained in all inspection and maintenance practices in order to keep the erosion and sediment control devices in good working condition.

After the project is completed and all bare soil is covered with vegetation, the potential for erosion on the site will be reduced significantly. After sturdy growth has occurred,

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the temporary erosion control devices will be removed. Permanent erosion control devices will include the storm sewer system, and permanent swales that convey runoff.

### *Vegetation and Wildlife*

As there is currently no significant vegetation or natural habitat on the site, these aspects will not be negatively affected either by the construction or by the proposed development and no mitigation measures are necessary. The proposed layout has been designed to minimize indirect impacts, including those associated with vegetation and marine wildlife.

With respect to the aquatic environment, as the project will take place inland, no mitigation measures will be required beyond the standard environmental protection techniques during construction. Once completed, the increased vegetation buffer along the river will improve the aquatic habitat and protect the river's species.

### *Water and Waterfront Resources*

The proposed layout has been designed to minimize indirect impacts associated with the development, including stormwater impacts. Best Management Practices (BMPs) will be incorporated in the engineering design of the project to meet or exceed New York State stormwater standards. In addition, the post-development conditions for the site contain a greater amount of vegetated area than pre-development conditions, increasing infiltration and decreasing peak flow rates. More information characterizing on-site stormwater is found in Section 5.0 "Stormwater Management".

Development of the site will result in the removal of existing pavement and the disturbance of topsoil, which has the potential to increase erosion and stormwater runoff on site during construction. Implementing an erosion and sediment control plan (see Chapter 3.B, "Soils") will minimize potential impacts. A number of erosion and sediment control measures have been incorporated into the design of the project to minimize soil erosion and to control sediment transport off-site.

Downstream properties and existing off-site drainage facilities will not be affected by the proposed development, as post-development stormwater runoff rates from the site are proposed to be lower than that of the existing stormwater runoff rates. Stormwater BMPs will be implemented throughout the site to ensure that there is an 80% reduction of total suspended solids (sediment) and a 40% reduction in total phosphorous as required by New York State guidelines.<sup>14</sup> As a result of the

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<sup>14</sup> *New York State Stormwater Management Design Manual. New York State Department of Environmental Conservation. 2001*

stormwater management practices implemented, it is anticipated that this design will mitigate the impacts associated with stormwater.

### *Wetlands*

There are no wetlands or watercourses located on the project site, and consequently, there is no need for mitigation measures.

During construction, a set of best management practices (BPMs) will be incorporated into the development, in order to protect the Hudson River and its estuaries from potential negative impacts. Erosion control devices, such as silt fences, check dams, sediment basins, and diversion swales will prevent sediment run-off into the River. In addition, the site area will be enclosed with fencing and buffered with vegetation as to prevent the accidental release of construction materials or debris into the River.

### *Bedrock Depth and Water Table*

It is anticipated that the proposed project will not impact the underlying bedrock or water table, and therefore, no mitigation measures are necessary.

### *Air Quality*

Mitigation measures to avoid impacts on air quality during construction are principally designed to prevent blowing of dust off-site. The following measures will be undertaken to avoid blowing of dust off-site:

- Planting of vegetative cover at the property boundary as a screen to trap fugitive dust emissions and prevent off-site release to the maximum extent practical.
- Placement of all removed topsoil into a topsoil storage area which would be seeded with quick cover vegetation to prevent erosion.
- Grading and gravelling of all roadways along with periodic regrading, compacting, and replacement of gravel as needed.
- Wetting of the roadways with water as needed.
- Trucks and on-site equipment will be appropriately covered, washed, and maintained as necessary to minimize the amount of fugitive dust generated during construction and related activities.

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- Maintenance of clearly delineated vehicle circulation patterns and access, and a maximum on-site speed limit of 15 mph to minimize pulverization and lifting of surface soil in the air-flow behind heavy equipment.
- Upon completion of building construction, upgrading all roads with pavement and drainage structures.

Studies performed on the adjacent asphalt plant with regard to health issues (see Appendix G, "Asphalt Plant Relocation Environmental Review") show that there are no significant health impacts to residents, both within Ferry Landings and in the surrounding area, due to the proximity of the Peckham Materials HMA plant. All exposure levels by the general public will be well within limits established by OSHA, USEPA, and/or NYSDEC.

Fugitive dust emission is the only issue that the required mitigation addressed in the site plan, in the form of protective buffering. Such buffers will surround and enclose the HMA facility site, and will consist of 12-16 foot high wood and steel walls with pine trees and other plantings, which will prevent the dispersal of fugitive dust particulate matter from Peckham Materials's plant into the surrounding community. This buffering will also help mitigate noise from the operation of the facility.

### Hazardous Materials

Since the proposed action is not expected to result in any adverse impacts to the remediation program, no mitigation is necessary.

### Stormwater Management

The stormwater conveyance system for the project will include the use of shallow channels, catch basins, and corrugated plastic culvert pipe. Stormwater runoff from impervious surfaces will be collected and conveyed to the treatment facilities prior to discharge.

According to the NYSDEC "Stormwater Management Design Manual", dated October 2001, under "Section 4.5, Extreme Flood Control Criteria", a 100-year stormwater runoff attenuation requirement may be waived if the stormwater is directly discharged into a fourth order or larger stream or a tidal river. The Hudson River is a tidal river at Tarrytown, therefore BMPs will be designed so that runoff from 100-year storm events will discharge directly from the stormwater treatment facilities to the river without attenuation. Downstream properties and existing off-site drainage facilities will not be affected by the proposed development stormwater runoff because the

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anticipated rates from the site are proposed to be lower than that of the existing stormwater runoff rates.

### Traffic

Although some of the intersections analyzed in the TIS were found to experience Levels of Service "E" and "F" under both future No-Build and Build conditions, as previously mentioned, the additional traffic generated by the Ferry Landings development will not significantly increase the delays for these movements. The following mitigation measures are provided relative to the proposed subdivision:

Installation of new traffic signals and roadway improvements would serve as traffic calming devices. These will be coordinated by the Applicant with the NYSDOT.

Several of the signalized intersections will require timing adjustments under future conditions, with or without the proposed development. These will be coordinated by the Applicant with the NYSDOT.

The on-site circulation roadways will provide access between each of the uses and will be designed to accommodate emergency vehicles. In addition, sidewalks will be provided for on-site pedestrian circulation.

In addition, the following issues were considered:

#### *Construction Vehicles/Access*

Construction traffic and activities will generally be conducted Monday through Saturday, between 7:00 AM and 6:00 PM. As construction vehicles will be coming to the site from various locations at various times, it is anticipated that there will not be significant impacts to surrounding roadways from construction vehicles. Furthermore, heavy equipment will be delivered to the site and will remain on the site until that piece of equipment is no longer needed, thereby reducing daily traffic trips. No further mitigation is proposed.

#### *Access Points Relative to Traffic Safety*

The proposed site access connections are located at areas that provide adequate sight distance for exiting and entering vehicles.

### Socioeconomic

#### *Population and Housing*

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It is estimated that the proposed project will introduce approximately 287 new residents to the Village of Tarrytown's population. As this represents only a 2.6 percent increase from the 2000 recorded population, it is anticipated that these additional residents will not impact the community significantly, as this level of growth is consistent with the 1 to 3 percent growth rate that the Village has experienced over the past twenty years. Therefore, no mitigation measures are necessary.

Furthermore, the proposed redevelopment of the site will create additional housing stock, waterfront uses, and access to 30± acres of currently underutilized, unattractive industrial land, and will offer a residential setting in close proximity to the Metro-North Railroad Station for residents who commute to New York City.

### Fiscal

Ferry Landings is expected to generate annual net revenues of approximately \$1,100,337 to the Village of Tarrytown and \$2,689,039 to the UFSDT.

In addition to increased tax revenue, the additional disposable income brought into the Village and the County by virtue of the residents living in the proposed development will generate additional sales at local area businesses.

### Community Facilities and Services

#### *Solid Waste*

It is anticipated that Tarrytown's Department of Public Works (DPW) will provide both residential and non-residential pick-up of solid waste two times per week with a limit of two 32 gallon containers of garbage per pick up. Should commercial waste exceed the DPW limits, commercial tenants will employ a private hauler for solid waste disposal.

#### *Water Supply and Sanitary Sewer*

As the water system, sewage collection system, pump station, and wastewater treatment system have sufficient capacity to serve the proposed facility, no mitigation measures are necessary.

#### *Emergency Services (Ambulance, Police, and Fire)*

The primary water source for fire fighting purposes will be provided by fire hydrants installed no more than 500 feet apart on the site. The water system for the proposed

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Ferry Landings development will be based upon *National Fire Protection Association (NFPA) Fire Protection Handbook* Section 17, "Water Supply Requirements for Fire Protection," to ensure that fire fighting needs will be adequately met.

Despite the increased population generated by the proposed development, the increased annual tax revenue generated by the project, coupled with the potential for new volunteers, is expected to offset any impacts the project may have on the Fire and Police Departments, or the Volunteer Ambulance Corps. Based on 2003 tax rates, the proposed development is expected to provide an additional \$979,177 in annual revenue to the Village of Tarrytown.

No further mitigation measures are proposed, as the Ferry Landings development is not expected to result in an adverse impact to the police, fire, or EMS protection services offered to residents in the Village of Tarrytown.

### *Schools and Day Care for Children*

The proposed project will result in a net positive fiscal impact of \$2,282,299 to the UFSDT. Construction on an extensive renovation and expansion project is expected to begin by the Spring of 2005. Therefore, no further mitigation measures are necessary.

Furthermore, Tarrytown's private schools are expected to maintain an excess capacity of 23 students upon full build-out of the proposed Ferry Landings development, and as such it is anticipated that the proposed project will not impact private school capacity.

School age programs and family child care providers located throughout Tarrytown have adequate capacity to support the additional 24 preschool age children that may require the use of day care facilities as a result of the proposed Ferry Landings development.<sup>15</sup> Therefore, as the proposed project will not impact capacity, no mitigation measures are necessary.

### Cultural Resources

#### *Cultural Resources*

As there are no known important historical or archaeological resources on the site worthy of preservation, there will not be any impacts to cultural resources from the proposed development, and no mitigation measures are proposed.

#### *Visual Resources*

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<sup>15</sup> Based on a conversation with Nicole Modafferri at the Child Care Council of Westchester County on April 27, 2004.

As the proposed action represents a significant improvement upon the existing visual and aesthetic resources, no mitigation measures are necessary.

## **G. Description of Alternatives Analyzed**

Please refer to Chapter 10, "Alternatives" of this document for an outline all of the proposed mitigation for significant adverse impacts identified in the environmental impact statement.