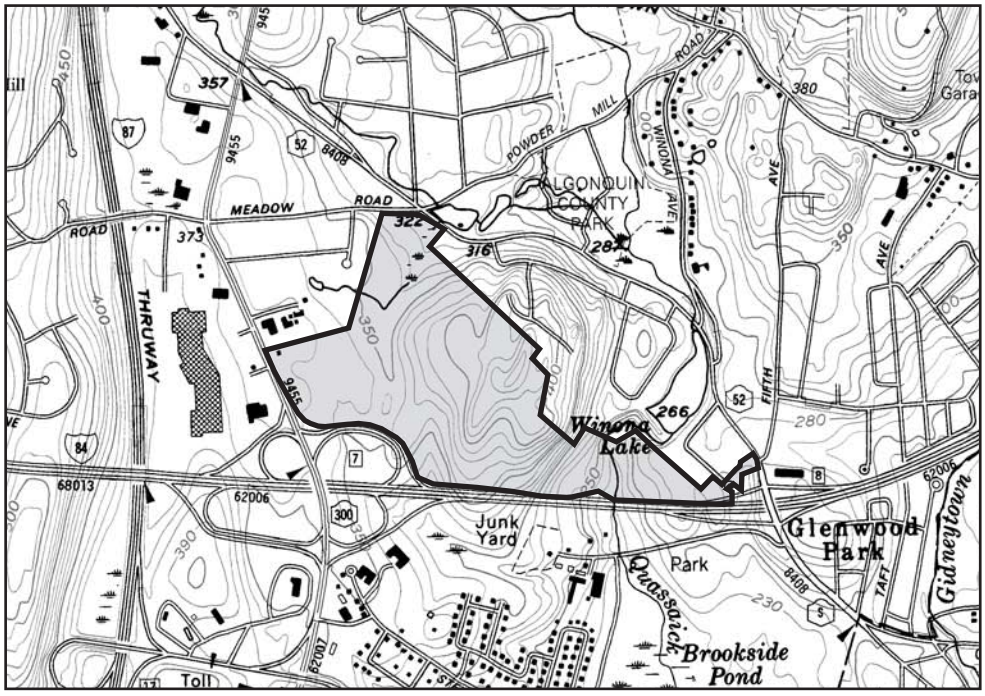
DRAFT ENVIRONMENTAL IMPACT STATEMENT

VOLUME I



THE MARKETPLACE AT NEWBURGH

TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

Prepared by:
Tim Miller Associates, Inc.

Project Sponsor:
Wilder Balter Partners, Inc.

Lead Agency:
Town of Newburgh Planning Board

April 4, 2006

THE MARKETPLACE AT NEWBURGH
DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

Project Description: The applicant proposes the construction of a commercial shopping center consisting of approximately 850,000 square feet on 127.6 acres of primarily vacant land within the Interchange Business (IB) zoning district opposite and east of the Newburgh Mall.

Location: The project site is located at the northeast quadrant formed by the intersection of NYS Route 300 with Interstate Route 84 in the unincorporated area of the Town of Newburgh, Orange County, NY. Access to the site would be via NYS Route 300 and NYS Route 52.

Tax Map Identification: (Tax Map/Block/Lot Numbers): 60/3/49.22; 60/3/49.1; 60/3/41.3; 60/3/48; 60/3/41.4; 60/3/49.21; 71/4/7; 71/4/8; 71/4/9; 71/4/10; 71/4/11-14; 71/5/9; 71/5/15,16; 97/1/13.3; 97/1/20.3.

Lead Agency and Contact Person: TOWN OF NEWBURGH PLANNING BOARD
c/o Norma Jacobsen, Planning Board Secretary
308 Gardnertown Road
Newburgh, NY 12550
(845) 564-7804

Project Sponsor: WILDER BALTER PARTNERS, INC.
570 Taxter Road, Sixth Floor
Elmsford, NY 10523
Contact: Bob Wilder
(914) 347-3333

DEIS Preparer: TIM MILLER ASSOCIATES, INC.
10 North Street
Cold Spring, New York, 10516
Attention: Tim Miller, AICP
(845) 265-4400

Lead Agency Acceptance Date: May 4, 2006

Date of Public Hearing: June 1, 2006

Deadline for Receipt of Public Comments: TBD

April 4, 2006

LIST OF PRIMARY CONSULTANTS

DEIS :	TIM MILLER ASSOCIATES, INC. 10 North Street Cold Spring, New York, 10516 (845) 265-4400 Contact: Tim Miller, AICP
Site Engineer/ Stormwater Management:	DIVNEY TUNG SCHWALBE One North Broadway, 14th Floor White Plains, NY 10601 (914) 428-0010 Contact: Mark Gratz, P.E.
Architect/Site Planning:	MSA COLLABORATIVE 23 Nepperhan Avenue Elmsford, NY 10523 (914) 345-1333 Contact: Ian Levy, RA, AIA
Architect/Life Style Center:	ADD Inc. 210 Broadway Cambridge, MA 02139 (617) 234-3100 Contact: Larry Grossman, RA, AIA
Traffic Engineer:	JOHN COLLINS ENGINEERS, P.C. 11 Bradhurst Avenue Hawthorne, NY 10532 (914) 347-7500 Contact: Philip Grealy, P.E.
Surveyor/Wetlands:	THE CHAZEN COMPANIES 356 Meadow Avenue Newburgh, NY 12550 (845) 567-1133 Contact: Martin Bayard
Noise/Air Quality:	LEMONIDES HEINEMAN ASSOCIATES 139 Fulton Street #619 New York, NY 10038 (212) 334-1962 Contact: Evan Lemonides
Land Use Attorney:	JACOBOWITZ & GUBITS 158 Walden Avenue Walden, NY 12586 (845) 778-2121 Contact: Gerald Jacobowitz, Esq.

THE MARKETPLACE AT NEWBURGH
Draft Environmental Impact Statement (DEIS)

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1.0 EXECUTIVE SUMMARY

1.1 Description of the Proposed Action

The project sponsor, Wilder Balter Partners, Inc. ("WBP"), proposes to construct an 850,000 square foot regional open air retail center on a 127.6-acre site located at the northeast quadrant formed by Interchange 7 of Interstate 84 and NYS Route 300 in the Town of Newburgh. The development, the Marketplace at Newburgh, is located across NYS Route 300 and immediately east of the existing Newburgh Mall on a property long planned and zoned for commercial use.

The Marketplace is being designed to accommodate and integrate two shopping formats. The portion of the site containing approximately 20 acres with frontage on both the Exit 7 ramp and NYS Route 300 would be developed with a 200,000± square foot "lifestyle center". A lifestyle center, the fastest growing segment of the retail market, traditionally contains smaller shops (under 20,000 square feet each) in a village center atmosphere with anchor tenants on the periphery creating a draw for destination shoppers.

Unlike traditional strip shopping centers, lifestyle centers have more of a pedestrian friendly design allowing more foot traffic, and often implementing a main street concept with minimal on-street parking. Parking lots are oriented off the main street in the rear of the buildings. Facades of the buildings will be neo-traditional design with varied storefronts and varied facade treatments to enhance the village main street theme. The tenants in a lifestyle center are typically clothing and specialty retailers, restaurants and often some entertainment uses. At the east end of the lifestyle center at the Marketplace, a 100,000 square foot retail use is planned and being designed for a national retailer.

The remainder of the site would be developed with larger retail tenants that may be in attached buildings or in a standalone format, totaling up to approximately 650,000 square feet of gross floor area.

The Marketplace at Newburgh's access drives would connect to NYS Route 300 and NYS Route 52 at three locations. The primary access to the Marketplace is from NYS Route 300 directly across from the Newburgh Mall southerly drive. Significant improvements to this four-way intersection, including the upgrade to the existing signal, is described more fully in the traffic section of the DEIS. This entrance will serve an average of 62 percent of the traffic entering and exiting the Marketplace.

A secondary "primary" entrance is planned to directly serve Marketplace customers from NYS Route 52 approximately ¼-mile north of Exit 8 on I-84, a four-way interchange. The specific location of this entrance is directly across from the NYS Route 52 and 5th Avenue intersection. Significant improvements are planned for this intersection including road widening, deceleration lanes and a traffic light. All improvements to this location and other entrance points on NYS Route 300 and NYS Route 52 will be submitted and approved by the NYSDOT which has jurisdiction over these two state roads.

It is estimated that the NYS Route 52 and 5th Avenue entrance will serve an average of 30 percent of the traffic entering and existing the Marketplace, and would provide a more convenient access point for shoppers approaching the Marketplace from westbound I-84 as well as an excellent alternative for leaving the Marketplace whether traffic intends to proceed either east or west on I-84.

By linking Exit 7 and Exit 8 with two "primary" entrances and exits, approximately 85-90 percent of the shopper traffic at the Marketplace would not need to use local streets or drive more than ¼-mile from the Interstate or Thruway road systems. Moreover, from an emergency service standpoint, these entrance/exit points coupled with the third access point discussed below, provides three alternative access routes for fire trucks, ambulances and other emergency service vehicles.

A third access point into the Marketplace is proposed at the intersection of NYS Route 52, Meadow Avenue, Powder Mill Road (CR 102) and Innis Avenue. As shown in the traffic report prepared by John Collins Engineers, P.C. (Figure 3.6-14 of the DEIS), major improvements to this intersection are planned.

Presently, as a result of the confluence of five streets at odd angles, the insufficient road width to provide a turning lane on to Meadow Avenue (westbound) for traffic proceeding northbound on Route 52, and some significant drainage issues resulting in wet and icy conditions immediately south of this intersection, this intersection needs significant improvement to function better and safer, notwithstanding the Marketplace development. As shown on Figure 3.6-14 of the DEIS and as set forth in the traffic report by John Collins Engineers (Appendix G of this DEIS), major improvements by the developer are planned to mitigate and improve all operational aspects at this intersection.

It is important to note that all these improvements to all three entrances and exits to the Marketplace are being undertaken with private capital both in design and construction.

In addition to the public improvements off-site, the developer will construct all on-site parking, access roads, retaining wall structures, stormwater facilities, utilities including water and sewer lines, internal sidewalks, and landscaping. After construction, maintenance of the occupied site would be the responsibility of the owner for the Marketplace. Maintenance costs for retail facilities are shared by the tenants through a reimbursement process known as common area maintenance cost reimbursement (commonly known as C.A.M.)

This Draft Environmental Impact Statement (DEIS) evaluates the potential environmental effects associated with the proposed development. It has been prepared in accordance with Section 8-0101, et. seq. of the Environmental Conservation Law and the regulations promulgated by the New York State Department of Environmental Conservation (NYSDEC) under 6 NYCRR Part 617 implementing the New York State Environmental Quality Review Act ("SEQRA").

1.2 List of Involved/Interested Agencies and Permits/Approvals

While many of these agencies have been contacted for preliminary discussions, no formal permitting process has begun outside of those approvals required from the lead agency.

Involved Agencies and Permits/Approvals

Site Plan Approval
Town of Newburgh Planning Board

Sanitary Sewer Extension and Pump Station Approval
Town Engineer, Town of Newburgh

City Engineer, City of Newburgh
Orange County Health Department

Abandonment of Existing Town Roads/Dedication of New Town Roads
Town of Newburgh Town Board

Sewer and Water Connection
Town of Newburgh, Town Engineer
Town of Newburgh, Water Department
Orange County Health Department

General Municipal Law Referral
Orange County Planning Department

Highway Work Permit (including traffic signal warrants)
New York State Department of Transportation
New York State Thruway Authority

SPDES General Permit 02-01, Water Quality Certificate, Dam Permit
New York State Department of Environmental Conservation

Wetland Permit (Jurisdictional Wetlands)
US Army Corps of Engineers

Blasting Permit
Town of Newburgh Building Inspector

Clearing and Grading Permit
Town of Newburgh Building Inspector

Water Main Extension, Hydrant Location and Fire Service Plan
Town of Newburgh, Water Department
Town of Newburgh, Town Engineer
Town of Newburgh Fire Inspector and Fire Chief, Orange Lake Fire District
Orange County Health Department

Permit to Conduct Work in Floodplain
Town of Newburgh Building Inspector.

Stormwater Management and Erosion Control Plan Approval
Town of Newburgh Engineer
New York State Department of Environmental Conservation

Architectural Review
Town of Newburgh Architectural Review Board

Interested Parties

- Michael Donnelley, Esq., Newburgh Planning Board Attorney
- James Osborne, P.E., Town Engineer, Town of Newburgh

- Ed Garling, AICP, Garling Associates, Newburgh Town Planner
- Ken Wersted, P.E., Creighton Manning Engineering, LLP, Town Engineering Consultant
- Karen Arent, RLA, Town Landscape Architect Consultant
- Newburgh Mall
- Orange Lake Fire District
- Wilder Balter Partners

1.3 Potential Impacts and Proposed Mitigation Measures

1.3.1 Soils and Topography

The proposed grading plan indicates that approximately 108 acres of the 127.6 acre site will be disturbed. Grading is required to build the internal road network, install site utilities and prepare level areas for retail building pads and related parking areas. In addition, grading is required to properly slope the site to the proposed stormwater management facilities. Cut and fill is required to accommodate building pads, associated parking areas and site access roadways. To minimize any off site impacts, the Marketplace has been designed to achieve a balance of cut and fill. Thus, it is anticipated that there will be no requirement to import any off-site fill material to complete construction (refer to grading plan, Figure 3.1-4).

The deepest cut occurs in the proposed parking area between Building D and E, where the existing grade would be lowered by an average of 30 feet for approximately 450 lineal feet southeast of Building D. Conversely, grades would be raised along the southerly property line adjacent to I-84, near Building B, by an average of 30 feet across a similar 450 lineal foot distance. Excavation is also required to construct on-site stormwater facilities; one would be located in the northwest corner of the site, and a second one would be situated in the southeast area of the property, near Quassaic Creek.

As stated previously, it is anticipated that there will be no requirement to import any off-site fill materials to complete construction. Further, the on-site processing and reuse of excavated materials on site will significantly reduce construction truck traffic and the potential for the off-site migration of construction dirt and debris on adjacent roads.

Construction material storage, equipment staging and soil stockpiling will occur on-site either along the access roads or on level areas of the site, in the west-central portion of the property following some site preparation. No storage facilities or staging areas are contemplated within 400 feet of the adjacent residential properties to the north.

The project would result in disturbance to approximately 19 acres of slopes 15 percent or greater.

Potential Blasting

Due to the known presence of rock outcrops, and the proposed grading required for the Marketplace, blasting will be required for the proposed development. The areas of greatest material removal will occur on the hillside at the eastern and northeastern portions of the site, and in the vicinity of Buildings C, 1, D and E. Based on preliminary estimates, the amount of materials that would be moved by blasting will range from 420,000 to 480,000 cubic yards. Of this amount, approximately half will be more than 500 feet from any residential wells servicing the homes on Hilltop Avenue.

Since the local bedrock consists of shale, it is anticipated that some bedrock near the site's surface and within utility trenches can be removed with excavators. The Material Cut Plan (Figure 3.1-6) identifies the proposed cut areas. Blasting is not anticipated for those excavation areas where the cut is less than 10 feet at the western edge of the site (north and west of Building C) or to complete construction of the stormwater detention/water quality basins.

The possible effects from blasting include flyrock, airblast (air overpressure), and ground vibration. Blasting protocol and regulations address all of these possible effects in some detail. It is expected that a single rock crusher will be used on an intermittent basis to process rock. It would be located at least 1,200 feet (> 1/5 of a mile) from the nearest residence.

Soil Erosion

As a result of soil disturbance and vegetative removal, there is an increased potential for siltation to occur in areas down gradient of the disturbed areas. A key concern is the prevention of uncontrolled stormwater runoff from impacting Quassaic Creek, on-site regulated wetlands, and areas of the construction activity.

Mitigation Measures

Soil Erosion and Sediment Control

Potential impacts associated with this project include soil erosion and sedimentation during construction. An Erosion and Sediment Control Plan has been prepared by the project engineer (see site plan accompanying the DEIS) and an Erosion Control Report is included as Appendix C. The objectives of the Erosion and Sediment Control Plan are as follows:

- control erosion at its source with temporary control structures;
- minimize the amount of sediment-laden runoff from areas of disturbance, and control runoff prior to discharge to off-site areas;
- de-concentrate and distribute stormwater runoff through natural vegetation or structural means before discharging to critical zones such as streams or wetlands.

The Erosion & Sediment Control Plan, an element of the Stormwater Pollution Prevention Plan ("SWPPP"), is subject to review by the NYS DEC and approval is required by NYS DEC prior to the issuance of a Stormwater Pollution Discharge Elimination System (SPDES) permit under GP-02-01. The Plan demonstrates how these objectives would be met.

The measures incorporated in the plan will upon implementation reduce the potential for soil erosion from areas exposed during construction and would prevent siltation of on-site regulated wetlands, Quassaic Creek and areas downstream of the project. The erosion control plan has been prepared in accordance with the requirements of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-02-01). During construction, the NYS DEC SPDES permit will require continuous monitoring of the site and erosion control measures during all construction phases of this development.

In addition to the NYSDEC requirements, erosion control measures have been designed to comply with the Clearing and Grading Control Law of the Town of Newburgh (Chapter 83 of the Town Code). The Clearing and Grading Control Law requires a permit from the Town for

specific clearing and grading activities. A purpose of the law is to prevent soil erosion and negative impacts to wetlands, streams and lakes.

The Erosion Control Report provides a construction schedule to minimize areas of exposed soils and manage stormwater runoff during the construction time frame. The construction schedule includes five phases with specific areas of disturbance, areas of cut and fill, and temporary stabilization. The location of rock crushing facilities is also provided in the phasing plans. Refer to Appendix C for the phasing of construction activities.

From the commencement of Phase 1 of construction and as a condition of the NYS DEC GP-02-01 permit, erosion will be managed by re-establishing vegetation and by installing permanent stormwater management devices as shown on the site plan drawings. The permanent stormwater management systems will be constructed in the first phase of the development in conjunction with the grading activities to install the internal driveway system so that "sediment traps" are functional as early as possible in the construction period.

Blasting

As described previously, the applicant will be required to conduct all blasting activities in accordance with New York laws and the Town of Newburgh Blasting Law (Chapter 66 of the Town Code). The Town blasting regulations contain specific requirements for insurance and the posting of a bond with the Town. In addition, the Town Code and the Permit include technical requirements for the conduct of blasting work. Unless otherwise authorized by the Town of Newburgh, rock drilling and blasting shall be limited to weekdays from 8:00 AM to 6:00 PM or sunset, whichever is earlier. Adjacent property owners will be notified prior to the commencement of blasting. Blasting will begin in the center of the site and proceed toward the northern boundary.

All required blasting at the site would be conducted using methods to mitigate potential impacts to neighboring properties and residences. Where blasting is required, the blasting protocol below would be followed:

- All blasting will be conducted in accordance with New York State requirements (Title 12 of the New York Code of Rules and Regulations (12 NYCRR Part 39).
- All blasting will be conducted in accordance with Chapter 66 - Blasting Law of the Town of Newburgh.
- Blasting will be conducted by qualified and insured blasting contractors.
- Pre-blasting inspections will be conducted of all off-site structures and wells located within 500 feet of the blasting area upon authorization by the property owner. These inspections will include photographic and/or video documentation.
- The contractor will conduct test blasting and seismographic monitoring prior to carrying out blasting operations in order to determine appropriate on-site blasting techniques.
- Seismographic monitoring will continue throughout the periods of blasting at the site, and daily logs of seismographic data, explosive use and field conditions will be maintained.
- Prior to blasting and if deemed necessary, blasting mats will be placed to eliminate fly rock.
- The blasting contractor would be liable for any damage to off-site properties resulting from potential blasting activities.

While there is concern by local residents in Hilltop Avenue regarding potential impacts to their private wells from blasting, in fact, such an impact actually occurring is quite rare. Interviews with health department representatives in Orange, Dutchess and Putnam County were conducted. No recorded incidents of well damage due to blasting was found in any of the three counties.

Any documented impact to private wells will be remedied by the blasting contractor. Remedies may include the installation of particle filters prior to or during the blasting phase if turbidity (suspended sediment) is found in private wells.

If wells are damaged or if their pre-blasting yield is affected, remedies may include deepening or replacing affected wells. The applicant will develop a well monitoring plan to obtain water level data on wells within 500 feet of blasting sites, before, during and after blasting.

The monitoring procedures will be strictly complied with as the blasting operation moves closer to these residences. In this way, the impact can be gradually monitored and measured to see what impacts, if any, occur as the blasting proceeds closer to the residences.

The applicant will address Town or resident concerns regarding blasting in consultation with the Town Building Inspector, Town Engineer, and Town fire official, and certain specific mitigation measures may be incorporated in the Town Blasting Permit issued for this project.

1.3.2 Wetlands

In order to build the site access roads from NYS Routes 300 and 52, some placement of fill will occur in ACOE-regulated wetlands. The approximate 1.76 acres of on-site regulated wetlands that would be so affected by this and other ancillary construction activity is shown on the site grading plan. The applicant will be required to apply for and receive an individual permit from the ACOE, prior to any disturbance of the regulated wetland areas and will thus be in compliance with Chapter 185, Zoning (185-22), of the Town Code. There are no NYSDEC regulated wetlands on this site and no wetland permit is required from the NYS DEC.

The proposed access roads cross Wetland A in two locations, and require grading along the edge of the wetland in four other locations. The Applicant proposes to construct 1-on-1 slope rip rap embankments in these areas to minimize wetland impacts. Disturbance to Wetland A totals 1.47 acres. None of the disturbance is related to building or parking lot construction. Without these disturbances, road construction and safe traffic circulation would not be possible for this development that otherwise meets the Town's zoning regulations.

At the east end of the site, a road crossing over Quassaic Creek is proposed in order to provide access to NYS Route 52 near the Route 84 interchange. Direct impacts would occur to Wetland E as a result of the filling necessary to construct footings for the large box culverts that are proposed. It is estimated that 0.29 acres of regulated area will be affected. Since the function of Wetland E is primarily to convey Quassaic Creek stream flow and occasional overflow from storm events, maintenance of this function has been considered in the mitigation plan presented below.

Isolated Wetlands B and C, constituting 4.88 acres, are located within the area of proposed development. These wetlands are not regulated and will be filled. The primary function of

Wetland B and C, i.e., the storage of stormwater runoff, will be replaced by proposed on-site stormwater management basins.

If not mitigated, the loss of these wetland areas would result in a reduction of the stormwater quality and quantity management function that is currently provided by them. However, the Applicant proposes to mitigate these wetland impacts.

Construction-Related Impacts

Erosion and sedimentation are potential indirect impacts to wetlands. As a result of additional impervious area, more surface runoff will occur. The proposed development would also increase pollutant loadings found in stormwater runoff. During construction activities, potential short-term construction impacts from grading activities and stockpiling of soil materials can impact surface water quality both on site and downstream.

Long-term changes to surface water quality can result once the development is complete and operational. Increased pollutants typically associated with commercial land use activities, including stormwater runoff from the paved areas and rooftops, can be expected.

Wetland Mitigation Plan

Four locations on site have been chosen for the mitigation of the direct impacts to site wetlands. A total of 1.79 acres of new/expanded wetlands would be created. The locations of these areas are shown on Figure 3.2-3 of the DEIS and planting and grading plans are provided in Appendix J.

The wetland mitigation areas associated with Wetlands A and E will be excavated in a manner that is consistent with the existing wetlands, and will be re-planted with trees, shrubs and herbaceous vegetation that are indigenous to the site. Only native species will be utilized, and a maintenance and monitoring plan will be prepared to ensure long term success of the plantings and the establishment of hydrology. A list of species to be used in these wetland expansion areas is included as Table 3.2-3 of the DEIS.

The creation of stormwater basins will mitigate against the loss of the functions that Wetland B and C provide. The stormwater basins will be planted with herbaceous wetland vegetation, and provide wetland habitat as well as control of stormwater quality and quantity. While no direct credit is being taken for these basins as wetland creation areas, they will in fact perform several wetland functions and result in a net increase of wetland function and benefits to the site following construction.

A possible indirect impact that may result from the activities in Wetland A is the diversion of surface and shallow lateral groundwater flow from one area of the wetland to another. Construction of the road crossings could prevent water from flowing to portions of the wetland, creating isolated areas that do not receive the requisite amount of water to maintain wetland conditions. This would be mitigated by installation of a number of culverts that will ensure the continued hydrologic connection between the existing wetlands, as well as providing necessary hydrology to the wetlands that will be created.

Erosion and Sediment Control Plan

An Erosion and Sediment Control Plan has been developed and provided with the site plan. All soil erosion and sediment controls will be installed in accordance with Best Management Practices of the NYS DEC Soil Erosion and Sediment Control Manual[1], Orange County Soil Conservation Service, and the Town of Newburgh municipal code.

The primary aim of this plan is to minimize the potential for soil erosion from areas exposed during construction and prevent sediment from reaching down gradient wetlands, watercourses, and adjacent properties. Prior to the commencement of any phase of this project that will result in the disturbance of soils, erosion and sediment control measures will be placed in accordance with the specifications on the engineered drawings. These measures will be maintained and left in place until permanent vegetative cover is established.

As described in Chapter 3.1 and depicted on the full size plan, the erosion control plan includes the following elements.

- Install protective fencing around trees and other features to be preserved.
- Install stabilized construction entrances and temporary perimeter silt fencing around the construction area.
- Construct permanent water quality and detention basins and install temporary swales and berms as needed to direct runoff to the basins. The basins will be utilized as temporary sediment traps during construction.
- Clear and grub vegetation, remove existing structural debris. Strip and stockpile topsoil as indicated on the erosion control plan.
- Provide temporary sediment protection at all stormwater inlets.
- Maintain silt fence barriers, sediment traps, and other erosion control measures in working order throughout the construction period.
- Plant, seed or pave all disturbed areas in a timely manner to prevent or minimize erosion.
- Monitor site to ensure establishment of all landscape plantings and other permanent erosion control measures at the site. Promptly stabilize and restore damage to plantings and seeded areas.

To mitigate the increase in stormwater runoff that would result from construction of the project, stormwater facilities have been designed to prevent impacts to on site wetlands and downstream areas. Water detention basins are proposed to reduce post-development peak flow rates to levels at or below existing rates.

Stormwater Management Plan

To address impacts to surface water quality, stormwater quality measures have been engineered in accordance with NYS DEC requirements. These designs, which are discussed in greater detail in Section 3.4, incorporate the standards presented in the New York State Stormwater Management Design Manual. The intent of these measures are to also meet the requirements of Section 157 of the Town of Newburgh Code.

[1] NYS DEC. April, 2005. Soil Erosion and Sediment Control Manual.

Road Crossing

To mitigate the impact to wetlands and wetland habitat at the proposed location of the Quassaic Creek crossing, the developer will install a single arched culvert approximately 40 feet in diameter to span the creek, thereby preserving significant portions of the wetland along the stream banks and the stream bed, and allowing fish and other aquatic species to pass unimpeded under the arch.

1.3.3 Terrestrial and Aquatic Ecology

The proposed project would result in the removal of approximately 108 acres of vegetation, of which 1.76 acres would be regulated wetlands. An additional 4.88 acres of isolated wooded wetlands, which are not regulated by any agency will be filled in order to accommodate the proposed "lifestyle center".

The site does not support known threatened or endangered species or State-listed species of special concern. Only species that are common to urban/suburban areas were identified on the property, and based on the transitional nature of the site vegetation (from past agricultural uses to successional woodlands) only common species are likely to exist on site. Connections to open space areas to the north (Algonquin Park) and the south (associated with Brookside Pond) have been cut off by previous development, traffic on NYS Route 52 and the construction of Interstate 84.

The site supports a relatively diverse tree community. Approximately 15.8 acres of the site, all of which are wooded, will be preserved in blocks as large as 4.5 acres. Combined with the proposed stormwater basins, wetland mitigation areas and vacant off site parcels, approximately 52.5 acres of open space will remain in the immediate area of the project site following development. The largest area of contiguous open space will be more than 17.5 acres.

In general, as a project site is developed, some species will relocate to similar habitats off-site. As habitat is eliminated, populations of some wildlife species may eventually be reduced. The composition of the wildlife population on the project site is likely to be altered following development, as species that are better adapted to urban/suburban cover types will increase, while species requiring more cover and open space will relocate. The on site deer population will continue to use undeveloped portions of the site, but will relocate to adjacent parcels, and may place forage on landscaping at these properties.

Avian species that are common to the area will continue to utilize remaining trees as resting and nesting spots. Bird species that prefer denser wooded habitat (several were identified during site surveys) will have to relocate to adjacent properties or pass by the area. When mature, the trees planted as part of the overall site landscape plan will also provide some roosting and nesting opportunities for species that are adapted to suburban conditions. The plants proposed will include berry and seed-bearing trees and shrubs that will offer a food source for birds.

Those amphibian and reptile species that exist on the parcel, although limited in number, will no longer be able to use the majority of the site, and will be limited to the wetland areas in the northwestern part of the site and the wooded areas associated with the Quassaic Creek corridor to the east.

Erosion and sedimentation from construction activities is a construction-related impact that could occur to adjacent wetland areas and downstream water resources if grading activities are left uncontrolled. Long term, impacts to water quality are possible if not considered in the stormwater management plan, which must include future monitoring of basins and maintenance of healthy vegetation.

Mitigation Measures

The loss of wetland habitat will be mitigated with the creation of additional wetlands in several different locations of the site, as described in more detail in Section 3.2. Wetland plant species that are common on the site will be used where appropriate to eventually create wooded wetland habitat. The on-site detention basins will be planted in a manner that is consistent with marsh and scrub-shrub wetland habitat, which will introduce a new habitat type to the site and provide additional biodiversity opportunities.

A Soil Erosion and Sediment Control plan has been prepared and is included as a drawing in the site plan. All soil erosion and sediment controls will be installed in accordance with Best Management Practices outlined in the NYS DEC Soil Erosion and Sediment Control Manual[2], and the Town of Newburgh municipal code. All soil erosion and sediment controls will be installed prior to construction activities.

To mitigate increased stormwater runoff that will result from the introduction of impervious surfaces in the form of buildings and parking areas, stormwater facilities have been designed and engineered to prevent impacts to on-site wetlands and downstream areas. Stormwater management basins are proposed to reduce post-development peak flow rates to levels at or below existing rates.

Establishment of Clearing and Grading Lines

Clearing limit lines are shown on the site plan. These limits would be demarcated in the field prior to construction. The establishment of disturbance limit lines is an effective way to limit impacts.

Landscaping

The project proposes landscape materials that would include a mixture of native and ornamental plant species. While not as valuable to wildlife as the existing forested habitat, the landscaped areas created by the proposed development would be used as forage, and many trees and shrubs will provide both food and nesting sites for squirrels, and other avian species.

Tree Preservation and Planting

The limits of disturbance will be established in the field prior to the start of construction operations. Most of the large existing free-standing trees located at the boundary of the site and in healthy condition will be preserved. The limits of the areas to be cleared will be delineated with fencing or similar method and individual trees to be preserved along the frontage will be protected by physical protective measures.

[2] NYS DEC. 2005. Soil Erosion and Sediment Control Manual.

The applicant proposes to plant 512 trees in parking areas, exceeding the town's requirement of 437 trees. Outside the parking areas, 290 street trees will be planted, 115 trees will be massed within the site and 140 trees will be planted in the buffer areas. In total 1,062 trees will be planted, exclusive of those to be planted in the wetland mitigation areas.

Re-Landscape With High Quality Native Vegetation for Wildlife Habitat

Native species will be used for landscaping purposes wherever possible. This preference is based on the fitness they have for being adapted to local climatic variables such as temperature, precipitation and growing season length. Native landscape species may also be selected which would be beneficial to native wildlife, especially birds. According to the Cornell Lab of Ornithology, establishing a diversity of plant groups in the re-landscaped areas is preferred, as a variety of plantings will better provide habitat to a larger diversity of bird species. Functional plant groupings of the most utility include: conifers, grasses and legumes, nectar-producing plants, summer-fruiting plants, fall-fruiting plants, and winter-persistent plants.

Coniferous trees and shrubs such as pines, spruces, firs, arborvitae, and junipers provide shelter and nest sites. Unmown grasses and legumes provide cover for ground-nesting birds. Nectar-producing plants may attract hummingbird and orioles. Summer-fruiting plants provide food during nesting season. Many native fruit-bearing plants which are adaptable to landscaping use are available, including various species of cherry, chokecherry, raspberry, serviceberry, blackberry, blueberry, mulberry, and elderberry.

Fall-fruiting plants are important for building up or maintaining fat reserves during bird migrations. Lastly, winter-persistent plants provide seasonal fruit sources for winter resident species. Varieties of crabapple, bittersweet, sumac, viburnum, as well as American highbush cranberry, eastern wahoo, and hollies such as winterberry are recommended. Nuts and acorn trees, including oaks, hickories, buckeyes, chestnuts, butternuts, walnuts, and hazelnuts, provide nutrient rich foods for birds and mammals and provide nesting habitat for many birds.

1.3.4 Water Resources

Stormwater Runoff Quantity and Quality

The Marketplace development would disturb approximately 108 acres of land and introduce 75 acres of impervious surfaces. Stormwater runoff increases in rate and volume when buildings, roads and parking lots are built and require appropriate mitigation measures to handle the additional stormwater flow. Uncontrolled stormwater runoff could affect the water quality of downstream receiving water bodies, including Quassaic Creek, the pond within Algonquin Park, and Upper and Lower Winona Lake.

The added runoff from impervious surfaces poses a potential increase in road and vehicle-related contaminants in the stormwater. These types of potential impacts require appropriate mitigation design to limit impacts to existing water quality.

Soil Erosion And Sedimentation

Grading and recontouring of soils is required for the construction of roads, building pads, and parking areas. Uncontrolled stormwater runoff has the potential to travel over exposed surfaces and cause soil erosion and sedimentation to downstream property.

Potential Water Quality Impacts from De-icing Materials

De-icing compounds, particularly salt, can have a negative impact on receiving water quality if used in excess. Control of de-icing agents is described below.

Groundwater

No impact to groundwater resources onsite is anticipated. Potential impacts to offsite groundwater wells from blasting is highly unlikely based on past experiences in the region. Should it occur, mitigation measures could include the deepening of existing wells, drilling of new wells, repair or improvement of well casings or connection to existing municipal supplies.

Mitigation Measures

Stormwater Pollution Prevention Plan

The proposed development must comply with a NYS Pollutant Discharge Elimination System (SPDES) General Permit for stormwater discharges (Permit No. GP-02-01), as well as Chapter 157, Stormwater Management, of the Town of Newburgh Code.

The objective of a stormwater quality management system is to reduce post-development stormwater pollutant loadings to pre-development levels to the greatest extent practicable. The stormwater quality components of the proposed stormwater management system are designed to comply with the NYSDEC requirement that 90% of the average stormwater runoff be captured and treated (the "water quality volume").

A Stormwater Management Report has been prepared (Appendix F) in accordance with applicable town and NYSDEC guidelines, including the New York State Stormwater Management Design Manual and the New York Guidelines for Urban Erosion and Sediment Control. Specific attention has been given to generally maintain existing reservoir basin drainage divides, to create Total Maximum Daily Limits (TMDL) benefits, to attenuate peak discharges in comparison to the pre-development conditions and to meet NYSDEC stormwater treatment criteria.

The primary treatment for runoff discharging from the project will be through newly constructed stormwater detention/water quality (also known as micropool extended detention ponds) basins. Passively controlled outlets from the basins will extend the discharge duration from the basins to 24 hours or more. Stormwater runoff will be collected in a subsurface closed drainage system and transported to stormwater basins for ultimate discharge from the site at two design points.

Basins are sized to meet the 90% treatment requirement of the NYS DEC for average runoff events. Based on the proposed best management practices, combined with phasing of the construction and regular maintenance and monitoring of erosion control measures, it is expected that there will be no adverse environmental impacts to either Quassaic Creek or other downstream water bodies.

Future peak flow rates are expected to be reduced in comparison to the existing flows, as required by the Town of Newburgh and NYS DEC. The stormwater basin volumes have been

scaled to allow for the capture and treatment of 90% of the average stormwater runoff, as required by the NYSDEC.

Bankside discharge points and velocity dissipaters will be structured so as to protect stream side banks and vegetation. Some of the post-development stormwater will continue to occur as sheet runoff from undisturbed and protected areas of the site, in a manner similar to existing conditions on the property.

The Stormwater Management Report (Appendix F) projects future water quality parameters in stormwater discharges. The Stormwater Management Report, which incorporates many of the recommendations and guidelines established by the NYSDEC, proposes a combination of mitigation measures including vegetative filtering, infiltration, catch basins with sumps, and stormwater detention to filter, adsorb and dilute these potential pollutants.

Stormwater Runoff During Construction

Prior to and throughout the construction phase, four basic principles of stormwater management will be developed in the Erosion and Sediment Control Plan prepared for and applied at the site to control stormwater runoff: 1) stabilization of disturbed areas, (2) containment of sediments, (3) treatment of dirty water, and (4) diversion of clean water.

Implemented, monitored, and enforceable Best Management Practices (BMP) will be utilized during the construction phase as the primary means of instituting controls for erosion and sediment control. The greatest potential watershed impacts associated with this project relative to soil disturbance would be from erosion and sedimentation during construction.

An Erosion and Sediment Control Plan is provided in the site plan accompanying this DEIS which incorporates both structural and nonstructural (i.e. operational) provisions. All soil erosion and sedimentation control practices will be installed in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-02-01) best management practices and Town of Newburgh code.

Soil Erosion Control Measures

Both temporary and permanent erosion control facilities and activities will be applied over the duration of project related activities on the site. Implementation of the soil erosion control plan will be based on the latest New York State Guidelines for Urban Erosion and Sediment Control. In general, the following temporary methods and materials will be used to control erosion from the project site:

- Stabilized construction entrances
- Diversion swales and/or berms
- Silt fence barriers
- Stone check dams
- Storm drain inlet protection
- Sediment basins

The applicant will be responsible for ensuring all stormwater management practices are adhered to. Responsible parties for the implementation and maintenance of each of the erosion control measures and stormwater facilities will be specifically identified and documented in the

Stormwater Pollution Prevention Plan to be prepared by the Applicant and approved by NYS DEC prior to construction activity.

Future Monitoring of Basins and Stormwater Discharged From Site

Each swale and basin, when stabilized, is designed to allow for sediments to accumulate for a period of 10-20 years before the functional capacity of the structure will be impacted. Sediment removal at this time will restore the structure to its original over-design capacity. Entry to the basins for performing scheduled maintenance activities will be through stabilized basin accesses. The basin accesses, grass swales, and the side slopes and berms of the basins will be mowed annually to prevent the establishment of woody plants within these areas.

During construction, all basins and sedimentation and erosion controls must be inspected on a weekly basis or other schedule approved by NYS DEC, in compliance with GP-02-01. Monitoring reports will be left at the site construction trailer for inspection and will be forwarded to the local jurisdiction, if requested. Inspections will also occur on a random basis following storm events. These inspections include observation of storm water leaving the site.

Mitigation of De-icing agents

The management entity responsible for maintaining the internal drives will use sand for traction following plowing of the parking areas and access roads. In some situations a de-icing agent such as sodium chloride may be used if severe weather conditions require its use, but application will follow strict guidelines in order to limit potential impacts to water resources.

Off Site Improvements

The Applicant has conducted an investigation of existing drainage conditions along NYS Route 52 in the vicinity of the pond at Algonquin Park. As a result of the investigation, the Applicant is prepared to install new catch basins, storm piping, under drainage and asphalt paving to alleviate the flooding conditions in this area.

1.3.5 Zoning and Surrounding Land Uses

The Marketplace at Newburgh is compatible with the majority of land uses within the project vicinity. Over 70 percent of the developed Marketplace site will border interstate highways, state highways or existing commercial property. Therefore, the Marketplace would be compatible with the existing commercial uses located on NYS Route 300.

Specifically, the Marketplace would not have any land use impact on Interstate 84 located to the south. With the existing commercial development along this segment of NYS Route 300 and its interchange with I-84, the site has been long planned and is well suited for shopping center development. The project would be similar to and compatible with the Newburgh Mall shopping center located on the west side of NYS Route 300 opposite the project site.

The project will introduce retail uses proximate to seven (7) single family homes located to the north of the site in the vicinity of Hilltop Avenue and five (5) homes on Route 52 across from Algonquin Park. Approximately 267,500 square feet of building footprint would adjoin this neighborhood.

These single family residences are potentially subjected to noise, light, traffic and security issues as a result of the construction of the proposed project. These topics are discussed in greater detail in Section 3.6, Transportation, and Section 3.8, Noise, and of this document. As examples, a potential impact to residential areas adjacent to the project site might be nuisances created by pedestrians traveling to or from the project site and "short-cutting" through residential areas if the Marketplace is not secured in some manner. Another example would be that during the evening, residents may also experience "night glow" from newly introduced lighting fixtures serving the Marketplace if lighting is not designed properly.

Town of Newburgh Comprehensive Plan - 2005

The Town of Newburgh Comprehensive Plan Update, which has been under preparation and review for the past three years, has been completed and adopted by the Town Board after extensive review and public comment. The Marketplace is fully consistent with the 2005 comprehensive plan in the following areas:

The Marketplace project would conform to the recently adopted Plan Update as the Update envisions that the project would remain in "IB" zoning which is intended to accommodate retail uses. In addition, the Plan Update acknowledges that residential uses such as senior and affordable housing may not be appropriate to the IB zoning district; the Marketplace does not propose any housing.

The Marketplace would result in improvements to the local transportation network, especially along NYS Route 300 and NYS Route 52, which would assist in addressing traffic and safety concerns along these corridors identified as "major corridors of concern." These improvements are described in detail in Section 3.6 of the DEIS.

The Marketplace would be consistent with the Town's objective to avoid suburban sprawl and preserve the rural character of the outlying areas by concentrating nonresidential development in proximity to the I-84/I-87 interchange area, an area within the growth boundary of the Plan Update. Lastly, the Marketplace's lifestyle center would create a focal point for social activity within the Town.

Compatibility with County and other Regional Plans

The proposed project would be compatible with the adopted Orange County Comprehensive Plan adopted in 2003. The project site is located within a Priority Growth Area, and the Plan recommends that commercial and industrial development be located within these areas. The Plan also notes that commercial and industrial users need a combination of the following: central water and sewer services, access to highways, roads and railroad sidings, housing, a favorable tax situation, suitable land for building or expansion, visibility, available emergency services, and a suitable employment base. The unique proximity of the site to major highway interchanges, emergency services and utilities makes the Marketplace property conducive to this proposed retail plan and retail use.

Compliance with Zoning and Other Land Development Regulations

The Marketplace use and site plan has been designed to be fully compliant with the town's zoning regulations including bulk requirements. No variances or special use permits are being requested.

Airport "A" Overlay

The highest building roof parapet is more than 200 feet below the allowable building height limitation in the Airport overlay zone. The plan complies with this zoning requirement.

Parking Requirements

The proposed project would be subject to the parking requirements set forth in Section 185-13 of the Newburgh zoning law. As presented on the site plan, the project site conforms to the Town's parking regulations including all requirements by the Town for handicapped parking spaces and handicapped facilities.

Sign Regulations

The applicant will submit a signage plan for review by the Planning Board prior to any site plan public hearing.

Setbacks and Buffers

The DEIS site plan meets the minimum setback of 100 feet a required by the zoning law along the northerly property line abutting Hilltop residences. Moreover, the majority of the rear building line of Building C (300 lineal feet and more than 50 percent of the building area in this portion of the site) overlooks a ravine where no homes are constructed and unlikely to ever be used residentially; For the five homes along NYS Route 52, the building setbacks range from 340 feet to more than 570 feet.

At the top of the rock cut along the northerly property line, the applicant proposes an 8-foot high solid fence along with 50-feet of landscaping and a natural vegetative buffer, as indicated on the landscape drawings. Therefore, for the majority of the adjacent homes along Hilltop, the buildings will either be partially visible or not visible at all. The sight lines from the back yards of these Hilltop homes are shown on Figure 3.10-8 of the DEIS.

The 50-foot wide landscaped buffer would retain existing vegetation including mature trees and understory, and throughout the length of this buffer further treatment would be provided including the following: a) an 8-foot high solid fence to separate the Marketplace from the Hilltop residences (this is intended to limit visual impacts, noise and pedestrian or vehicular access between the backyards of these homes and the Marketplace site); and b) landscaping, consisting of a combination of evergreen and deciduous plantings as shown on the landscape plan. The proposed plantings in the buffer area are consistent with the requirements in the Town Zoning Code.

As can be seen from the Site Grading Plan, to the northeast of the majority of Building C and proceeding in a northerly direction, the area grading changes from cut to fill. At the northerly end of the developed portion of Building C's parking area, the fill will average 30 feet with some fills approaching 40 feet. This fill area will be stabilized with rip-rap and soil and seed will be applied to this stabilized bank.

At the top of the bank, the landscape plan provides for a continuation of the 8-foot high solid fencing, mitigating noise and visual impacts to the five homes on Route 52 across from

Algonquin Park as well as providing an impassable buffer so pedestrians at the Marketplace can not enter the back yards of these homes.

Environmentally Sensitive Areas

Development of the Marketplace would conform to Section 185-22 of the Newburgh zoning law. The stormwater management plan will ensure that stream flows are managed so as not to impact the 100-year flood plain or downstream properties. With regard to wetlands, the project sponsor would apply for a permit and would conform to all permit requirements of the United States Army Corps of Engineers.

Site Plan Review

Development of the proposed site for the Marketplace requires approval of the site plan by the Town of Newburgh Planning Board as set forth in the Town zoning law. Concurrent with this DEIS submission, the applicant is submitting a final site plan application for review.

Architectural Review

The project sponsor will present final building elevations that will be subject to the Town of Newburgh ARB review. This review would be performed prior to the Planning Board's approval of the site plan and ARB recommendations would be incorporated into the site plan approval conditions.

Blasting

A blasting permit will be secured from the Town of Newburgh Building Inspector prior to any blasting activities. (see Section 3.1 of the DEIS)

Clearing and Grading

The Marketplace development will require a permit issued by the Town Building Inspector. An Erosion and Sediment Control Plan has been prepared and is included as part of the site plan. Refer to Section 3.1 and 3.4 with regard to the specific controls to be implemented to eliminate effects associated with clearing and grading activities.

Fire Prevention

Construction of the Marketplace will conform to the requirements of Chapter 107, Fire Prevention. The Bureau of Fire Prevention will review the site plan application as well as the Fire Chief of the Winona Lake Fire Company.

Flood Prevention

There are no planned development activities in the flood plain area except a stream crossing. The crossing within the special flood hazard will necessitate a development permit from the Town Building Inspector to construct the proposed easterly access drive. The Town Building Inspector will review the site plan and proposed development in flood plain areas.

Stormwater Management

A Stormwater Management Report has been prepared and is included as Appendix F of the DEIS. It will be incorporated into the project's Stormwater Pollution Prevention Plan to be reviewed and approved by the Town Engineer and NYS DEC prior to the issuance of a building permit and SPDES General Permit for Construction Activities, respectively.

Mitigation Measures

The proposed site plan has been designed in such a way as to minimize the degree of disturbance to existing residences adjoining the project site. These measures are as follows:

- The northerly boundary of the site adjoining the Hilltop Road residences would be separated from the rear lot line of the residential lots with a 50-foot vegetative buffer as described previously.
- In addition to preserving a 50-foot native vegetative buffer, supplemental vegetative screening will be provided between the proposed stormwater management facilities and Charlile Circle as shown on the landscape plan.
- Existing vegetation will be retained between the easterly access drive and the residences along Brookside Avenue to limit views of the road.
- The Brookside Avenue cul-de-sac will be reconstructed, and landscaping will be introduced to block views of the easterly drive. This would limit distant views of I-84 from Brookside Avenue.
- The proposed buildings nearest the residential structures have been oriented south towards Interstate 84. Limited customer activity will take place on the northern side of the building nearest the residences.
- The site has been designed to reduce traffic along the northern property line near the residential structures.
- The proposed site lighting plan has been designed to provide zero (0) foot candles of light at the residential property boundaries on the north side of the Marketplace site.
- An 8-foot solid wall security and privacy fence will be installed along the northeasterly property line adjacent to the residential properties on Hilltop and north on Route 52.
- Based on discussions with area residents, no pedestrian or vehicular (via New Street) connections are being provided between the residential neighborhoods and the shopping center due to security concerns.

These mitigation measures have been proposed to insure that potential conflicts between the residential neighbors and the Marketplace will be minimized to the extent practical and feasible.

1.3.6 Traffic and Transportation

A *Traffic Impact Study*, prepared by John Collins Engineers, P.C., evaluates existing and future traffic conditions at fifteen intersections which are located in proximity to the Marketplace. Thirteen existing intersections were identified in the *Final Scope* document submitted to the Town of Newburgh. The I-84 ramps at Exit 7 were evaluated as two intersections, and the new

intersection of the relocated Meadow Avenue and Site Access Drive (evaluated in the Build condition only), for a total of fifteen intersections. Figure 3.6-2 shows the locations of the fifteen intersections studied.

Based on the analyses contained in the traffic study, the proposed Marketplace at Newburgh will generate 2,047 new trips during the PM peak hour, and 2,738 new trips during the Saturday peak hour. The distribution of this peak hour traffic is projected to be 59 percent at the NYS Route 300 entrance, 29 percent at the Route 52/5th Avenue entrance, and 12 percent at the Meadow Avenue/Route 52/Powder Mill Road entrance.

Three new access points would be created to serve the Marketplace as follows:

- NYS Route 300 (Union Avenue) and the Main Access across from Newburgh Mall
- NYS Route 52 and relocated Meadow Avenue
- NYS Route 52 and 5th Avenue

Each of the proposed access points will be signalized. In addition, at each proposed access point, significant highway capacity improvements are proposed including widening, striping, traditional turn and stacking lanes, and additional drainage. Multi lane approaches, queue lengths and storage capacity at each intersection provides for a minimum of 15 vehicles.

The Marketplace will include internal pedestrian sidewalks and crossings to link the various building areas together. Moreover, extensive pedestrian walks and amenities are planned for the lifestyle center portion of the Marketplace which is designed to significantly reduce parking and vehicular traffic and increase pedestrian activity and outdoor amenities. Appropriate traffic control signage is shown on the accompanying site plan. The Transit Coordinator for Orange County, has expressed a willingness to coordinate existing public transit services during the site plan approval process.

The site plan does not introduce new sidewalk or bicycle connections to the adjoining residential neighborhoods as neighbors have indicated a desire to limit interaction between the shopping center and the residential areas.

Construction traffic to and from the site is not expected to be excessive, as building will generally be constructed in phases. The heaviest volume of construction traffic is expected to occur at the beginning of the construction as site clearing and rough grading is conducted, and when asphalt and building materials are transported to the site. It is anticipated that most construction trips would travel to and from the site via NYS Route 300 and NYS Route 52.

Mitigation Measures

With completion of the following improvements, acceptable Levels of Service will be obtained and the proposed Marketplace at Newburgh will not result in a significant impact to traffic operations in the area.

1. An analysis of the proposed access to Union Avenue indicates that the main entrance should be constructed to consist of four exiting lanes and two entering lanes and should align opposite the Newburgh Mall South Driveway approach (refer to Figure 3.16-3). A separate right turn lane should be provided on the northbound and southbound approaches and signalization will also be warranted. With these improvements, the intersection will be

able to adequately accommodate the additional traffic generated by the Marketplace at Newburgh.

2. The intersection of NYS Route 52 and Meadow Avenue/Powder Mill Road currently experiences significant peak hour delays and congestion primarily due to the lack of separate turn lanes. Improvements will be required at this intersection regardless of the proposed development. The construction of left turn lanes or alternate improvements will have to be pursued at this intersection. As part of this proposed development, plans have been developed to construct an entrance to the Marketplace on Route 52 opposite Powder Mill Road to provide a standard four way intersection (refer to Figure 3.6-14). Separate left turn lanes will also be provided on the NYS Route 52 approaches. Meadow Avenue will be relocated and the existing traffic signal will be upgraded. The overall safety of the intersection will be significantly improved. These improvements will have to be coordinated with the Town of Newburgh and NYS DOT as part of the Highway Work Permit process.

3. A new access drive will be constructed opposite 5th Avenue (refer to Figure 3.6-15). This entrance will consist of two exiting and one wide entering lane and a traffic signal will be installed to control traffic movements. In addition, due to the significant through volumes along NYS Route 52, the plan proposes widening of NYS Route 52 and additional pavement markings.

4. The existing traffic signals at the Exit 8 I-84 ramps will have to be upgraded and interconnected with the signal at 5th Avenue and the proposed NYS Route 52 driveway access. In addition, the I-84 westbound off ramp will have to be widened to include additional length on the right turn lane approaching the NYS Route 52 intersection.

5. At the intersection of Meadow Avenue and NYS Route 300, the traffic signal phasing will have to be upgraded to accommodate the expected turning movements.

6. The New York State Department of Transportation is currently completing improvements including the provision of separate turn lanes and upgraded signalization at the intersection of NYS Route 300 and NYS Route 32. These improvements will be required to accommodate future traffic volumes with or without the proposed development.

7. Associated with the construction of the site access and new signalization, the adjacent existing traffic signals along NYS Route 300 will be interconnected. These include the intersection of NYS Route 300 and Meadow Avenue/Meadow Hill Road, the existing Newburgh Mall north driveway and coordination with the planned new signalization of the I-84 exit ramps.

8. The intersection of NYS Route 52 and NYS Route 300 has been identified as an existing constrained intersection. Improvements will be required at this intersection regardless of the proposed development. A fair-share contribution towards these improvements should be undertaken in association with the project.

With the increased volumes, the intersections will experience longer peak hour delays and a traffic management program will have to be implemented to accommodate the expected future traffic volumes during seasonal time periods. A plan will be implemented prior to the issuance of any certificates of occupancy and will be developed in coordination with local, county and state

highway officials and the Town of Newburgh police. The plan is expected to include, but not be limited to the following:

- Potential use of police or other manned traffic control at key internal and potentially some external intersections.
- Use of supplemental internal variable message signs to direct traffic to the appropriate exit drives from the site.
- Potential temporary internal closures or restrictions of turning movements (such as left turns) at certain internal intersections to direct traffic flow on-site.
- Coordination with NYS DOT and NYS TA regarding any other external measures including use of other temporary variable message signs, etc.

1.3.7 Community Services/Socioeconomics

Fiscal Effect

It is estimated that the project would generate $2.7 million in annual real estate taxes and annual sales tax revenues of $38 million of which approximately $17.5 million will be directly reimbursed to Orange County. Orange County redistributes a portion of this sales tax revenue to the towns, cities and villages including the Town of Newburgh. Presently, sales tax revenue reimbursements to the Town of Newburgh are approximately $2.7 million annually or 17.5 percent of the annual Town of Newburgh budget. The largest beneficiary of the increase in real estate taxes is the Newburgh City School District which will receive annually approximately $1.9 million or approximately 74 percent of the real estate taxes generated by the Marketplace. Overall, the Marketplace will have a significant net positive fiscal impact for the Town of Newburgh.

Employment

The project would increase the Town's job base for short- and long-term employment. The shopping center is anticipated to employ 1,600 people in a number of job categories, including but not limited to sales, management, administration, accounting services, security and maintenance. These jobs would represent a sizable increase in employment in the Town of Newburgh and Orange County. The project would result in the creation of up to 1,000 person-years of construction employment.

Police

The Marketplace would require police services as do all retail projects in the town. Early in the review process during the initial formulation of the project, the applicant met with the Police Chief Kehoe to discuss the project. The applicant fully intends to work with the Newburgh Police Department to incorporate internal security into the security program of the Town.

The lifestyle center of the project would have between 20-30 tenants and is one-half the size of the Newburgh Mall. The large-format tenants are similar to other such uses in the town. The retail use would generate a varied number of calls per shift and will increase the demand for police services from the Town.

It is expected that as stores open at the Marketplace, the owner/tenant will meet with the Police Chief to review security measures and coordinate security with the police department. As the

Town measures and evaluates the added demand on police services, it is possible that requests to the Town Board for increase police budget and manpower will be made over time. Because of the substantial increase in revenues that will accrue to the Town from property and sales taxes, the ability to respond to increases in security should not burden the general public.

Fire Protection

According to the Fire Chief, the Marketplace development would place limited demand on the Orange Lake Fire District, and more specifically, the Winona Lake Engine Company 2. Response time to the site is expected to be less than five to seven minutes. The firehouse is located across from the intersection of a new access road with Meadow Avenue/Route 52/Powder Mill Road. According to Chief Hager, there is sufficient fire fighting equipment and vehicles between the two companies in the Orange Lake Fire District to provide fire protection to serve the Marketplace.[3]

Ambulance

It is expected that demand would be placed on the Town of Newburgh Volunteer Ambulance Corps. The majority of calls that the Tonvac responds to at existing commercial developments results from vehicular accidents at access points. The agency responds occasionally to emergency medical situations within commercial facilities. Tonvac is located on Route 52 in close proximity to the two new access roads that would intersect with Route 52. No significant impacts are anticipated.

Mobile Life Support Services, Inc., a private commercial paramedic service located in the City of Newburgh, acts as backup service to Tonvac. During weekends and evenings, calls are routed to Mobile Life if Tonvac does not have adequate manpower to respond.

Solid Waste

The project would generate 21,250 pounds of solid waste per day, or 10.6 tons of waste per day. Solid waste would be collected by a private carter as is the case with other commercial properties in the Town of Newburgh. As commercial carters would handle the collection and disposal of solid waste generated by tenants of any proposed retail facility on the project site, specific disposal sites may vary depending on the arrangements made by the solid waste carter.

It is expected that the large-format tenants would contract separately to handle waste services, and the central management company would contract with a solid waste carrier to cart waste from the lifestyle center. Solid waste generated on the site would be collected from individual collection points and stored in dumpsters or compactors located to the rear of the buildings. All solid waste storage areas will be screened on four sides by a fence enclosing the dumpster or compactor area. A separate dumpster enclosure consisting of a six-foot high fence of opaque materials and a self-locking gate will screen and secure the dumpster locations, or, alternatively, the dumpsters will be housed in the building or loading area within the rear service area depending upon the design of the individual tenant's building. The storage areas will be located at the rear of the buildings, along a service drive. A buffer between the proposed development and existing residential uses along the northerly property line will be provided as described in Section 3.10, Visual Resources.

[3] Chief Timothy Hager, phone conversation, October 6, 2005.

Large format retailers would be expected to retain a pest management service to maintain the individual store dumpster locations. The central management entity would be responsible for retaining a pest management service to maintain dumpster areas associated with the lifestyle center. Maintenance typically includes such measures as spraying and baiting.

Water Supply

The Marketplace is located in Consolidated Water District 1. Operation of the proposed 850,000 square feet of commercial space is projected conservatively to require approximately 117,000 gallons of water per day. According to the Town Engineer, there is adequate capacity available with the existing water source to meet the water demands of this project.

An existing 16-inch water line located in Route 300 and which passes directly in front of the Marketplace site will supply the required fire and domestic water to the site. This water line services all of NYS Route 300 and much of the Town west of the Thruway originating from the Chadwick Lake Reservoir to the north. Presently, there is adequate pressure to service the non-fire needs of the Marketplace. However, further study will be required to ensure that the pressures and volumes are sufficient for the fire hydrants and sprinkler systems that will be provided in every structure.

Where required, booster pumps with standby generating capacity will be provided to insure all fire safety standards are met. In addition, it is planned that the Town water system will be looped through the project from Route 300 to an existing 12-inch water main in Route 52 in the vicinity of Meadow Avenue and Powder Mill Road in order to ensure two sources of supply and to maintain pressure and flow for emergency situations.

All new water mains and appurtenances will be installed on site at no cost to the water district**.** All work will be done in accordance with the standards and specifications of the Town of Newburgh and the Orange County Department of Health. The proposed routing of water mains is shown in the detailed site plan accompanying this DEIS.

Wastewater

The Marketplace is located within the Crossroads Sewer District. Effluent is treated at the City of Newburgh Wastewater Treatment Facility by an intermunicipal agreement between the Town and City. A 2 million gallon per day (mgd) plant expansion is presently underway and operation of this expansion capacity will be available in late spring-early summer 2006 according to the Town Engineer. With this expansion, there will be sufficient capacity to service the Marketplace. Total wastewater generation is estimated at some 105,200 gallons per day (gpd). The existing sewer mains are deemed sufficient to handle the additional daily flow from the Marketplace.

Mitigation Measures

Police Protection

During initial operation of the shopping center, it is expected that the police department and the retailers would evaluate security requirements, establish internal and external security procedures and then assess the added demand that the new facilities would place on the Newburgh Police Department over a period of time. The Town Board, who is responsible for

adopting the municipal budget, would assess with staff input, the costs attributable to the police department and respond accordingly.

The Town would receive more than $400,000 annually in revenues to the General Fund which would offset the potential additional cost of police protection. As mentioned previously, the Marketplace is not expected to place significant demand on other local governmental departments.

The Marketplace is designed to minimize blind corners and unlit or hidden pedestrian areas. All public routes will be well lit. A visible security camera network on a close circuit television system visible to the public will be installed. A private security staff, in a well marked car, monitoring the parking lots and pedestrian areas is another level of deterrence that can be used. During the opening years of the center it is expected that an above average security presence will be beneficial.

The most important level of the security package is deterring crime through enforcement. With the assistance of the Newburgh police department, the private security force, the use of closed circuit televisions, and the proactive involvement of tenants, complaints will be handled and prosecuted to the fullest extent.

Shoplifting and other issues take place internal to the stores. Security will be addressed at both the tenant and central management level. Individual store tenants typically have their own security devices, including burglar alarms, video surveillance, mystery shoppers (plain clothes security personnel), and internal training of staff are responsibilities of the tenants.

The central management entity would retain the services of a private security firm whose responsibility would be to advise the landlord on the appropriate security measures and to implement them.

It is the opinion of the project sponsor that the property and sale tax revenues that would be generated by the project, coupled with proposed security measures, would minimize and mitigate increased demands on police protection services.

Fire Protection

The retail buildings would be required to meet applicable standards of the New York State Uniform Fire Prevention and Building Code, and would also adhere to applicable regulations of Chapter, 107, Fire Prevention, of the Code of theTown of Newburgh.

The buildings would be constructed of masonry and steel Type 1 and 2. As per the Town's regulations, all buildings would be sprinklered. Hydrant locations have been situated in proximity to each retail building for firefighting purposes. The Town Fire Inspector will review the DEIS and accompanying plans, and any comments will be addressed as part of this SEQRA process. The three main access drives to the Marketplace will be kept open at all times. The owner and management company will be responsible for keeping the access lanes clear of vehicles and snow for purposes of ensuring adequate emergency access during all times of the year.

Fire hydrants will be kept clear of snow and will be marked for easy location. The water mains and fire hydrants on the Marketplace property would be maintained and serviced regularly in

accordance with standards set forth by the Newburgh Fire Inspector. As per Chapter 107, hydrants will be inspected semiannually and after use, and inspection will include operation at least once a year. Hydrants will be required to be kept in good condition, and the management company will keep a record of inspection and repairs to be made available to the Fire Inspector upon request.

The proposed access roads are designed to accommodate fire engines and truck traffic. There are three points of access, providing alternate routes in the event of an emergency. Emergency access is provided around all retail buildings on the project site. Specifically, fire lanes will be provided in front of the buildings, and unobstructed access is provided around sides and rear portions of the buildings.

The Winona Lake Fire Company station, servicing the Marketplace, is located directly across Route 52 from one of the proposed entrances. The ambulance corps building on Route 52 is located equidistant and approximately ½-mile from two of the three entrances, both located on Route 52.

The Marketplace development would increase property tax revenues that would accrue to the Orange Lake Fire District. Specifically, the project is expected to generate $88,357 annually, representing a nine percent (9%) increase in tax revenues to the district.

Solid Waste

All solid waste storage areas will be screened on four sides by a fence enclosing the dumpster or compactor area. A separate dumpster enclosure consisting of a six-foot high fence of opaque materials and a self-locking gate will screen and secure the dumpster locations, or, alternatively, the dumpsters will be housed in the building or loading area within the rear service area depending upon the design of the individual tenant's building.

The storage areas will be located at the rear of the buildings, along a service drive. A buffer between the proposed development and existing residential uses along the northerly property line will be provided as described in Section 3.10, Visual Resources.

Large format retailers would be expected to retain a pest management service to maintain the individual store dumpster locations. The central management entity would be responsible for retaining a pest management service to maintain dumpster areas associated with the lifestyle center. Maintenance typically includes such measures as spraying and baiting.

1.3.8 Ambient Noise Levels

Traffic Noise

To evaluate the potential for traffic noise impacts, a comparison of traffic volumes was conducted looking at the increase in traffic between the No Build and the Build conditions. The project traffic would be most concentrated along NYS Route 300 and NYS Route 52. The volume comparison analysis for the critical intersections of concern is presented in Appendix H of this DEIS. The proposed project would not result in a doubling of traffic at the critical locations identified. No project noise impacts relating to increases in traffic on the existing roadway network are anticipated.

New Noise Sources

The potential for noise impacts relating to new noise sources has been evaluated by examining each of the new sources that would be introduced on the site.

There would be three new access drives constructed to serve the project site: one main entrance would be constructed along NYS Route 300, one would be on Route 52 at Powder Mill Road, and one would be on NYS Route 52 at 5th Avenue. There are no sensitive noise receptors adjacent to the new site drives on NYS Route 300 and new traffic on these site drives would only affect noise levels on the project site itself. Thus, the noise study does not consider changes in ambient noise levels from traffic at this intersection.

The highest volumes of traffic will occur during the Saturday peak hour, when 312 new vehicles would be accessing the site to and from the new Powder Mill Drive, and 796 new vehicles would be accessing the site to and from the new 5th Avenue Drive. The section of NYS Route 52 between Powder Mill Road and 5th Avenue currently carries approximately 1,000 and 1,150 vehicles per hour (vph) during the PM and Saturday peaks, respectively.

The nearest residence to the new site drive where noise measurements were monitored is located approximately 200 feet from the end of the Brookside Avenue cul-de-sac. Existing noise levels at this location (Brookside 1) are influenced by highway noise from I-84, with Leq levels at 56.2 dBA. At the worst-case locations immediately adjacent to the new right-of-way, there would be noise levels of approximately 58.5 dBA. Therefore, it is projected that there would be a 2.3 dBA increase, which is in the barely perceptible range, and not significant. Because the 5th Avenue access drive represents the worst-case location, there can be no significant noise impacts associated with either of the other access drives.

Schedule of Truck Traffic and Loading

Truck activity at the proposed development will cause noise levels similar to noise measurements indicated in Table 3.8-6 of the DEIS, which is generally between 56 to 69 dBA. Daytime and nighttime average and maximum noise levels at various locations are summarized in Table 3.8-9 and 10. The tables and analyses conclude that there will not be adverse effects on noise.

Vegetation and Buffering

The proposed Marketplace development would preserve existing vegetation, primarily around the perimeter and in wetland areas, and would require installation of new plantings. Existing vegetation along the northern property boundary will remain intact during construction to provide an immediate buffer to neighboring residential dwellings. Details of the landscape buffer are described in Section 3.10, Visual Resources. Additionally, a fence will be placed along this natural vegetation to further buffer the dwellings from noise impacts.

The increase in vehicular and truck traffic generated by the project is projected to have no significant impact to existing noise conditions. With regard to the Town of Newburgh noise standards, the projected noise levels after construction of the proposed Marketplace development will be lower than the noise threshold for the IB zoning district of 70 dBA during the night and 80 dBA during the day standard as per the Town's regulation.

Construction Noise

Ambient daytime noise levels will increase in the immediate vicinity of the site during project construction. Construction activities and operation of construction equipment have been the subject of numerous noise studies completed for various projects in the region.

It is anticipated that existing residences located just north of the proposed Marketplace development will experience temporary elevated noise levels at occasional periods during the construction of the proposed project.

Mitigation Measures

As the project would not result in noise levels that exceed the Town's noise standards, mitigation measures, such as additional tree plantings using structural soils, are not warranted. Nevertheless, the site plan calls for an 8 to 10-foot high fence in certain buffer areas, parapet walls on the tops of buildings and the orientation of the entrances of buildings and main parking areas away from residential neighborhoods.

Noise generated by the proposed project would not have a significant impact on ambient noise levels. The project would comply with Town of Newburgh zoning regulations, including the preservation of native vegetation and installation of new plantings along the northern property line adjoining residences along Hilltop Avenue.

The evergreen plantings at the top of the stone cut behind Buildings C and D will consist of hard pine toward the shopping center, planted in a double staggered row, with lower trees and shrubs on the wooded side to soften the view from residences. An eight foot high, solid board fence will be placed at the top of the rock cut. Fifty (50) feet of vegetative buffer will be retained along the northerly property line abutting the Hilltop residences. The fence will be placed at the top of the rock cut. The placement and quantity of plants in this location will depend on analysis of field conditions and relative to the location of existing trees. The priority will be to save as many trees as possible and landscape those areas where tree removal has created a need for supplementary plantings.

Existing vegetation to be preserved along the property line that is shared with residences on Charlile Circle would be supplemented with evergreen plantings as shown on the landscaping plan and described in Section 3.10 of the DEIS.

It is expected that additional plantings will be provided between the easterly drive and the newly constructed Brookside Avenue cul-de-sac which may attenuate some noise emanating from I-84 and provide visual mitigation.

Neighboring residential properties would be subjected to short-term increases in noise during construction of the proposed Marketplace development. As per the Town's clearing and grading law, site preparation activities will be conducted only between the hours of 7:30 AM and 6:00 PM when within 1,500 feet of any residence. No site preparation activity will be conducted on Sundays or public holidays without express consent with the clearing and grading permit. All construction vehicles and equipment will be well maintained and operated in an efficient manner. In particular, the mufflers on all construction equipment will be fully functional and well maintained by the construction contractors.

1.3.9 Air Quality

Air quality impacts associated with the proposed project were assessed to determine whether the project would have an adverse effect on the surrounding environs. Air quality impacts from construction activities were assessed along with a determination of impacts from project induced traffic along the primary access routes to and from the project site. The analysis contained herein finds no significant adverse air quality impacts resulting from the proposed project.

Construction Related Impacts

Construction activities may have a short-term impact on local air quality through generation of fugitive or airborne dust. Fugitive dust is generated during ground clearing and excavation activities, and generally when soils are exposed during dry periods. Throughout the construction period, passage of delivery trucks and other vehicles over temporary dirt roads and other exposed soil surfaces would also generate fugitive dust. Residences, on Hilltop Avenue, closest to the proposed areas of grading and would have the greatest potential to be impacted by dust.

Construction-related air emissions will result from the use of diesel fuel as a source of energy for construction vehicles and equipment. Diesel engines that are maintained are more fuel efficient than gasoline engines, however, they are a source of some air pollutants.

Construction related impacts would vary based on the proximity of the activities to the adjacent properties and the type and amount of construction equipment used for each project phase. However, to address potential air quality impacts from construction related activities, mitigation measures have been proposed for specific construction activities to minimize the overall impact on the air quality. If mitigation measures are applied properly, adverse air quality impacts would be minimized.

Mitigation Measures

The project is not anticipated to cause a violation of the current NAAQS standards for carbon monoxide. Therefore, no mitigation measures are warranted.

Standard construction dust control methods would be employed to ensure that construction generated dust does not impact off-site residents. These methods include:

- Minimizing the area of grading at any one time and stabilizing exposed areas with mulch and seed as soon as practicable;
- Minimizing vehicle movement over areas of exposed soil, and covering all trucks transporting soil; and
- Unpaved areas subject to traffic would be sprayed with water to reduce dust generation.

The potential for emissions from construction vehicle exhaust can be reduced by the proper maintenance of engines and air pollution controls. No additional mitigation measures are proposed.

1.3.10 Visual Quality

The proposed project would convert approximately 108 acres of vacant wooded property to retail use. Grading activities to prepare the site would result in topographic alterations that may alter views of the site. Construction of retail buildings and parking areas may likewise alter views. Portions of the property may appear more open with the removal of the tree canopy as viewed from the surrounding roads and residential areas that adjoin the site.

The project would introduce views into the site from NYS Route 300. Specifically, the lifestyle center and boulevard entry would be visible from NYS Route 300. This change in view would not have an impact on NYS Route 300, as this road is already commercialized in the project vicinity. The visual character of the shopping center would be compatible with its surrounds.

Views of the project site from I-84 would be altered as the lifestyle center would become visible from the off-bound ramp from I-84 onto NYS Route 300. Although views from I-84 would be altered, the views are not significantly different than views of the Newburgh Mall and the NYS Route 300 corridor visible from I-84 in this vicinity.

The view from NYS Route 52 would be altered, as a new approach to the Powder Mill/Meadow Avenue/NYS Route 52 intersection would be added. However, due to the presence of regulated wetlands that would be preserved and enhanced at the site's entrance, the entry would maintain much of its existing natural appearance. According to the traffic engineering consultant for the project, it is anticipated that a segment of the Meadow Avenue approach near the intersection will be removed and replanted. Thus, a four-legged intersection would be maintained visually.

The introduction of a new intersection on NYS Route 52 at 5th Avenue would not significantly impact this location, as the visual character at this location, extending to I-84, is commercial in nature.

Based on the line of sight profiles, it is not anticipated that there will be views during either summer or winter months from South Plank Road residences.

Along Hilltop Avenue, views will be limited in part by the intervening topography and remaining woods, and in part by the proposed eight-foot high solid fence and landscape screening. During the summer months, the largely deciduous woods will provide additional screening to obscure much of the already limited view of the new buildings.

As illustrated in the line of sight profiles presented in Figure 3.9-8, the potential lines of sight is intercepted at the tree line, and would pass over the top of proposed commercial buildings on the Marketplace site. In winter months, it is possible that glimpses of roof tops of the new buildings may be seen from the area to the immediate north. Given the distance of the potential viewer from the project site, this view would appear as a small portion of the broader view of the nearby and distant landscape.

Potential views of the project site observed from points on Brookside Avenue were also evaluated. Construction of the drive in the vicinity of Brookside Avenue does not entail significant grading, and the road would be constructed at the approximate same grade as the existing topography. Thus, the road would not be made visible by elevating it in relation to the heights of the adjoining residences. As the road does not require significant grading, existing

vegetation will be retained between the road and the rear property lines of these residences and would not be visible during on-leaf conditions.

During off-leaf conditions, there may be partial views of the vehicles traveling along the drive. Given the profile of the buildings on the site in relation to the site topography, trees to remain, and distance between Brookside Avenue and the proposed buildings, it is not anticipated that the development area would be visible from Brookside Avenue.

The homes on Charlile Circle are buffered from the proposed development by on-site regulated wooded wetlands that would be preserved, and existing vegetation that would be retained at the project site's shared property line with these residences. Based on a review of the intervening tree cover, topography and the distance from the viewer, changes on the project site would not be expected to be readily noticeable. It is possible the stormwater basins along the northerly drive would be visible from several homes. This would be mitigated by proposed landscape plantings.

Existing vacant properties located between the project site and Wintergreen Avenue would continue to screen views of the project site from residences located there.

The Orange Mill Historic District would not be impacted visually by the project as new views would be limited to the view of the access drive that would intersect with three existing roads in the same location - Meadow Avenue would be relocated to tie into the new access drive, and a segment of the road at the intersection would be closed, removed and replanted. No new buildings would be visible from the historic district. Natural vegetation will be preserved along the perimeter of the property, thus preserving distant views of trees. Buildings would not extend above the tree line that would remain.

Night Lighting

The lighting plan for the shopping center will be designed to provide overall nighttime illumination on all primary roadways and parking areas. Lighting intensity would be kept at levels adequate for public safety and security. The overall lighting plan will include street lights of a standard design selected for the project and located on the site to create an optimal lighting pattern while minimizing glare.

Marketplace Architectural Theme

The architecture will be commercial in nature with various building classifications from "main street" style to "large format" retailers. Building design would be articulated to have the effect of reducing visually the bulk of the proposed buildings. The project would incorporate an eclectic variety of buildings and facades with an overall design compatibility. The initial architectural designs would be consistent with modern high end and open-air retail facilities with a theme best described as "new urbanist" or "neotraditional".

A warm palette of colors would be used in Marketplace's design. The colors and lights of retailer signage would play an integral part of the overall design. Buildings would be in multiple types and colors of bricks and blocks. Bright colors would be used on awnings, roof parapets, door casings, window trim, and architecture features sparingly. Site dumpsters would be screened from public view.

Signage

Sign locations are shown on the accompanying Pavement Marking and Signage Plan. Colorful signage would be used when appropriate to add energy and life to the Marketplace. Illuminated single channel back lit signs would be used, however, other signs would be used as appropriate. For example, a theme restaurant such as an Irish Pub may have an externally lit wood-carved sign. Signs would conform to the Town's zoning requirements.

The Town of Newburgh zoning ordinance limits the number and size of signs for use on commercial properties based on the amount of road frontage of a property. In the case of the Marketplace, up to 3,304 square feet of signage is permissible based on the 6,609 linear feet of frontage. The current conceptual plans for signage, both internal and at the property boundaries, total approximately 3,110 square feet as shown below on Table 3.10-1.

Table 3.10-1
Proposed Signage and Zoning Compliance
Marketplace at Newburgh

Sign type	Number	Average Size	Total SF
Shopping Center Identification Sign	4	130	520
Directory Sign	2	30	60
Directional Sign	7	15	105
Large Building Signs	5	200	1,000
Medium Building Signs	3	100	300
Small Building Signs	25	45	1,125
		Total	3,110 sf
		Allowable under Zoning	3,304 sf

Mitigation Measures

Landscaping

The intervening landscape will limit visibility. It is expected that the proposed landscape treatments within the developed areas, including installation of shade trees throughout the project to create a new canopy of tree cover, as well as careful selection of architectural treatment of the buildings (for example, building colors and varied rooflines), will minimize any potential adverse effect of the visual change. It is also noted that the views from area roads would be experienced briefly by people in moving vehicles rather than from stationary view points.

A landscaping plan is included as a drawing in the site plan accompanying the DEIS. Landscape plantings will be utilized to compliment the landscape, to screen potentially objectionable views and to replace plants lost due to clearing the site for development. Outside tree, shrub and perennial plantings areas would be integrated with the building fronts, and other non-impervious surface would be maintained as lawn.

Plants used to compliment the new development will include street and parking lot trees and shrub plantings, building foundation plantings, and plantings around the bases of signs or other site features. Trees along streets and parking lots will be deciduous shade trees. These

plantings will be supplemented with lower shrub bed and/or perennial bed plantings in portions of boulevard and parking lot islands. Foundation plantings will soften the transition of building masses to the ground plane and will consist of a mix of deciduous and evergreen trees, shrubs and perennials.

Plants utilized to screen potentially objectionable views will include a mixture of deciduous and evergreen trees and shrubs, with a higher concentration of evergreen plant material than in other areas to provide a more effective year round effect. These plantings will be employed around the perimeter of the site to screen parking areas, refuse storage areas, the rear of buildings, and other potentially objectionable views from the public.

On the shared property line between the rear yards of homes on Hilltop Avenue and Buildings C and D, there will be particular emphasis on landscape treatment by providing a new vegetation edge along the limit of disturbance line, adding to the existing visible screen between residents and the shopping center. The vegetation edge will also contain a fence for additional screening, security and sound attenuation.

The evergreen plantings at the top of the stone cut behind Buildings C and D will consist of hard pine toward the shopping center, planted in a double staggered row, with lower trees and shrubs on the wooded side to soften the view from residences. An eight foot high, solid panel fence will be placed at the top of the rock cut and along the fill sections and embankments to the north along the proposed 50 feet setback from the property line.

The fence will be placed to avoid existing trees and the variable top edge of rock cut. The placement and quantity of new plants in this location will depend on analysis of field conditions relative to the location of existing trees. The priority will be to save as many trees as possible and then planting areas where tree removal has created a need for supplementary plantings.

To the south and east of building D, where there are no buildings to be screened, the goal will be to diminish the visual disturbance by blending unobtrusive landscaping with the existing vegetation. The planting line will continue at the top of the slope with an eight foot high, visually unobtrusive security fence, which is a black vinyl coated chain link fence to blend into the forest. The shopping center side of the fence would be planted with evergreen materials, near the top of the bank, for maximum screening effect.

The adjoining residential properties to the north and west of Building C are located significantly lower in elevation than the site. The fill slope will be constructed of rip rap from shot rock removed to level; the area behind buildings C and D. The top of the bank, alongside the driveway, will be planted with an evergreen hedge with street trees interspersed throughout its length with a continuation of an 8-foot high fence running the length of the residential area.

It is the intent of the landscape design to re-vegetate the developed site with as many trees, shrubs and perennial plantings as reasonably appropriate in a commercial development. These plantings will be in the form of both complimentary and screening landscape treatments, as well as additional plantings where appropriate to augment the plantings described above.

Lighting will be used for the hours of evening operation. Lights primarily for the safety of visitors in parking and sidewalk areas, and for sign illumination, and most lights will be controlled by photocells. Other lights, which are necessary for security, may remain on all evening. These

lights will generally be a lower level of lumens and will be located at entrances and strategically around the site roadways to allow effective evening surveillance.

The site lighting has been designed to provide no spillover into the adjacent residential areas to the north. Directional shields will be placed on all lighting open to the residential areas to insure that at the property line the level of light is zero (0) foot candle. For the larger parking areas, the light levels will provide for a minimum of one (1) foot candle.

1.4 Alternatives

The following alternatives were examined in this EIS:

- No Action Alternative - There would be no job creation of approximately 1,600 employment positions or construction-related jobs. There would be no positive economic impacts, including the $2.7 million in annual real estate taxes and annual sales tax revenues of $38 million, $17.5 million which would be directly reimbursed to Orange County. There would also be no in property tax revenues to the Newburgh Enlarged City School District in the amount of $1.9 million annually to offset increased costs associated with new housing and introduction of additional schoolchildren to the school district. There would be no improvements to the poor drainage conditions at the intersection of Route 52 and Meadow Avenue. This alternative would result in no changes to existing soils and topography, water resources, traffic, ecological habitat, community services, or noise levels.

- Access Road Realignment Alternative. This alternative proposes an alternative alignment for the easterly access drive which extends to NYS Route 52 at 5th Avenue. The road would be situated father south and closer to the NYSDOT property. This alternative proposes the same building layout as the proposed site plan which is the subject of the DEIS. This alternative would likely result in a larger vegetative buffer between the road and the residences along Wintergreen and some residences along Brookside Avenue. Noise levels associated with the road would likely be lowered although the change would be barely perceptible.

- Buffer Alternative. In addition to the access road realignment, this alternative would also increase the vegetative buffer along the Marketplace northerly property line from 50 feet to 75 feet. This would have an additional benefit to the homeowners, who would be provided a more expansive buffer which would have a positive visual impact. Noise levels may be slightly more attenuated when compared with the proposed action. Similar to the road realignment alternative, this alternative would likely result in a larger vegetative buffer between the road and the residences along Wintergreen and some residences along Brookside Avenue.

- Alternative Lifestyle Center Design. The project proposes the same amount of building floor area as the proposed site plan. In this alternative, the circular arrangement of parking located centrally in the lifestyle center has been removed and a longer main street is created with improved view corridors and more efficient parking areas. This alternative also incorporates the realignment of the easterly access drive to traverse the NYSDOT property, and the expanded buffer area described above. The building footprint associated with the lifestyle center would be varied, but the lifestyle center concept would be retained. The differences in project impacts would be the same as described under the Buffer Alternative.

See Section 4.0 for a more detailed description of the various alternatives presented in the DEIS.

1.5 Brief Description of Issues and Potential Controversy

Based on the comments raised during the public scoping session, it is expected that areas of concern relate largely to stormwater runoff, increases in traffic and noise, loss of trees, and construction-related impacts.

1.6 List of Matters to Be Decided, Including Permits and Approvals

There is a list of agencies having potential approval authority for this project in Chapter 2 of the DEIS, Project Description and at the beginning of this chapter. No approvals have been granted to date, so any required action by an agency so listed will be needed before the project can be built and occupied.

2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 Introduction

Project Description - Overview

The project sponsor, Wilder Balter Partners, Inc. ("WBP"), proposes to construct an approximately 850,000 square foot open air shopping center development on an 127.6 acre project site located at the northeast quadrant formed by Interchange 7 of Interstate Route 84 with New York State Route 300 (a.k.a Union Avenue) (see Figure 2-1). The shopping center, the Marketplace at Newburgh, would be located directly across Route 300 from the Newburgh Mall, a 470,000 s.f. enclosed shopping mall constructed in 1970.

Ninety eight (97%) percent of the Marketplace site is zoned IB (Interchange Business) and all the buildings and parking would be constructed in the IB zoned portion of the property. The proposed secondary access from Route 52 in the vicinity of Exit 8 on I-84 would be constructed though a small portion of the site, some of which is zoned R-3.

The open air retail center site would contain two shopping formats. The area closest to Route 300 would support approximately 200,000 square feet of single-level retail space and would be designed as a "lifestyle center". Lifestyle centers, the fastest growing segment of the retail industry, are designed in a neighborhood or village setting, and contain higher end, smaller shops (under 20,000 square feet) with an emphasis on clothing, dry goods, specialty shops, and restaurants.

Pedestrian, brick-paver walkways, landscaping, varied facades, as well as a mix of small shops all work together to contribute to the ambiance of a lifestyle center. This lifestyle center component will also provide the lower scale, visual appeal from Exit 8 on I-84 and from Route 300 that the Town Planning Board and their consultants have requested.

The remainder of the site would be occupied by larger retail tenants housed in attached buildings or in a standalone format, totaling up to 650,000 square feet of gross floor area. The site layout for the Marketplace at Newburgh is shown in Figure 2-2.

Vehicular access to the Marketplace at Newburgh would be via three access roads. The main access road would intersect with NYS Route 300 at the existing intersection of Route 300 with the Newburgh Mall's southerly access driveway. The road is designed as a boulevard road for approximately 2,500 feet of its length. At the boulevard's intersection with Route 300, the road has been designed with six-lanes, fully signalized and coordinated with other signals on Route 300 to maximize the level of service for vehicles on Route 300. The primary access boulevard would be reduced to two lanes approximately 1,500 feet into the Marketplace site, past the lifestyle center as it bisects the proposed buildings and parking areas in the central and eastern portion of the development. A complete analysis of this primary entrance to the Marketplace is discussed in Section 3.6 of the DEIS and shown on Figure 3.6-13 of the DEIS.

As the road passes through the site and continues eastward to the second main entrance at the intersection of Route 52 in the vicinity of 5th Avenue, the access road will be widened and signalized to improve turning movements and improve safety and convenience in this location.

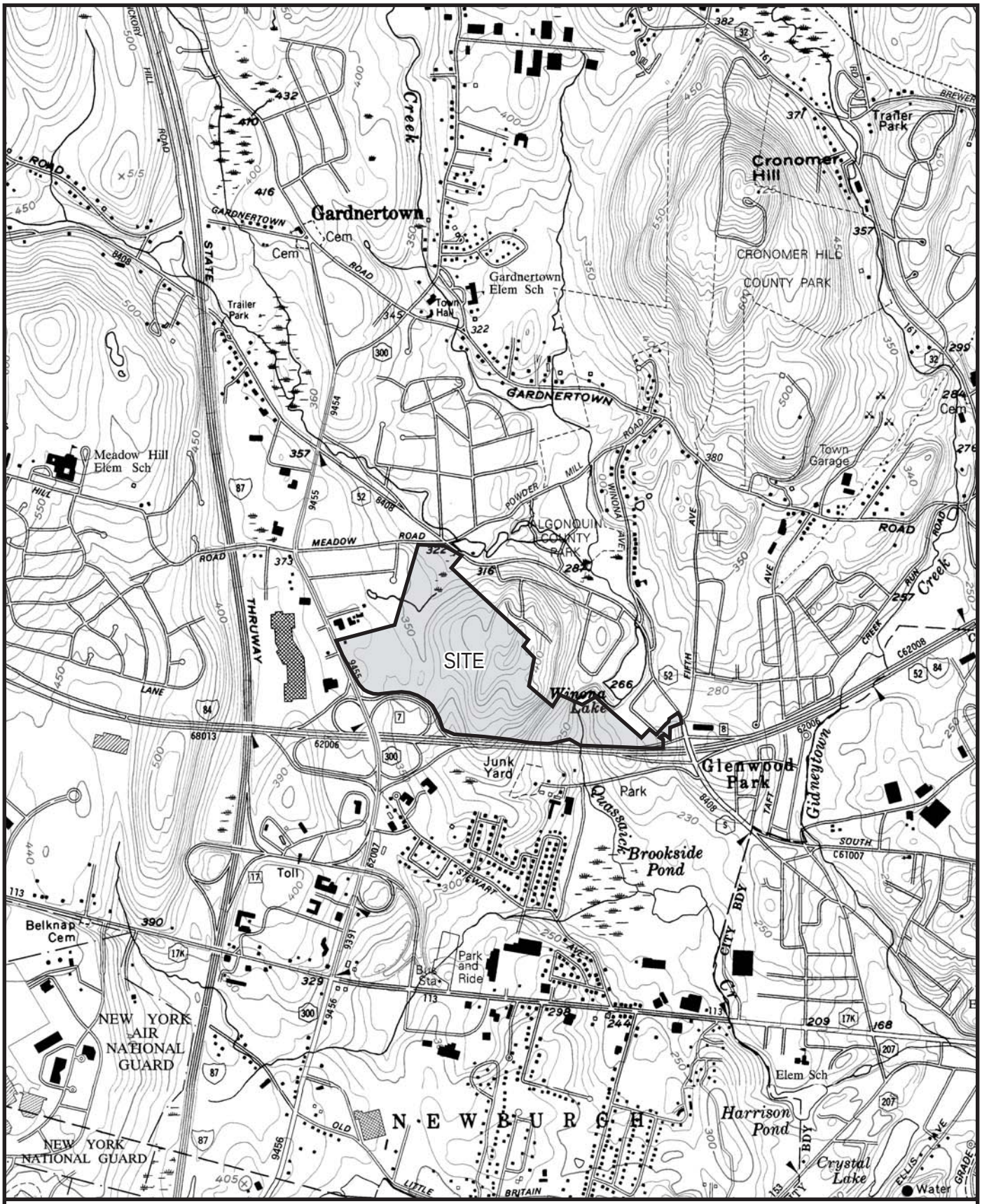

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Figure 2-1: Location Map

The Marketplace at Newburgh
Town of Newburgh, Orange County, New York
Base: NYSDOT Topographic and Planimetric Maps, Newburgh Quad (1957, 1991)
Scale: 1 inch = 2,000 feet

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Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

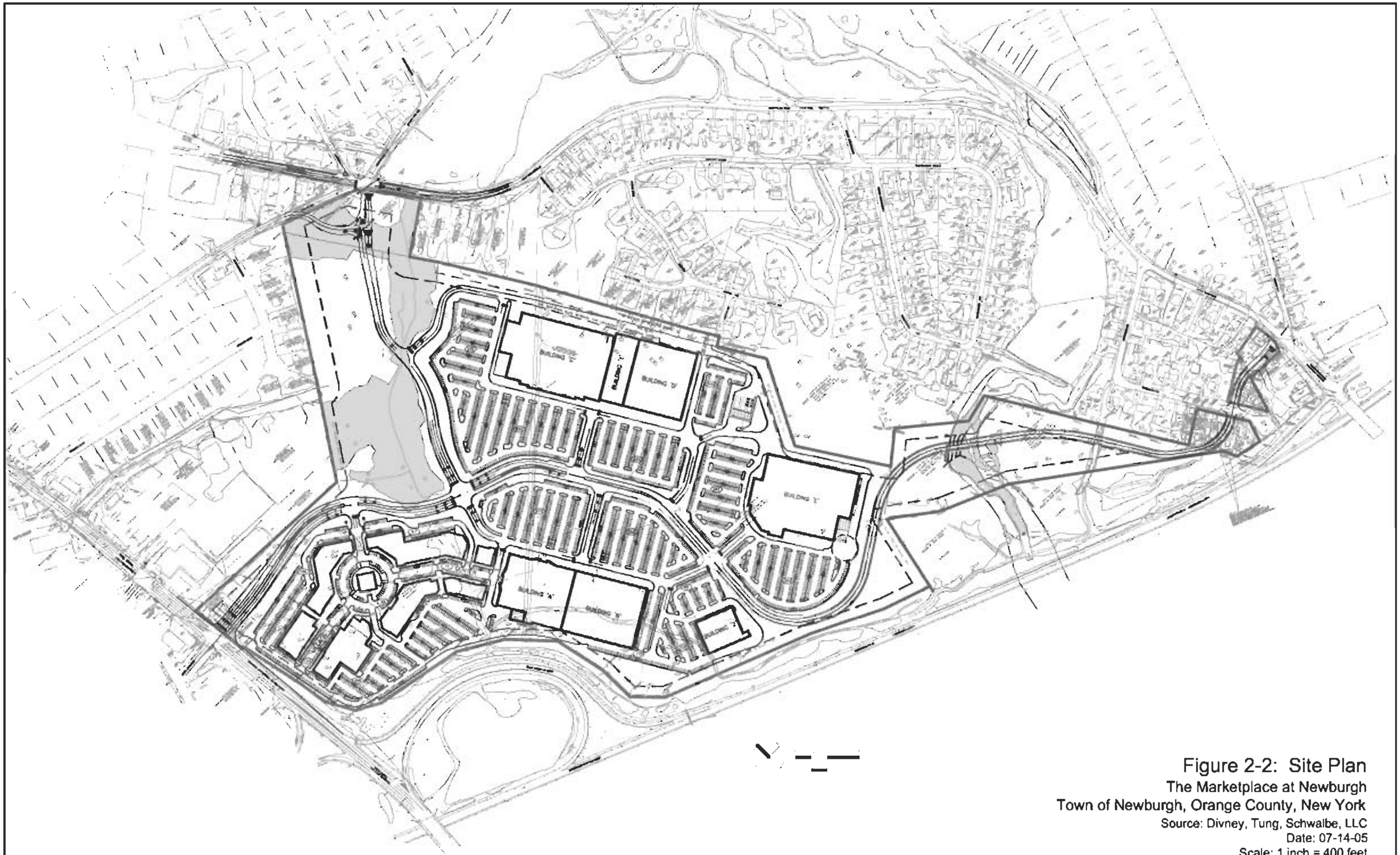

Figure 2-2: Site Plan
The Marketplace at Newburgh
Town of Newburgh, Orange County, New York
Source: Divney, Tung, Schwalbe, LLC
Date: 07-14-05
Scale: 1 inch = 400 feet

A third access road is proposed at the intersection of NYS Route 52, Meadow Avenue, Powder Mill Road (CR 102) and Innis Avenue and travels in a southerly direction where it would connect with the proposed Marketplace boulevard that bisects the development.

The developer will construct all on-site parking, access roads, retaining wall structures, stormwater facilities, utilities including water and sewer lines, internal sidewalks, and landscaping. After construction, maintenance of the occupied site would be performed by a combination of the Marketplace management company and the leaseholders. This is described in more detail in Section 2.7 of this DEIS.

SEQRA

This Draft Environmental Impact Statement (DEIS) evaluates the potential environmental effects associated with the proposed project, Marketplace at Newburgh. It has been prepared in accordance with Section 8-0101, et. seq. of the Environmental Conservation Law and the regulations promulgated by the New York State Department of Environmental Conservation (NYSDEC) under 6 NYCRR Part 617 implementing the New York State Environmental Quality Review Act ("SEQRA").

The content of this DEIS has been established by a scoping outline prepared by the Town of Newburgh Planning Board, acting as lead agency, in cooperation with all other involved agencies. To solicit public comments regarding the scope of the DEIS analyses, the Planning Board held a public scoping session on January 13, 2005. The scoping outline was adopted on February 10, 2005, and is included in Appendix A of this DEIS.

Appendix A also includes a copy of the Environmental Assessment Form, Part 1, and the Positive Declaration issued by the Newburgh Planning Board.

2.2 Approvals and Involved Agencies

The SEQRA regulations define an "involved agency" as an agency that has jurisdiction by law to fund, approve or directly undertake an action. If an agency will ultimately make a discretionary decision to fund, approve or undertake an action, then it is an "involved agency". While many of these agencies have been contacted for preliminary discussions, no formal permitting process has begun outside of those approvals required from the lead agency. The following lists the involved and interested agencies, and approvals required to commence the project.

Site Plan Approval
Town of Newburgh Planning Board
308 Gardnertown Road
Newburgh, NY 12550

Abandonment of Existing Town Roads/Dedication of New Town Roads
Town of Newburgh Town Board
308 Gardnertown Road
Newburgh, NY 12550

Sewer Main Extension and Pump Station Approval
Town of Newburgh Engineer
Attn: James Osborne
308 Gardnertown Rd.
Newburgh, NY 12550

Orange County Health Department
124 Main Street
Goshen, NY 10924

Sewer and Water Connection
Town of Newburgh Water Department.
Attn: William Puchalski, Water Department Superintendent
115 Plattekill Turnpike
Newburgh, NY 12550

Town of Newburgh Engineer
Attn: James Osborne
308 Gardnertown Rd.
Newburgh, NY 12550

Orange County Health Department
124 Main Street
Goshen, NY 10924

City of Newburgh Engineer
83 Broadway
Newburgh, NY 12550

General Municipal Law Referral
Orange County Planning Department
124 Main Street
Goshen, NY 10924

Highway Work Permit (including traffic signal warrants)
New York State Department of Transportation
4 Burnett Boulevard
Poughkeepsie, NY 12603

New York State Thruway Authority
New York Division Suffern
Suite 400
4 Executive Blvd.
Suffern, NY 10901

SPDES General Permit 02-01, Water Quality Certificate, Dam Permit
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 12561

Wetland Permit
US Army Corps of Engineers
New York District, Regulatory Branch
J. Javits Federal Building
26 Federal Plaza
New York, NY 10278-00090
Attn: Brian Orzel

Blasting Permit
Town of Newburgh Building Inspector
308 Gardnertown Road
Newburgh, NY 12550

Clearing and Grading Permit
Town of Newburgh Building Inspector
308 Gardnertown Road
Newburgh, NY 12550

Superintendent of Highways
308 Gardnertown Road
Newburgh, NY 12550

Water Main Extension, Hydrant Location and Fire System
Town of Newburgh Water Department
Attn: William Puchalski
115 Plattekill Turnpike
Newburgh, NY 12550

Town of Newburgh Fire Inspector and Fire Chief, Orange Lake Fire District
c/o 308 Gardnertown Road
Newburgh, NY 12550

Permit to Conduct Work in Floodplain
Town of Newburgh Building Inspector
308 Gardnertown Road
Newburgh, NY 12550

Stormwater Management Plan Approval
Town of Newburgh Engineer
308 Gardnertown Road
Newburgh, NY 12550

Architectural Review
Town of Newburgh Architectural Review Board
308 Gardnertown Road
Newburgh, NY 12550

2.3 Interested Parties

The following parties have been identified as interested parties:

Michael Donnelley, Esq.,
Planning Board Attorney
PO Box 610
Goshen, NY 10924

Ed Garling, AICP
Town Planner
Garling Associates
301 Main Street, Suite 1A
Goshen, NY 10924

Ken Wersted, P.E.
Town Engineering Consultant
Creighton Manning Engineering, LLP
17 Computer Drive West
Albany, NY 12205

Karen Arent, RLA
Town Landscape Architect Consultant
21 Old Minisink Trail
Goshen, NY 10924

Winona Lake Fire Engine Company #2
160 South Plank Road
P.O. Box 7360
Newburgh, NY 12550
attn: Chief Timothy Pillsworth

New York State Thruway Authority
Administrative Headquarters
200 Southern Boulevard P.O. Box 189
Albany, NY 12201-0189
(518) 436-2700

Newburgh Mall
1401 Route 300
Newburgh, NY 12550

Orange Lake Fire District
408 South Plank Road
Newburgh, NY 12550

Wilder Balter Partners
570 Taxter Road, 6th Floor
Elmsford, NY 10523

Tim Miller Associates
10 North Street
Cold Spring, NY 10516

2.4 Project Purpose, Needs and Benefits

2.4.1 Public Need and Benefits

Enhancement of the Ratable Base/Sales Tax Revenues

The Marketplace at Newburgh would result in significant economic benefits to the community and create a regional facility that is fully code compliant and that is fully consistent with the Town of Newburgh's recently adopted Comprehensive Plan Update and the Comprehensive Plan adopted by Orange County in 2003. Both the Town and County Comprehensive Plans are seeking to balance the rural character of the County and the Town with the significant growth Orange County is experiencing.

The solution in both Comprehensive Plans is to establish higher density developments in what the County Plan refers to as the "priority growth areas" which are proximate to utilities and transportation corridors and where significant dense development has occurred. The Marketplace is an excellent example of a project which not only conforms fully to the Town Zoning Ordinance in all regards but also embodies the objectives of these comprehensive plans.

The Marketplace will provide significantly to the real estate tax base of the community as well as providing an estimated $35 million in annual sales taxes, of which $13 million or approximately 40% will be transferred directly back to Orange County and the towns, cities, and villages in it.

In terms of its contribution to the annual real estate tax base and real estate taxes paid based on the assessed value of the completed center, the Marketplace will contribute approximately $2.6 million annually in real estate taxes. Of this amount, in excess of $1.9 million will be paid to the Newburgh Enlarged City School District. For more detail on the estimated real estate taxes paid by the Marketplace, refer to Table 3.7-1 on page 3.7-1 of this DEIS. A discussion of how the primary proposal compares to the analyzed alternatives is provided in Section 4.0.

Employment Opportunities

The Marketplace of Newburgh would create job opportunities in Orange County, generating demand for approximately 1,600 jobs in a number of categories, including but not limited to sales, management, administration, accounting services, security and maintenance. In addition, the Marketplace is only short distance from the City of Newburgh which has been designated by the U.S. Department of Labor as a "labor surplus area". A LSA is defined as an area with an unemployment rate 20% or higher than the national rate.

The proposed project would also generate approximately 1,000 full-time equivalent jobs during the construction phase of the project.[1]

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[1] *Urban Land Institute, Development Impact Assessment Handbook.*

Unique Retail Opportunity

The lifestyle center would introduce a unique retail shopping center experience that does not presently exist in the Town. The lifestyle center will blend retail, dining, and entertainment venues in one outdoor location that would serve as a community gathering place and contribute a "sense of place" to a commercial corridor that at present is comprised mostly of conventional strip commercial centers.

2.4.2 Objectives of Project Sponsor and Compatibility

The objective of the applicant is to develop a well-designed retail shopping center complex consistent with the Town of Newburgh's zoning regulations and to create a financially viable project that is compatible with the character of the NYS Route 300 retail corridor and the long-range plans for this interchange area.

Compatibility with the New (October 2005) Newburgh Comprehensive Plan Update

In October 2005, the Town of Newburgh adopted an Update to its Comprehensive Plan. The Marketplace is consistent with this Plan which recommends more intense development in the areas that can support higher density, where transportation corridors and public utilities are available, and "protect and enhance the existing community character" and preserve open space in the more rural and environmentally sensitive areas of the Town. The Comprehensive Plan Update was the result of a three year undertaking by the Town, its consultants and significant input by the public, including numerous public hearings.

The proposed Marketplace would conform to the recently adopted Comprehensive Plan Update as the Update envisions that the project would remain in "IB" zoning which is intended to accommodate retail uses. In addition, the Plan Update acknowledges that residential uses such as senior and affordable housing may not be appropriate to the IB zoning district; the Marketplace does not propose any housing.

The Marketplace would result in improvements to the local transportation network, especially along NYS Route 300 and NYS Route 52, which would assist in addressing traffic and safety concerns along these corridors identified as "major corridors of concern." These improvements are described in detail in Section 3.6 of the DEIS.

The Marketplace would be consistent with the Town's objective to avoid suburban sprawl and preserve the rural character of the outlying areas by concentrating nonresidential development in proximity to the I-84/I-87 interchange area, an area within the growth boundary of the Plan Update. Lastly, the Marketplace's lifestyle center would create a focal point for social activity within the Town.

Compatibility with Orange County Comprehensive Plan

The Orange County Comprehensive Plan was adopted in 2003. Based on a review of the land use plan included in the County's Comprehensive Plan, the project site is located within a "Priority Growth Area". Priority growth areas are general areas of preference for future development to maximize efficiency of infrastructure and services and to minimize open space loss in the County while maintaining enough growth in the tax base to help fund the increasing demands for services without raising taxes.

The project site is located within the County's "Interchange" area defined as an area with proximity to major interchanges, and intended for retail, distribution and commercial uses. The project site is also located strategically between the Newburgh City Area and Stewart International Airport transportation hubs. The proposed project would be consistent with the County's land use objectives of concentrating development in areas well served by utility and transportation infrastructure.

The proposed commercial uses at the Marketplace development are compatible from a land use perspective with the existing commercial uses along NYS Route 300 as well as Interstate 84 to the south and the interchange. With the existing commercial development along this portion of NYS Route 300 and the easy access from I-84 via two exits (Exit 7 and 8) and the NYS Thruway interchange less than ¼ mile south of the proposed Marketplace entrance, the site is uniquely positioned for major commercial development. Locating commercial development on this site relieves pressure to place retail uses on the secondary state, county, and local roads thereby reducing impacts on areas less suited for commercial development.

2.5 Project Location, Description and Environmental Setting

2.5.1 Geographic Boundaries of the Project

The project site is bounded generally by I-84 and the westerly off ramp of Interchange 7 to the south; NYS Route 300 (Union Avenue) to the west; Meadow Avenue, NYS Route 52 (South Plank Road) and Hilltop Road to the north; and, NYS Route 52 to the east. The site is located in the unincorporated area of the Town of Newburgh, Orange County, New York.

2.5.2 Existing Access to the Property

The project site has frontage on NYS Route 300 to the west, Meadow Avenue/NYS Route 52 to the north, and NYS Route 52 to the east. The majority of the site (97%) is presently vacant and there are no existing roads and drives internal to the site. A small portion of the site consists of five (5) single family residences along Route 52 and Brookside Avenue. These homes will be demolished and that area will support one of the access drives to the site.

2.5.3 Existing Zoning, Topography, Site Characteristics

Ninety-eight percent (97%) of the Marketplace site is located within the "IB", Interchange Business zoning district (refer to Figure 3.5-2 of the DEIS). All of the areas on which the retail buildings, parking, and stormwater facilities would be located are within the IB zone. The proposed use, a shopping center, is a use subject to site plan review by the Newburgh Planning Board.

A 3.2-acre area of the project on the easterly edge of the site zoned "R-3" Residential and would be developed with a second "main entrance" that would connect from NYS Route 52 at 5th Avenue to the main road bisecting the Marketplace.

The topography of the site is described in detail in Section 3.1 of this DEIS. Generally, the southwest corner of the site adjacent to the off-ramp from I-84 westbound is at an elevation of 350± feet above mean sea level (msl). The project site rises from southwest to northeast and crests at an elevation of approximately 425± feet msl. The elevation of the site then

decreases traveling east toward Winona Lake and Quassaic Creek. The creek elevation is approximately 220± feet msl.

East of Quassaic Creek, the site rises more gradually and flattens out at an elevation of approximately 270 ± feet msl approaching NYS Route 52. Slope ranges on the site vary, and are shown in Chapter 3.1 of the DEIS.

The Town of Newburgh does not have a permitting program relative to wetlands. Wetlands are under the legal jurisdiction of either the U.S. Army Corps of Engineers (if the wetlands are determined to be waters of the United States) and the New York State Department of Environmental Conservation (NYS DEC). The Town of Newburgh zoning regulations define "protected" versus "unprotected" wetlands. "Protected" wetlands are those that come under state or federal jurisdiction.

The entire site was reviewed in the field by the United States Army Corps of Engineers, who has jurisdiction of freshwater wetlands pursuant to section 404 of the Clean Water Act. Approximately 10.9 acres of wetlands on the subject site are regulated by that agency. Isolated wetlands on the subject site, reviewed by the ACOE and deemed to not fall under ACOE jurisdiction approximately 4.9 acres.

The on-site, ACOE-regulated wetland extends from the intersection of Meadow Avenue/NYS Route 52 into the site approximately 1,000 lineal feet (See Fig 3.2-3). The site plan shows approximately 1.76 acres of regulated wetland would be disturbed.

In order to mitigate the loss of wetlands, 1.79 acres of new wetland would be created. This is described in greater detail in the wetlands section of this DEIS. In addition, the proposed stormwater detention basins will be planted to function as wetlands and are located adjacent to the existing wetland. While ACOE does not include storm water detention ponds in the mitigation calculations, in fact these ponds will become part of the wetland regime.

Quassaic Creek is a stream corridor located in the easterly section of the property which flows from north to south as it traverses the site. According to the New York State Department of Environmental Conservation, the creek has a water quality designation "D" within the project site. Streams designated "D" are not protected streams and therefore no NYS DEC permits will be required in connection with the proposed stream crossing.

The applicant is proposing an arched concrete culvert spanning the entire creek bed (versus a series of box culverts) in order minimize impacts on the vegetative, fish and wildlife habitat along the stream corridor to the extent possible. Arched culverts spanning the entire stream width are considered "best practices" for stream crossings .

The Federal Emergency Management Agency ("FEMA") maps flood plains for all communities on a national basis. There is a small portion of the 100 year flood plain along the banks of the Quassaic Creek. Due to the steep banks of the creek, the flood plain area is narrow and extends, for the most part, less than 20 feet on either side of the creek. No development apart from the stream crossing structure is proposed for areas within the 100 year flood plain. The accompanying site plan shows the location of the 100-year flood plain on the Marketplace property.

The vegetative cover of the undeveloped portions of the property is wooded. According to a wetland report prepared by Chazen Companies and included as Appendix D of this DEIS, the major vegetative communities on the project site are successional hardwood forest and red maple hardwood swamp. Vegetative communities are described in detail in Section 3.3 of the DEIS.

A small portion on the easterly edge of the project site includes several tax lots on which buildings are currently situated. There is one, 1-acre commercial parcel on NYS Route 300 (Newburgh tax map designation of Section 60, Block 3, Lot 41.3) where a former Exxon gas station has been completely demolished and removed, including removal of all underground tanks, lines, paving curbs, the building and building foundation. The site has been regraded. Remediation of a 17-year oil spill has been completed recently as a result of actions by the developer. More than 3,000 cubic yards of contaminated soil have been removed off site and new fill has replaced the excavated material. Monitoring wells are being installed the first week of November 2005 and the monitoring wells will be monitored quarterly and sent to the NYS DEC for their review as part of the overall clean up of the formerly contaminated site.

In order to construct the drive that would access NYS Route 52 in the vicinity of Exit 8, the applicant has purchased or contracted to purchase a number lots with single-family dwellings. Except for one single-family dwelling that fronts on NYS Route 52 in this vicinity, the remaining dwellings are located at the Brookside Drive cul-de-sac.

2.5.4 Surrounding Area Land Use

As per the adopted scoping outline, the following is a description of surrounding area land uses, topography, environmental characteristics and traffic located within the triangular area formed by the New York State Thruway (I-87), Route 52 and Route 84. In addition, land use and traffic is described for the surrounding area extending south to Route 17K.

Figure 3.5-1 of the DEIS shows existing and surrounding land use within the study area. The land use within the surrounding area reflects the Town's zoning regulations and the uses allowed in the various zoning districts within this area. The Route 52 corridor extending from the NYS Thruway to Interchange 8 of I-84 is zoned a combination of the Interchange Business (IB), Business (B), and Residential (R-3) zoning districts. At the west end of the corridor, a mini storage facility is zoned IB.

NYS Route 52 is zoned "B" on both sides of the road extending from the New York State Thruway to its intersection with Powder Mill Road. Within the "B" zone, there are numerous miscellaneous small strip shopping centers with a variety of small retail and personal service establishments. Gas stations, delis, a bowling lane, diner, fast-food restaurants, car wash, automotive repair facilities, movie rental, pool and spa sales, and hardware store are represented along this corridor.

Scattered residential uses and some mobile home trailers that do not maintain frontage on the road but gain access to it via existing private roads are located along the westerly end of the NYS Route 52 corridor in the vicinity of the Thruway.

The R-3 district is mapped on both sides of NYS Route 52 between Powder Mill Road and Interchange 8. This zone encompasses a residential neighborhood on the south side of the road consisting primarily of single-family residences.

On the north side of NYS Route 52, Algonquin Park is situated along much of the road's frontage extending to Route 52's intersection with Winona Avenue. Winona Lake is located on the south side of the road, and is surrounded by smaller lot single-family residences. It is noted that nonresidential uses are scattered along this residentially-zoned portion of the corridor, including law offices, a dentist, and chiropractor's office. A restaurant and welding/manufacturing use are also located here.

At the east end of Route 52, the IB district and B district encompass the properties immediately adjacent to Exit 8 and contain a mixed use commercial building and a small strip retail center. A gas station is also located at the corner of Fifth Avenue and Route 52.

The NYS Route 300 corridor, between Route 52 and the Exit 7 interchange and adjoining the project site, is overwhelmingly commercial in character. Properties with frontage on Route 300 are zoned "IB". Uses include banks, fast food restaurants, automotive repair establishments, and the Newburgh Towne Center which includes a grocery store, apparel store, and miscellaneous retail and service commercial tenants.

The Newburgh Mall occupies the land area bound by Meadow Avenue, I-84, Route 300 and the NYS Thruway. A list describing various retailers is provided in Section 3.5 of this DEIS.

The project site, zoned IB, is primarily vacant and located on the east side of NYS Route 300 and north of I-84. To the northwest of the site, a small residential single-family neighborhood is located between Meadow Avenue and the Marketplace property and is zoned R-3. Meadow Avenue is zoned IB, and includes a mix of commercial, office, and single-family residential uses.

Much of the land immediately adjoining Exit 7 is vacant and I-84 right-of-way, as well as right-of-way associated with Exit 17 of the New York State Thruway. South of the interchange area, land with frontage on NYS Route 300 is zoned IB, and includes hotels, sit-down restaurants, and a large office building.

The frontage along 17K is zoned IB, extending from NYS Route 52 to the Town's boundary with the City of Newburgh. The corridor is commercial. In the immediate vicinity of the 17K/Route 300 intersection, new stores have been constructed at the southwest quadrant consisting of large-format and small-format retailers, including a home improvement warehouse (Lowe's), book store (Barne's and Noble), arts and crafts store (Michael's) and home good store (Pier One). A restaurant is under construction. A diner and gas station is located on the north side of this development.

Traveling east along Route 17K, a concentration of automotive retail dealerships exist including Nissan, Honda, Chevrolet, Chrysler/Jeep Dodge, Ford and Buick/Pontiac. Numerous banks are found along the highway's frontage. The former Ames shopping center is being refurbished for the future site of Target. A steakhouse, grocery store, and miscellaneous smaller retail tenants are situated in this shopping center. Adams Fairacre, a regional specialty /grocery store and garden center, is also located at the southeast corner of Route 17K and NYS Route 300. Farther south on Route 303 are a Home Depot (108,000 square feet) and Wal-Mart which is being expanded presently to a Wal-Mart super store (approximately 209,000 square feet).

Lastly, a single-family residential neighborhood consisting primarily of a mix of bungalow-style homes and one-story ranches is located along Stewart Avenue, which connects NYS Route 300 with Route 17K. A gated access road provides emergency access from this street to the Ames Shopping Center which is currently being refurbished and would be anchored by the retailer, Target. To the north and east of this neighborhood, a Pepsi distribution center and NYS DOT maintenance facility are nonresidential uses that dominate land to the west of Interchange 8, on the south side of I-84.

In summary, the majority of the surrounding study area is commercial in nature. Approximately 12 homes to the north of the site are the only adjacent residential abutters along the northerly property line in proximity to proposed buildings.

Figures 3.6-3, 3.6-3A, 3.6-4, and 3.6-4A illustrate existing traffic volumes along roads during the weekday peak PM hour and the Saturday peak hour. Volume counts are also included in the traffic study included as Appendix G of the DEIS for the roads in the immediate vicinity of the project site.

The two major state roads in the vicinity of the Marketplace site are NYS Route 52 and NYS Route 300. On NYS Route 52 east of Powder Mill Road, average daily traffic volumes are approximately 12,500 trips and NYS Route 300, south of Meadow Avenue, had an average daily traffic volume of approximately 28,700 trips southbound, and 31,080 trips northbound. Meadow Avenue had an average daily traffic volume of approximately 8,000 trips.

The site's environmental characteristics have been considered in the design of the layout for the Marketplace. Along Interstate 84, low lying areas occur along the path of the Quassaic Creek. Although there are no NYS DEC regulated wetlands on the Marketplace site, according to maps published by the NYSDEC, there are two New York State designated freshwater wetlands located within the surrounding project area. The first, NB-28, is located ¼ to ½-mile north of the project site within Algonquin Park, a county recreational complex.

The wetland would not be impacted by development of the Marketplace. The project would not result in any disturbances to this wetland. The NYS DEC wetland extends from Powder Mill Road to the north, to Route 52 to the south. The wetland discharges into Quassaic Creek, which flows into Winona Lake.

South and downstream of Lake Winona, Quassaic Creek continues through a portion of the project site, and underneath I-84 where it flows into Brookside Pond on the south side of the highway. Brookside Pond is designated as NYSDEC regulated freshwater wetland NB-29. There would be no direct disturbance to NB-29, although controlled and treated stormwater flow from the project site would ultimately enter this wetland.

As stated above and shown on the accompanying site plan, Quassaic Creek flows through the easterly portion of the project site. Within the project area, the creek enters from the west just north of Route 52 and east of the New York State Thruway. The creek flows in a southeasterly direction along the north side of Route 52. The creek crosses under Powder Mill Road where it flows into a series of ponds and the wetlands within Algonquin Park. As mentioned previously, the stream then flows into Winona Lake, through the project site, under I-84, and discharges into Brookside Pond.

The stream continues south and east entering the City of Newburgh, ultimately discharging to the Hudson River. Along its length, the stream has been altered and channelized to accommodate various nonresidential uses located on Route 52.

Along Quassaic Creek, the Federal Emergency Management Agency has mapped the 100 year and 500 year floodplains both upstream and downstream of the project site within the project vicinity (Flood Insurance Rate Map, Community Panel Map 360627 0017 A) (see the site plan accompanying the DEIS).

On-site wetlands have been delineated and are shown on Figure 3.2-3 of the DEIS.

2.6 Project Layout

Building Layout

Figure 2-2 illustrates the building layout for the Marketplace at Newburgh. The buildings have been oriented along the periphery of the project site, with the parking and drive aisles located centrally within the site. A cluster of eight (8) buildings comprise the lifestyle center which is located just east of NYS Route 300 and north of the I-84 westbound off-ramp at Exit 7. The lifestyle center buildings have been oriented to create a "main street" feel to the center, with a large rotary situated in the middle of this complex. Parking would be provided both in front and behind the commercial buildings.

The remainder of the retail center will have stand alone, large-format retail tenants.

To the east of the lifestyle center and along the site's southerly boundary, buildings labeled "A" and "B" would have a footprint of approximately 190,000 square feet. Immediately to the east, a smaller building identified as "2" has a 30,000 square foot footprint. A standalone Building "E" is proposed along the northerly property boundary of the site and has a 150,000 square foot building footprint. The remaining building would consist of three separate retail spaces identified as "C", "1" and "D". In total, this building would contain 267,500 square feet. In total, the larger format tenants would comprise up to 650,000 square feet of gross floor area.

The large-format tenants have been situated at the periphery of the property to allow all parking areas to be located centrally within the development. In terms of the overall building layout, only the building containing spaces C, 1 and D adjoin residential properties. A vacant parcel to the north of Building E is located between the northerly residential neighborhood and this space; this vacant parcel is zoned Interchange Business, IB, and is not part of this project. However, with no access except through New Street and no municipal utilities and steep slopes over much of the 5.5 acre site, it is doubtful that an intense commercial development of this parcel will occur.

Floor Area

The site plan for the Marketplace at Newburgh illustrates a layout encompassing 850,000 square feet. Of this total, approximately 200,000 square feet gross leasable area (gla) would be contained in the lifestyle center, and 650,000 square feet gla would be constructed on the remainder of the site.

Building Use

Within the lifestyle center, it is expected that there would be a combination of uses that could include but would not be limited to cafes, restaurants, retail stores, banks, active recreation uses (e.g. fitness club), and personal service establishments. The remainder of the site would be developed with large-format retail uses that create a draw to support smaller formatted stores.

Drainage

In 2003, the NYS DEC promulgated new statewide regulations for storm water management. These regulations require that all new developments provide on-site storm water quality and treatment of stormwater runoff before leaving the site. Typically, on-site storm water detention basins are required and must be sized to contain the 100-year probability storm. In addition, each site development plan for sites of greater than one (1) acre of disturbance must prepare and submit to the NYS DEC for approval a Stormwater Pollution Prevention Plan ("SWPPP") which outlines construction phasing and stormwater management practices and procedures to be used during construction and for post construction operations.

The Applicant's engineer has prepared a Stormwater Management Report for the proposed Marketplace at Newburgh. This report details the design of the stormwater management basins and is included as Appendix F of the DEIS.

Further, the report and associated Stormwater Management Plan was developed in accordance with applicable town and NYSDEC guidelines, including the New York State Stormwater Management Design Manual and the New York Guidelines for Urban Erosion and Sediment Control. Specific attention has been given to generally maintain existing reservoir basin drainage divides, to create Total Maximum Daily Limits (TMDL) benefits, to attenuate peak discharges to attain a "zero increase" in comparison to the pre-development conditions and to meet NYSDEC stormwater treatment criteria.

The primary treatment for runoff discharging from the project will be through newly constructed stormwater detention/water quality basins (also known as micropool extended detention ponds). Passively controlled outlets from the basins will extend the discharge duration from the basins to 24 hours or more. Stormwater runoff will be collected in a subsurface closed drainage system and transported to stormwater basins for ultimate discharge from the site at two design points as shown in Figure 3.4-3. The last pond in either series of basins is designated as a "micropool extended detention pond" (P-3) per the NYSDEC Design Manual. Runoff at Drainage Area C will enter a sub-surface water quality treatment system. Overflow form this system will discharge to the south along the existing I-84 right of way to an existing vegetated swale.

Basins were sized to meet the 90% treatment requirement of the NYS DEC for average runoff events. Based on the proposed best management practices, combined with phasing of the construction and regular maintenance and monitoring of erosion control measures, it is expected that there will be no adverse environmental impacts to Quassaic Creek or other downstream water bodies.

Calculated future peak flow rates for each of the 24-hour storm events are expected to be reduced in comparison to existing flows, as required by the Town of Newburgh and NYS

DEC. The stormwater basin volumes have been scaled to allow for the capture and treatment of 90% of the average stormwater runoff, as required by the NYSDEC.

Bankside discharge points and velocity dissipaters will be structured so as to protect stream side banks and vegetation. Some of the post-development stormwater will continue to occur as sheet runoff from undisturbed and protected areas of the site, in a manner similar to existing conditions on the property.

In summary, the proposed stormwater management system as shown on the plans is designed to assure that the stormwater runoff in the post-development condition will not significantly alter the pre-development quantitative and qualitative stormwater conditions. Pollutant loading calculations can be found in the Stormwater Management Report (Appendix F) and demonstrate that post-development pollutant loading will be less than in the existing condition for suspended sediments, phosphorus, nitrogen and bacteria, with a nominal increase in loading for metals.

Parking Layout

The parking layout is shown on Figure 2-2 and in more detail on the plans attached to this DEIS. According to the project engineer, the proposed project would include 3,800 parking spaces conforming to the Town of Newburgh zoning requirements which requires that 1 parking spaces be provided for every 225 square feet of gross leasable area or 4.44 spaces per 1,000 of g.l.a.) for shopping centers in excess of 25,000 square feet. All parking areas will be paved with asphalt, and would be maintained in order to prevent pot holes and to retain clarity of required markings as per the zoning law.

The parking spaces are distributed throughout the site in relation to the proposed structures. Handicapped parking spaces will be included to meet all applicable requirements. A total of 40 such parking spaces are shown on the site plan.

Parking areas would be landscaped in conformity with Section 185-13 of the zoning law. The landscaping plan drawing is included in the site plan that accompanies this DEIS as described below.

The Town of Newburgh requires that trees be planted within the parking lots at a ratio of one tree for every eight parking spaces proposed. The current proposal provides 512 trees for the 3,494 parking spaces that are proposed. This exceeds the Town requirement of 437 trees. A total of more than 1,000 trees will be planted.

Landscaping Plan

A landscaping plan is provided on the attached set of drawings. Landscape plantings will be utilized to compliment the landscape, to screen potentially objectionable views and to replace plants lost due to clearing the site for development. Outside tree, shrub and perennial plantings areas would be integrated with the building fronts, and other non-impervious surface would be maintained as lawn.

Plants used to compliment the new development will include street and parking lot trees and shrub plantings, building foundation plantings, and plantings around the bases of signs or other site features. Trees along streets and parking lots will be deciduous shade trees.

These plantings will be supplemented with lower shrub bed and/or perennial bed plantings in portions of boulevard and parking lot islands. Foundation plantings will soften the transition of building masses to the ground plane and will consist of a mix of deciduous and evergreen trees, shrubs and perennials.

Plants utilized to screen potentially objectionable views will include a mixture of deciduous and evergreen trees and shrubs, with a higher concentration of evergreen plant material than in other areas to provide a more effective year round effect. These plantings will be employed around the perimeter of the site to screen parking areas, refuse storage areas, the rear of buildings, and other potentially objectionable views from the public.

On the shared property line between the rear yards of homes on Hilltop Avenue and Buildings C and D, there will be particular emphasis on landscape treatment by providing a new vegetation edge along the limit of disturbance line, adding to the existing visible screen between residents and the shopping center. The vegetation edge will also contain a fence for additional screening, security and sound attenuation.

The evergreen plantings at the top of the stone cut behind Buildings C and D will consist of hard pine toward the shopping center, planted in a double staggered row, with lower trees and shrubs on the wooded side to soften the view from residences. An eight foot high, solid panel fence will be placed at the top of the rock cut and in the proposed 50 feet setback from the property line.

The fence will be placed to avoid existing trees and the variable top edge of rock cut. The placement and quantity of new plants in this location will depend on analysis of field conditions relative to the location of existing trees. The priority will be to save as many trees as possible and then planting areas where tree removal has created a need for supplementary plantings.

To the south and east of building D, where there are no buildings to be screened, the goal will be to diminish the visual disturbance by blending unobtrusive landscaping and fencing. The planting line will continue at the top of the slope with an eight foot high, visually unobtrusive security fence, which is a black vinyl coated chain link fence to blend into the forest. The shopping center side of the fence would be planted with evergreen materials, near the top of the bank, for maximum screening effect.

The adjoining residential properties to the north and west of Building C are located significantly lower in elevation than the site. The fill slope will be constructed of rip rap from shot rock removed to level the area behind buildings C and D. The shot rock will be covered with organic material to blend into the area while maintaining an aggressive terrain to dissuade pedestrian movement between the Marketplace and off-site locations that would interfere with the quiet enjoyment of the existing residential neighbors. The top of the bank, alongside the driveway, will be planted with an evergreen hedge with street trees interspersed throughout its length with an eight foot high fence running the length of the residential area.

It is the intent of the landscape design to re-vegetate the developed site with as many trees, shrubs and perennial plantings as reasonably appropriate in a commercial development. These plantings will be in the form of both complimentary and screening landscape

treatments, as well as additional plantings where appropriate to augment the plantings described above.

Lighting Plan

A lighting plan sheet has been provided as part of the site plan.

The lighting plan shows the location and types of lighting fixtures utilized as well as the point to point foot candle ratings. The limit of light spillage is identified by a blue line inside the perimeter of the Marketplace property. The lighting plan has been designed to avoid spill-over along the site's northerly border abutting a residential neighborhood located along Hilltop Avenue.

At the boundary of the Hilltop residences, the foot candle level will be zero (0). All lighting behind buildings C and D nearest the Hilltop residences will have shields to provide security for the rear of the buildings while, at the same time, eliminate all lighting spillover onto the adjacent residential properties. A vegetative buffer and an 8 foot high solid fence is proposed for this area. However, the lighting plan assumes a "worst case scenario" with no vegetation and no fence. There will however, be vegetation and fencing to further mitigate lighting effects at the property line.
The fixtures chosen to light the parking lots utilize a flat glass lens with the lamp completely recessed into the housing which reduces glare to maintain "dark sky" compliance. The site plan for the Marketplace has been designed to use the large retail structures on the north side of the site to block traffic noise and light pollution.

For the more heavily trafficked pedestrian areas, a carriage type fixture will be used to compliment the architecture and landscape design. It is also expected that decorative, lower-height, pedestrian-scale lighting will be used to accentuate the architectural design within the lifestyle center to enhance the area's village ambiance.

Close attention was paid to the layout of the fixtures to maintain lighting uniformity that reduces hot spots and dark spots. The results of the lighting analysis show a uniform distribution of light that makes for a safe and inviting environment.

Erosion and Sediment Control Plan

All soil erosion and sedimentation control practices will be installed in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-02-01) best management practices and Town of Newburgh code.

Both temporary and permanent erosion control facilities and activities will be applied over the duration of project related activities on the site. A plan for phasing and sequencing of site construction has been prepared and is included in the Erosion Control Report (Appendix C). Overall, a total of five phases are proposed. Each phase will stand alone with regards to erosion controls, use of best management practices and site stabilization. This plan, as prepared, is intended to meet the requirements of the NYS General Permit.

The project will be built out in the following phases:

A. Phase 1A – Erosion Control

The first step in the construction process will be to establish erosion controls, including the excavation and construction of all required sediment basins. The three sediment basins constructed will be used to capture and detain stormwater runoff. Additionally a stabilized access road and an on-site rock crushing facility will be setup during this phase. Construction vehicle access to the site will be from NYS Route 300 (Union Avenue) in the early phases of construction.

B. Phase 1B – Lifestyle Center

The location for the Lifestyle Center will be cleared of topsoil, trees and other vegetation. Excess fill from the center of the site will be placed in controlled and compacted lifts to bring the project area up to final grade. The on-site rock crusher will be utilized to minimize the amount of rock and soil entering or leaving the site. Pavement base courses and building foundations will be placed as soon as possible to stabilize the site.

The sediment trap at the west end of the site will be replaced with the permanent below grade stormwater treatment system once significant stabilization is complete. Installation of the on-site utility infrastructure will also be commenced during this phase.

C. Phase 1C – Buildings A, B, and 2

Construction will continue in the area of buildings A, B, and 2 and will include the driveways, parking lots, walkways and utility infrastructure. Excess fill from the center of the site will be placed in layers to bring the project area up to final grade. The on-site rock crusher will be utilized to process excavated rock material to minimize the amount of rock and soil entering or leaving the site. Pavement base courses and building foundations will be placed as soon as possible to stabilize the site. Additionally, the connection to Meadow Avenue and NYS Route 52 northeast of the site will be completed in this phase.

D. Phase 1D – Building E

Construction will continue in the area of buildings E and will include the driveways, parking lots, walkways and utility infrastructure. Excess fill from the center of the site will be placed in lifts to bring the project up to final grade. Rock will be processed on-site to utilize it for foundations and engineered fill below parking areas and road. This recycling of onsite materials will reduce the need to import in excess of 150,000 cubic yards of processed quarry material from off-site locations. Once the pavement base course has been installed, the temporary sediment trap will be converted into permanent stormwater quality and detention basins.

E. Phase 1E – Buildings C, D and 1

Construction will continue in the area of buildings C, D and 1 and will include the driveways, parking lots, walkways and utility infrastructure. Excess fill from the parking area and buildings C and 1 will be placed in lifts to bring the remainder of the project area up to final grade.

Pavement base courses and building foundations will be placed as soon as possible to stabilize the site. In the alternative, disturbed areas will be temporarily seeded after grading has been completed. Additionally, the connection to Route 52 southeast of

the site will be completed in this phase. Once the pavement base course has been installed, the temporary sediment trap will be converted into permanent stormwater quality and detention basins.

The NYS DEC SWPPP requirements are very stringent for large sites (in excess of 5 acres of disturbed area at any time in the development process). Where areas greater than 5 acres are being excavated and graded, additional requirements of the NYS DEC under the SWPPP process include:

1. The site must be inspected every other day by a certified professional during those periods when work areas include more than ten acres of exposed soils.

2. Areas identified by the erosion control inspector must be addressed within three days.

3. Disturbed areas that will not be used for construction within ten days must have temporary stabilization methods applied.

4. A supply of temporary erosion control measures, to include mulch, erosion control blankets, and hydroseed shall be maintained on site to stabilize all exposed areas.

5. Prior to forecasted storms in excess of one inch in 24 hours, the exposed area shall be reduced to a maximum of 10 acres through the use of temporary erosion control measures.

6. Building foundations shall be excavated to contain runoff for dewatering to sediment traps whenever feasible.

7. Rock that is exposed during construction will generally be cleared of loose soils.

8. Slopes of 3:1 or greater will have jute mesh, top soil, and seed applied immediately after final grading is complete.

Disturbed areas will be permanently stabilized within 14 days of establishing final grading to limit the length of time that the temporary facilities must be utilized. The use of a planned sequence of phased construction activities across the site will limit the maintenance requirements for temporary facilities during the construction phase.

Permanent methods of erosion control will be accomplished by diverting stormwater runoff from steep slopes, controlling or reducing stormwater runoff velocities and volumes, and installing vegetative and structural features which will act to stabilize soil surfaces. All of the permanent facilities will be selected from options which feature low-maintenance requirements and long-term exposure stability.

The applicant will be responsible for ensuring all stormwater management practices are adhered to. Responsible parties for the implementation and maintenance of each of the erosion control measures and stormwater facilities will be specifically identified and documented in the project's SWPPP prior to construction activity.

Setbacks and Buffer treatments

Buildings C , 1 and D are the only commercial structures near residential homes on Hilltop, Fern and NYS Route 52. Therefore, special attention was given to address the buffer concerns of these affected residences.

Section 185-21 of the Town of Newburgh Zoning Ordinance requires, among other things, a minimum 50-foot landscaped buffer and a minimum 100-foot building setback for commercial buildings adjacent to a residentially zoned property. While these buffer and setback regulations are among the most restrictive in the County, the developer is aware of the potential impact on these adjacent residential neighbors. Therefore, in addition to the requirements of the zoning ordinance, the developer is proposing, as shown on the site plan, the following additional improvements to improve the buffering; these include:

1. The addition of an 8-foot tall solid wooden fence. This would be pressure treated with a lifetime warranty. The property management company for the Marketplace would be required to maintain the fence. The fence and proposed plantings will be set on top of an earthen berm to provide more vertical coverage and further screen the proposed buildings.
2. The slope of the cut will be maintained as steep as possible in order to maintain as much undisturbed space as possible.

The discussion under the heading “Landscaping Plan” in this section describes the buffer treatments proposed to be provided in these areas.

Sidewalk/Pedestrian treatment

The lifestyle center is intended to be a pedestrian-oriented environment which will be designed with decorative sidewalks internal to the complex.

Based on industry publications, it has been documented that patrons to large-format retailers typically use their vehicles to travel from one large retailer to another, as the purchases typically made are sizable and cannot easily be transported from one retailer to another retailer on foot. Notwithstanding the foregoing, the project has been designed to maximize pedestrian traffic flow.

The lifestyle center will strongly encourage, through the site plan design, pedestrian movements in this area. Wide brick walkways, bench areas, interesting streetscapes, outdoor music, low scale lighting, varied storefront facades, additional landscaping along with limited on street parking all are designed to work together to create a village center atmosphere in the lifestyle portion of the Marketplace.

In addition, a major 100,000 square foot tenant will, in all likelihood, anchor the east end of the lifestyle center providing a transition for the lifestyle center shops to the larger retailers in the center of the project. All of the larger retail stores will be connected with wide sidewalks, and cross walk areas will be constructed with brick pavers to lead pedestrians across the larger parking lots should they choose to walk. If requested by the Planning Board, the applicant will also provide pedestrian access to Route 300 so that pedestrians could potentially access the Newburgh Mall on the west side of Route 300.

Public bus transportation and two bus stops are envisioned for the Marketplace and brick paver walks will direct pedestrians to walk from these bus stops to the shops throughout the center. Correspondence from the Orange County Planning Department (dated 9/21/05, included in Appendix B) confirms that the County is supportive of the inclusion of public transportation opportunities within the proposed Marketplace, although specific comments will not be provided until the Town is more involved in detailed site plan design.

Public transportation will enhance opportunities for both shoppers and for employees to reach the site from all surrounding areas, particularly the Town and City of Newburgh. It will also reduce parking in the facility during peak times. Sidewalks to Route 300, if required by the Town may also provide access to additional shopping and employment opportunities at the Newburgh Mall.

At the request of adjacent residential neighbors, the Marketplace does not propose to construct sidewalks linking the shopping center with adjoining neighborhoods. The applicant has participated in numerous meetings and conversations with area homeowners. Residents are concerned that sidewalks would make these neighborhoods readily accessible to outsiders, something that is not favored. Residents have not expressed an interest in walking to the Marketplace.

Internal traffic controls

Internal traffic controls have been designed by the project's traffic consultant and are shown on the accompanying site plan. These internal traffic patterns are being designed not only in accordance with good traffic design practices but also with the technical expertise of some of the larger retailers who are keenly aware of the nuances in traffic patterns and designs.

2.7 Construction and Operation

2.7.1 Construction

Construction Period

It is expected that the project would commence in 2006 and be completed in 2008.

Construction Sequence

As mentioned previously, the project will be built out in the following phases. This description focuses on project phasing; for a discussion of erosion control measures, please refer to Section 2.6, under the heading "Erosion and Sedimentation Control", above.

Phase 1A – Erosion Control: The first step in the construction process will be to establish erosion control measures. A stabilized access road and an on-site rock crushing facility will be setup during this phase. Construction vehicle access to the site will be from NYS Route 300 (Union Avenue).

Phase 1B – Lifestyle Center: The location for the Lifestyle Center will be cleared. Excess fill from the center of the site will be placed in compacted lifts to bring the project area up to final grade. Pavement base courses and building foundations will be constructed. At the west end of the site, the permanent below grade stormwater treatment system will be installed.

Installation of the on-site utility infrastructure will be commenced.

Phase 1C – Buildings A, B, and 2: Construction will continue in the area of buildings A, B, and 2 and will include the driveways, parking lots, walkways and utility infrastructure. Excess fill from the center of the site will bring the project area up to final grade. Pavement base courses and building foundations will be installed. The connection to Meadow Avenue and NYS Route 52 northeast of the site will be completed in this phase.

Phase 1D – Building E: Construction will continue in the area of buildings E and will include the driveways, parking lots, walkways and utility infrastructure. Excess fill from the center of the site will be placed in layers to bring the project area up to final grade. The on-site rock crusher will be utilized to minimize the amount of rock and soil entering or leaving the site. Pavement base courses and building foundations will be placed as soon as possible to stabilize the site. Once the pavement base course has been installed, the temporary sediment trap will be converted into permanent stormwater quality and detention basins.

Phase 1E – Buildings C, D and 1: Construction will continue in the area of buildings C, D and 1 and will include driveways, parking lots, walkways and utility infrastructure. Excess fill from the parking area and buildings C and 1 will be placed to bring the remainder of the project area up to final grade. Pavement base courses and building foundations will be installed. The connection to NYS Route 52 southeast of the site will be completed in this phase. After the pavement base course has been installed, the permanent stormwater quality and detention basins will be finalized.

Erosion and Sediment Control Measures

The erosion and sediment control measures are described in Section 2.6 above.

Staging Area Location

Construction material storage, equipment staging and soil stockpiling will occur either along the access roads or on more level areas of the site, in the west-central portion of the property. It is not envisioned that any staging areas will be within 400 feet of a residential property boundary.

The approximate location of the portable rock crusher is shown for each phase of the construction process as shown in Appendix C. The rock crusher has been situated in a manner to limit noise effects on neighboring residential properties. During the final phase of construction, when the rock crusher is closest to neighboring residential properties, it would still be located at least 600 feet from the nearest residential area.

Truck traffic

The proposed project will result in construction activity taking place. It is anticipated that a stabilized rough grade of the proposed site access will serve as access for the project during construction. This access is from NYS Route 300, as shown on the proposed site plan and in Appendix C, Erosion Control Report. All construction vehicles will use this access for ingress and egress. Construction vehicles and employees will park on-site at all times. Materials and equipment storage will be located on site.

Construction traffic consists primarily of construction vehicles arriving at the beginning of the construction period, trucks carrying and delivering supplies, and daily trips of construction workers. Construction workers typically arrive and depart the site prior to standard commutation peak hours. Trucks delivering construction supplies would generally arrive and leave during the day.

Construction traffic to and from the site is not expected to be excessive, as building will generally be constructed in phases. The heaviest volume of construction traffic is expected to occur at the beginning of the construction as site clearing and rough grading is conducted, and when asphalt and building materials are transported to the site. Most construction trips would travel to and from the site via the Thruway, I-84, NYS Route 300 and, in the later phase of construction, from NYS Route 52.

The site plan has been developed to create a cut and fill balance so that no off site fill material will be brought on site. Because the site has an estimated 300,000-700,000 cubic yards of rock, no crushed, processed material will be required from off site. Had there not been on site rock to crush and reuse, the off site processed material required for the project that would need to be imported would be approximately 100,000 cubic yards.

In combination with the materials to be brought on site for paving, the cut and fill analysis prepared by the engineer anticipates a balanced project. Paving material will exceed 35,000 cubic yards and concrete for curbs, sidewalks and foundations and slabs will be approximately 15,000-20,000 cubic yards . Therefore, no “fill material” aside from concrete and asphalt will be required to balance the site. Every inch of material on a site this size (approximately 108 acres of disturbance) creates approximately 15,000 cubic yards of material. Therefore, every effort will be made to balance the cut and fill not only to minimize the environmental impacts but to create the most favorable economic solution for the project at the same time.

Dust suppression

Construction activities on the project site could result in fugitive or airborne dust. Fugitive dust is generated during ground clearing and excavation activities. Throughout the construction period, passage of trucks and other vehicles over temporary dirt roads and other exposed soil surfaces also generates fugitive dust.

Standard construction dust control methods would be employed to ensure that construction generated dust does not impact off-site residents. These methods include:

- Minimizing the area of grading at any one time and stabilizing exposed areas with mulch and seed as soon as practicable;
- Minimizing vehicle movement over areas of exposed soil, and covering all trucks transporting soil; and
- Unpaved areas subject to traffic would be sprayed with water to reduce dust generation.

All construction activities shall be in accordance with Section 83 of the Town Code and the NYS DEC approved Stormwater Pollution Prevention Plan.

2.7.2 Operation

Hours of Operation

It can be expected that the shopping center will be operational seven days per week, Monday through Sunday. The specific hours of operation would be tenant-driven. It is expected that stores would operate generally between the hours of 9 AM to 10 PM during the weekdays and Saturdays, and between 10 AM to 8 PM on Sundays, although the hours of operation may vary. Restaurants would likely be open later on the weekdays and Saturdays, and thus it may be expected that retailers would remain open as well. Retailers may also have expanded hours during the holiday season.

Deliveries

Delivery of goods to the tenants can be expected to occur anytime during a 24-hour period. It is expected that most deliveries would be made during off-peak traffic hours.

Lighting and Security

A lighting plan is described in Section 2.6 above under the heading "Lighting Plan", and a lighting plan is included in the full-scale site plan accompanying this DEIS.

The project sponsor proposes a number of security measures and design improvements including:

1. The Marketplace has been designed to reduce hidden pedestrian areas that are shielded from proposed lit areas.
2. All public routes will be well lit.
3. The lighting design demonstrates a commitment to illuminate properly any secluded areas and illuminate vehicular areas to reduce potential traffic accidents.

At the same time, the lighting plan is sensitive to the adjacent residences. As shown on the lighting photo metric plan, along the residential property boundaries, the lighting level will be zero (0) foot candles. By way of contrast, in the main parking areas, the lighting level will average 1 foot candle. Buildings C,1, and D will help significantly block parking lot lighting from spilling over into the residential neighborhood. Topography and the proposed solid 8 foot high fence will provide additional light buffers. All lighting behind Buildings C, 1, and D will have shields to direct the light toward the paved drive and away from the residential areas.

A visible security camera network on a close circuit television system visible to the public will be installed. Public awareness of a surveillance system discourages crime, and if it occurs, provides evidence to use in court. A private security staff, in well marked cars, would monitor parking lots and pedestrian areas as deemed necessary and in coordination with the local police department.

Shoplifting and other issues take place internal to the stores. Security will be addressed at both the tenant and central management level. Individual store tenants typically have their

own security devices, including burglar alarms, video surveillance, mystery shoppers (plain clothes security personnel), and internal training of staff are responsibilities of the tenants.

To further assist the individual tenants, central management will encourage all tenants to receive training through the existing Newburgh police department security training programs. Property management would also supplement the Town's program with any additional resources the central management's private security force and advisors would offer.

The property management company would retain the services of a private security firm, in concert with the local police department, who would advise the owner and the tenants on the appropriate security measures and to implement them. Private security patrol of the parking lots and maintenance of the security camera network would be their primary function. It is expected that the security force would assist persons in addressing minor incidents such as locked cars. The security patrols would also act as a deterrent to such activities as car break-ins and automotive theft.

Maintenance

Common areas, including the stormwater management systems, main access roads, parking areas, lighting and landscape maintenance and other amenities associated with the Marketplace would be maintained by a shopping center management company experienced with the management of shopping centers of this magnitude. All tenants, as part of their lease agreement, would pay their proportional share of the common area maintenance costs (known as C.A.M.).

3.0 ENVIRONMENTAL SETTING, POTENTIAL IMPACTS AND MITIGATION

3.1 Soils and Topography

3.1.1 Existing Conditions

Geology

The project site is located in the eastern third of Orange County, which is identified as the Hudson Highlands physiographic province composed of complexly folded and faulted metamorphic rocks which range in age from Pre-Cambrian to Triassic geologic periods.

The project area is located in a relatively large, continuous area of metamorphic rocks of middle Ordovician age. Local and regional geology has been mapped by the State of New York in the Geologic Map of New York Lower Hudson Sheet (reprinted 1995). The site is underlain by the Normanskill formation, which is described as shale, argillite and siltstone. These are fine grained rocks originally formed in shallow lakes or seas, containing a high percentage of clay minerals. Bedrock outcrops were observed in several locations on the property.

According to the Surficial Geologic Map of New York, Lower Hudson Sheet (1989), the surficial deposits in the area of the site consist of glacial tills. Tills are described as variable in texture (e.g. clay, silt-clay, boulder clay), that were deposited adjacent to melting glaciers.

Topography and Slopes

Topography in the vicinity of the site is varied and rolling with generally higher grades in the eastern portions of the site and lower grades in the western portion of the property, in the vicinity of Union Avenue (NYS Route 300). Local topography is shown in Figure 3.1-1, Area Topography. Local topography reflects the underlying folded and faulted metamorphic rocks. The terrain on the site varies with the majority of the slopes 0-15% (See Figure 3.1-2 - Existing Slopes).

Elevations of the developed area of the site range from 250 feet on the south to a high point of 440 feet at the hilltop along the eastern boundary of the site. In the access roadway areas east toward NYS Route 52 and Exit 8 on I-84, the topography drops to 225 feet at the Quassaic Creek stream bed for a short distance. Figure 3.1-2 shows the existing topography.

Steeper slopes are found at the western edge of the Quassaic Creek, while slopes on the eastern side of the creek, towards South Plank Road (NYS Route 52) are more gradual. Steeper slopes are also found in areas with rock outcrops in the east central portion of the site. A review of surrounding topography and local drainage patterns indicates the site has not been graded previously. There are no mines or quarries shown in the vicinity of the site, or on the USGS map coverage for the site.

Slopes on the subject site are shown in Figure 3.1-2 Existing Slopes Map. The figure distinguishes areas of slopes between 15 and 20 percent, 20 to 25 percent and greater than 25 percent. The large majority of the site has gentle slopes less than 15 percent. Slope

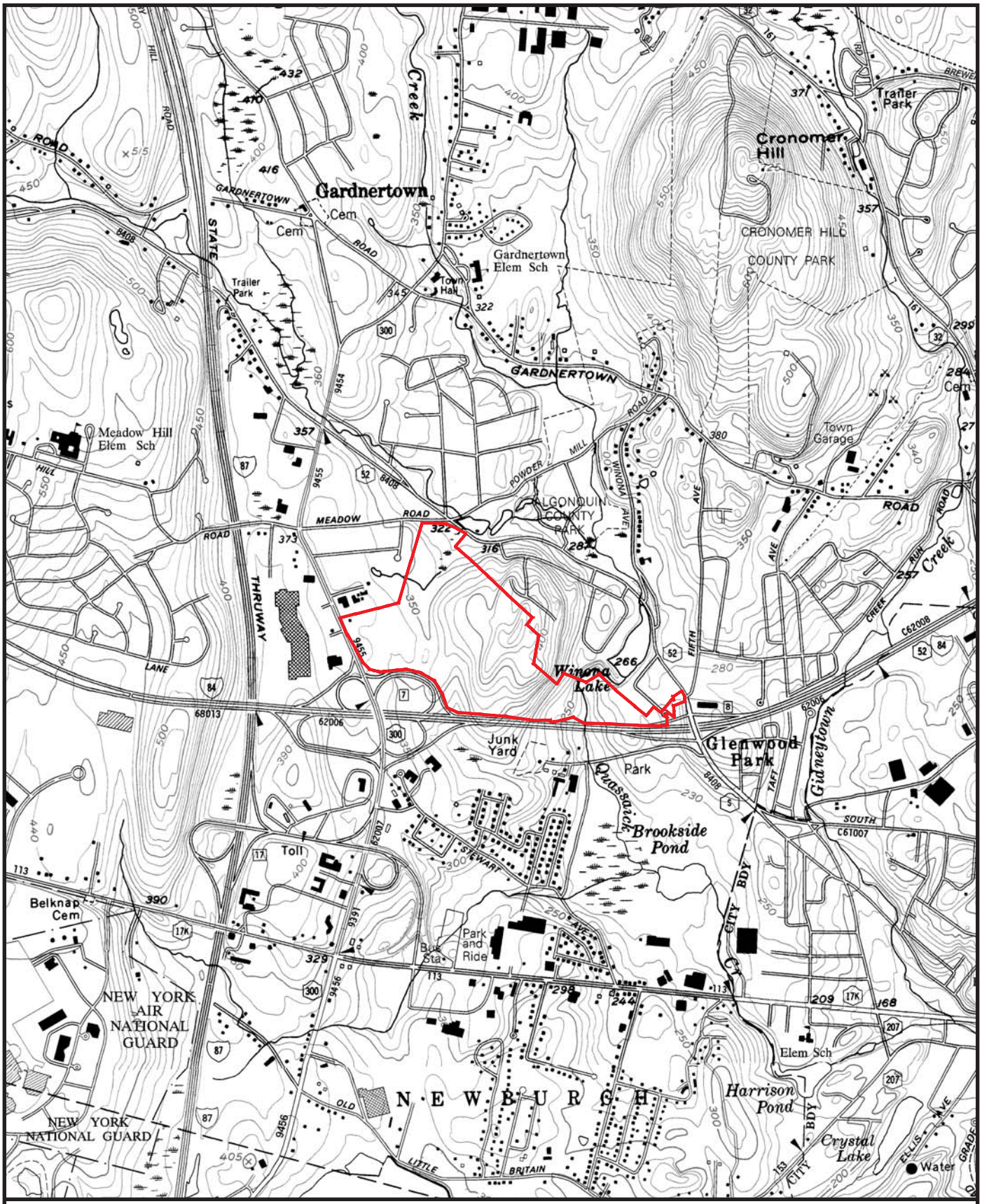

Figure 3.1-1: Area Topography

The Marketplace at Newburgh

Town of Newburgh, Orange County, New York

Base Map: USDOT Topographic Map, Newburgh Quad, 1991

Scale: 1 inch = 2,000 feet

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SLOPE	AREA (ACRES)
15-20%	8.69
20-25%	4.46
25+%	5.79

LEGEND

PROPERTY LINE

0-15%

15-20%

20-25%

25+%

N E S W

Figure3.1-2: Existing Topography
The MarketplaceatNewburgh
Town of Newburgh,OrangeCounty,NewYork
Source:Divney,Tung,Schwalbe

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categories on the property are summarized in Table 3.1-1 below. Approximately 18.94 acres of the total 127.6 acre property contains slopes greater than 15 percent.

Table 3.1-1
Existing Slopes

Slope Category	*Approximate Acres Existing Slopes*
15% to 20%	8.69
20% to 25%	4.46
>25%	5.79
Total Steep Slopes	*18.94*

Note: Total Site Acreage: 127.6 acres
Source: Divney, Tung, Schwalbe, 2005.

Soils

On-site soils have been mapped and described by the USDA Soil Conservation Service (SCS) in the Soil Survey of Orange County, New York (Atlas Sheet 20), issued in 1981. Generally, soils on the Marketplace site consist of Bath-Nassau, Mardin, and Farmington soil types, which are described as deep, well drained or moderately well drained soils found on hilltops, ridges and sloping uplands.

The soil mapping units found on the site, using the soil classifications and descriptions of the USDA SCS, are summarized below and are depicted in Figure 3.1-3.

- Mardin gravelly silt loam, (MdB & MdC). This soil unit consists of deep, moderately well drained, gently sloping soil formed in glacial till deposits derived from sandstone, shale, and slate. It is typically found on broad hilltops and ridges and is not considered a hydric soil. MdB soils are mapped on 3 to 8 percent slopes and MdC soils are mapped on 8 to 15 percent slopes. A dense fragipan is typically found at 20 to 60 inches in depth. The water table is perched above this fragipan early in the spring and during other wet periods. Permeability is moderate in the surface layer and is slow or very slow in the fragipan and substratum. The available water capacity is moderate to low and runoff is slow to medium. These soils are found in the northwestern corner and near the southeastern portions of the site. This soil is also mapped along the western edge of the site near Union Avenue. This soil unit comprises approximately 39.14 acres or 30.7 percent of the site.

- Bath-Nassau shaley silt loam (BnB). This soil unit consists of deep, well drained soils and somewhat excessively drained soils that formed in glacial till deposits derived from shale and slate. These soils are generally found on hilltops and ridges in uplands and are not considered hydric soils. The soil series typically has slopes ranging from 3 to 8 percent. This complex is made up of approximately 50 percent Bath soil, 30 percent Nassau soil, and 20 percent other soils. The depth to bedrock in Bath soils is typically 53 inches. The depth to bedrock in Nassau soils is typically 19 inches. Bath soils typically contain a fragipan, which results in a perched water table for brief periods in

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SitePropertyBoundary

Figure3.1-3: Soils Map

The MarketplaceatNewburgh

Town of Newburgh, Orange County, New York

BaseMap: Soil Survey of Orange County, NY

U.S. Dept. of Agriculture, Soil Conservation Service, Oct. 1981

Scale: 1 inch = .25 mi.

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early spring. A fragipan is a compact, dense layer in the soil which impedes the movement of water and the growth of roots. Perched shallow groundwater is not typical in Nassau soils. Permeability in Bath soils is moderate in the subsoil and slow or very slow in the fragipan. Permeability in Nassau soils is moderate throughout. Available water capacity is moderate in Bath soils and low to very low in Nassau soils. Water runoff is slow to medium in both soils. Bath-Nassau soils are located in central portion of the property and comprise approximately 29.13 acres or 22.8 percent of the site.

- Rock outcrop-Arnot complex, moderately steep (RKD). This soil complex is composed of exposed bedrock and the shallow, well drained to moderately well drained Arnot soil. These soils are found on hillsides and ridges in uplands. This soil complex is not considered to be a hydric soil. Arnot soil was formed as a thin mantle of glacial till deposits over sandstone and shale bedrock. This complex is moderately steep to steep and has a "stair step" appearance on hillsides because of the horizontal bedrock. The soil complex has slopes generally ranging from 15 to 35 percent. This soil unit is comprised of 50 percent rock outcrop, 40 percent Arnot channery silt loam or channery loam, and 10 percent other soils. The depth to bedrock in Arnot soils is approximately 10 inches. The permeability in Arnot soils is moderate, and the runoff is rapid. This soil complex is mapped on the property in an area extending from the southern property boundary to the central portion of the property and comprises approximately 16.63 acres or 13 percent of the site.

- Farmington silt loam, sloping (FAC). This soil unit is described as a shallow, well drained, sloping and gently sloping soil formed in glacial till deposits derived from limestone, shale, slate, and siltstone. It can be found on hilltops, ridges, and knolls and is not considered a hydric soil. Slopes for this soil unit generally range from 8 to 15 percent. Typically, shallow groundwater is not perched during wet periods in this soil type. Permeability is moderate and runoff is medium to rapid. This soil type is found in the northeastern portion of the property and comprises approximately 14.21 acres or 11.1 percent of the site.

- Pittsfield gravelly loam (PtB). This soil unit is deep, well drained, gently sloping soil formed in glacial till deposits and is found on hilltops, ridges, and knolls in uplands. This soil is not considered to be hydric. The slope range for this unit is 3 to 8 percent. The depth to bedrock is greater than 60 inches. The water table is usually found more then 6 feet below the ground surface. The permeability is moderately rapid in the surface and subsoil layer and is moderately rapid in the substratum. The available water capacity is moderate to high and runoff is slow to medium. The soil is mapped in the southeast corner of the site, east of Quassaic Creek and comprises approximately 10.21 acres or 8 percent of the site.

- Canandaigua silt loam, (Ca). This deep, nearly level, poorly drained soil formed in glacial lake deposits dominated by clay, silt, and very fine sand. It usually occupies small depressions in uplands and broad flat lowland plains and is considered a hydric soil. Canadaigua soils are generally mapped in areas with slopes of less than 2 percent. The depth to bedrock in this soil

complex is typically 60 inches. The water table is found near the surface for prolonged periods and some areas are ponded for a brief time in the spring. Permeability is moderate or moderately slow in the surface layer and subsoil and moderately rapid in the substratum. The runoff is slow and the water capacity is high. This soil unit can be found in the western portion of the property near Union Avenue (NYS Route 300) and comprises approximately 9.52 acres or 7.5 percent of the site.

- Rock outcrop-Nassau complex, sloping (RSB). This soil complex consists of exposed bedrock and shallow, somewhat excessively drained Nassau soils. It can be found on upland ridges, knolls, and hilltops that have irregular sloping topography. This complex is not considered to be a hydric soil. These soils are mapped in areas with slopes ranging from 3 to 8 percent. The depth to bedrock in Nassau soils is typically 18 inches. This soil complex seldom contains a perched water table above the bedrock. The permeability of the soil is moderate. The available water capacity is low or very low. Runoff is medium for the Nassau soil and is rapid in areas of exposed shale bedrock. This complex is mapped at the southern edge of the site bordering the Interstate 84 entrance/ exit ramp and comprises approximately 4.23 acres or 3.3 percent of the site.

- Rock outcrop-Farmington (RMD). This soil complex is somewhat excessively drained to well drained Farmington soil found on hillsides, ridges, and mountainsides in uplands. This soil complex is not considered to be a hydric soil. The slope ranges from 15 to 35 percent but is typically 15 to 25 percent. This soil complex is composed of 60 percent rock outcrop, 30 percent Famington silt loam, loam, or fine sandy loam, and 10 percent other soils. Bedrock can be found at the surface and at depths of up to 40 inches below the ground surface. The available water capacity is typically very low and the soil has moderate permeability and relatively rapid runoff. This soil is mapped in a small area adjacent to Quassaic Creek in the eastern portion of the site and comprises approximately 3.27 acres or 2.6 percent of the site.

- Udorthents, smoothed (UH). This soil is formed in manmade cut and fill areas, which can be found primarily near industrial sites, urban development, or construction sites. It consists of excavated earth material that has been stockpiled or used as fill or soils left in areas that have been excavated or cut. This soil unit is dominantly observed to be nearly level or sloping. This unit is excessively drained to moderately well drained and is not considered to be a hydric soil. Specific characteristics such as texture, stone content, soil pH, and depth to bedrock are not consistent through out the unit due to the nature of the excavated and fill areas. Depth to the seasonal high water table and permeability vary also depending on the topography, degree of compaction, and soil texture. This soil is mapped in a small area on the southern boundary of the site adjacent to Interstate 84 and comprises approximately 1.12 acres or 0.9 percent of the site.

- Udifluvents-Fluvaquants complex (UF). This soil complex if also termed alluvial and consists of deep, well drained to very poorly drained and is not considered to be a hydric soil type. The slopes for this soil types are primarily

level to gently sloping with slope ranges from 0 to 5 percent. The complex is often subject to frequent flooding, which can result in lateral erosion and shifting of soil deposits from on place to another. This soil complex is approximately 45 percent Udifluvents, 45 percents Fluvaquents, and 10 percent other soils. Soil features such as available water capacity, texture, small stone content, surface topography, permeability, depth to seasonal high water table, and soil reaction are variable within short distances and can not be categorized. This soil is mapped in a small area on the northern boundary of the site adjacent to Route 52 and comprises approximately 0.14 acres or 0.1 percent of the site.

As described above, on-site soils were formed from glacial material and deposits. The majority of the site contains Bath-Nassau, Mardin, Farmington and Rock outcrop-Arnot soils. Soils vary in drainage capacity from somewhat poorly drained to well drained.

Soil Suitability

The Soil Survey of Orange County provides information regarding soil characteristics as they relate to drainage, erosion potential and development limitations. Soil characteristics, as described in the Soil Survey, are provided in Table 3.1-2 below. Development limitations are considered *slight* where soil properties are generally favorable for the indicated use and limitations are minor and easily overcome; *moderate* if soil properties are less favorable for the indicated use and special planning, design or maintenance may be needed to overcome or minimize the limitations; and *severe* if soil properties require special design and will necessitate increased costs to accommodate construction.

As shown in Table 3.1-2, soils mapped on the property generally are listed as having certain limitations for construction. The presence of these constraints does not mean the land is undevelopable. The ratings reflect the difficulty and relative costs of corrective measures that may be necessary (e.g. erosion controls, footing drains or other drainage improvements) for development. The limiting characteristics of these soils require thoughtful project planning, design and management. Design recommendations to respond to these conditions have been addressed in this report and are provided in Section 3.1.3, Mitigation Measures.

The majority of construction and grading will occur in Bath-Nassau, Mardin, Farmington and Rock Outcrop-Arnot soils, which are the most predominant soils on the property. Bath-Nassau and Mardin soils have development limitations related to wetness, frost, slope and rock. Farmington soils have development limitations related to depth to rock. The Rock Outcrop-Arnot soil type has limitations identified as depth to bedrock.

Table 3.1-2
Soil Characteristics and Limitations

Soil Series	Hydrologic Group[1]	Permeability (in./hr.)	Erosion Factor	Potential Limitations for:			
			K[2]	Local Roads and Streets	Dwellings w/ basements	Dwellings w/o basements	Lawns and Landscaping
Bath-Nassau shaly silt loam (BnB)	C	Bath Soils: 0.6-2.0 (0-29" deep) <2.0 (29-53" deep) Nassau soils: 0.6-2.0 (0-18" deep)	Bath soils: 0.24-0.28 Nassau soils: 0.20	Moderate: frost action. Severe: depth to rock.	Moderate: wetness. Severe: depth to rock.	Moderate: frost action. Severe: depth to rock.	Moderate: small stones. Severe: depth to rock.
Mardin gravelly silt loam (MdB & MdC)	C	0.6-2.0 (0-20" deep) <2.0 (20-60" deep)	0.24-0.28	Moderate: frost action and slope.	Severe: wetness.	Moderate: frost action, wetness and slope.	Moderate: small stones and slope.
Farmington silt loam (FAC)	C	0.6-2.0 (0-19" deep)	0.32-0.28	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.
Rock outcrop-Arnot complex (RKD)	C/D	0.6-2.0 (0-15" deep)	0.24-0.17	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope, depth to rock.
Canandaigua silt loam (Ca)	D	0.2-2.0 (0-35" deep) 2.0-6.0 35-60" deep)	0.49-0.17	Severe: frost action, wetness.	Severe: wetness.	Severe: frost action, wetness.	Severe: wetness.
Rock outcrop-Nassau complex (RSB)	C	0.6-2.0 (0-18" deep)	0.20	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.
Pittsfield, gravelly loam (PtB)	B	2.0-6.0 (0-34" deep) 0.6-6.0 (34-60" deep)	0.24	Moderate: frost action	Slight	Moderate: frost action	Slight
Rock outcrop-Farmington (RMD)	C	0.6-2.0 (0-19" deep)	0.32-0.28	Severe: depth to rock	Severe: depth to rock	Severe: slope, depth to rock	Severe: depth to rock.

[1] Hydrologic groups are used to estimate runoff from precipitation; they range from high infiltration (A) to low infiltration (D).
[2] Erosion Factor K indicates susceptibility to sheet and rill erosion by water measured in tons/acre/year. K values range from 0.6 to 6.0. Higher values indicate greater susceptibility.
Source: Soil Survey of Orange County, New York, USDA SCS.
The Udorthents (UH) and Udifluvents-Fluvaquents complex (UF) are not included in this table because specific characteristics were not available per the Orange County Soil Survey.

3.1.2 Potential Impacts

Grading

The proposed grading plan indicates that approximately 108 acres of the 127.6 acre site will be disturbed. Approximately 19.6 acres of the site will remain undisturbed. While grading will occur on the majority of the site, the site development and grading plan was developed to avoid the wetlands in the western and northern portions of the site and steep slopes in the eastern portion of the site, in the area of the South Plank Road (NYS Route 52) easterly access drive.

Grading is required to build the internal road network, install site utilities and prepare level areas for retail building pads and related parking areas. In addition, grading is required to construct the proposed stormwater management facilities to be located in the northwest corner of the site near Meadow Road and in the eastern portion of the site along the access road. Proposed grading is shown on the DEIS Site Plan - Conceptual Grading and Drainage Plan (Drawing SP-2.0), and in Figure 3.1-4 Proposed Grading Plan. This graphic is also available at a larger, easier to read scale in the project plan set.

Cut and fill is required to accommodate construction of the proposed building pads, associated parking areas, and site access roadways. In general, the hillsides in the northeastern portion of the site will be excavated or cut, while areas with lower elevations in the southwest portion of the site will be filled. However, the project has been designed to be a balanced cut and fill project.

Based upon engineering estimates, approximately 1 million cubic yards of material will be excavated and reused on-site. It is important to understand that 15,000 cubic yards of either cut or fill may be generated by raising or lowering the approximate 108 acres of disturbed land by one inch. Further, with all quantity estimates based on two-foot contours, it is not feasible to determine to the inch the overall elevation of the project. However, every effort will be made by the developer to not import or export any “fill material”.

The deepest cut occurs in the proposed parking area between Buildings D and E, where the existing grade would be lowered by an average of 30 feet for approximately 450 lineal feet southeast of Building D. Conversely, grades would be raised along the southerly property line adjacent to I-84, near Building B by an average of 30 feet across a similar 450 lineal-foot distance.

Grading is also required to construct on-site stormwater facilities; one would be located in the northwest corner of the site, and a second one would be situated in the southeast area of the property, near Quassaic Creek.

Areas that would not be graded include wetlands in the northwest corner of the site and areas adjacent to the South Plank Road (NYS Route 52) access drive.

Construction material storage, equipment staging and soil stockpiling will occur either along the access roads or on more level areas of the site, in the west-central portion of the property.

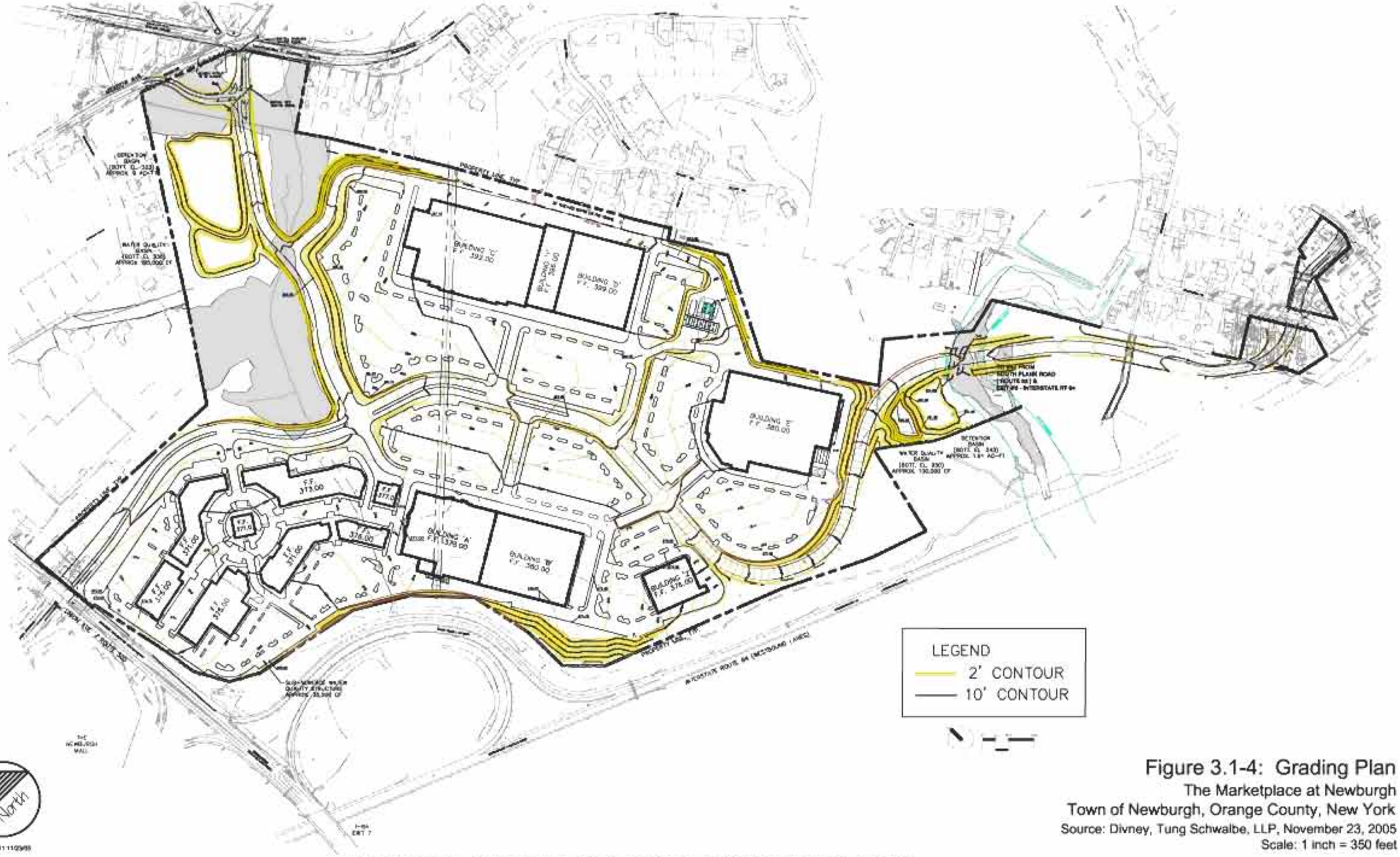

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Figure 3.1-4: Grading Plan

The Marketplace at Newburgh
Town of Newburgh, Orange County, New York
Source: Divney, Tung Schwalbe, LLP, November 23, 2005
Scale: 1 inch = 350 feet

Steep Slopes

Since the Marketplace site consists of rolling topography and hillsides, disturbance of slopes for the construction of building pads, parking lots and access roads, is required. The Marketplace would result in disturbance to 16.85 acres of slopes 15 percent or greater. Disturbance impacts to areas of steep slopes are shown in Figure 3.1-5. Construction on slopes greater than 15 percent must be considered carefully during construction since grading increases the potential for soil erosion and may affect slope stability.

Potential soil erosion will be mitigated through the implementation of the soil erosion and control plan developed for the Marketplace. The Erosion Control Report provides site specific erosion control measures and a construction sequencing plan, designed to minimize the potential for soil erosion during and following construction. The Erosion Control Report is provided in Appendix C and is further described in Section 3.1.3, Mitigation Measures, below.

Potential Blasting

Due to the known presence of rock outcrops and the proposed grading required, the project engineer anticipates that blasting will be required for the proposed development. Based on geotechnical investigations prepared by Tectonic Engineering, the applicant estimates that between 420,000 and 480,000 cubic yards of material will be removed by blasting. This is an average of approximately 11 feet of material to be moved over an approximate 25-acre area that, based on soils analysis and select field test holes, is mostly rock.

As described above, the areas of greatest material removal will occur on the hillside at the eastern and northeastern portions of the site, and in the vicinity of Buildings C, 1, D and E. The project engineer has developed a plan identifying areas of potential blasting (see Figure 3.1-6).

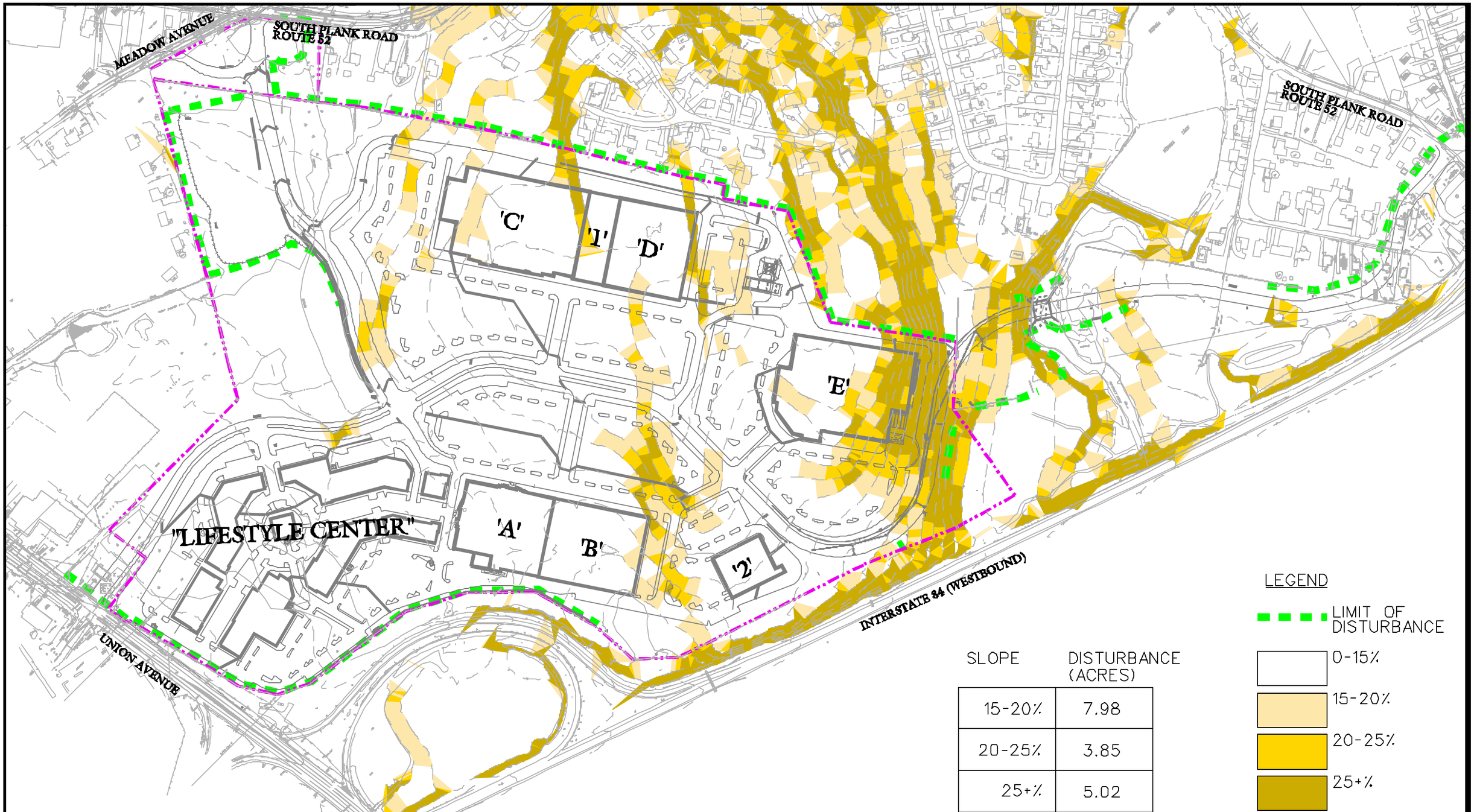
Although it is anticipated that some bedrock near the site's surface can be removed with excavators, the blasting plan includes areas where the estimated material cut is less than 10 feet. Blasting is not anticipated for the stormwater basins at the western edge of the site and for the access road at the eastern edge of the site.

The possible effects from blasting include flyrock, airblast (air overpressure), and ground vibration. Blasting protocol and regulations address all of these possible adverse effects in some detail.

Potential areas of concerns associated with blasting activities are summarized below.

Flyrock

Flyrock is broken rock that is propelled through the air as a result of a blast. It can be controlled by managing the size of the blasts and using blasting mats, which are heavy woven metal mats that cover the blast site. These mats are suitable for and will be used when blasting occurs within 250 feet of adjacent structures or the project property line to best protect adjacent properties from fly rock. When blasting is required in the center of the site, affecting larger areas of rock, it is not expected that blasting mats will be used.



SLOPE	DISTURBANCE (ACRES)
15-20%	7.98
20-25%	3.85
25+%	5.02

N E S W

Figure 3.1-5: Proposed Slopes Disturbance
The MarketplaceatNewburgh
Town of Newburgh, OrangeCounty, NewYork
Source:Divney,Tung,Schwalbe

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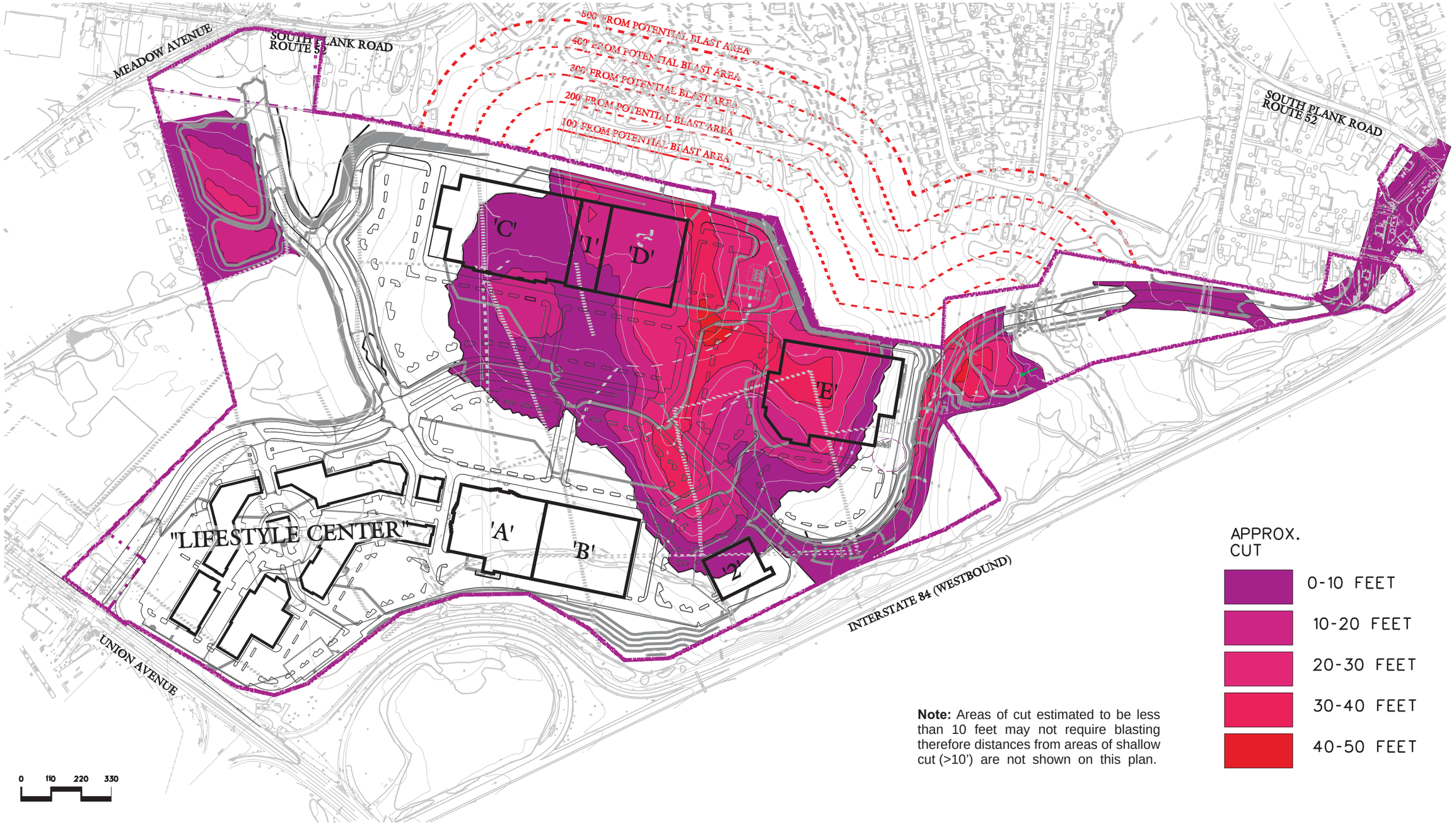

N E W S

Figure 3.1-6: Material Cut Plan
Marketplace at Newburgh
Town of Newburgh, Orange County, New York
Source: Divney, Tung & Schwalbe Engineers
& Tim Miller Associates. Inc.

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

Airblast

Airblast is an airborne shock wave resulting from the detonation of explosives and can be measured in pounds per square inch or decibels. The "loudness" of the airblast does not necessarily indicate the energy of the shock wave since the human ear can only hear frequencies in the range of about 16-20,000 Hz. Therefore, the blaster can create a blast that sounds loud, but has relatively low shock wave energy, or alternatively a blast that is virtually inaudible can be produced, while registering as a very high airblast event.

Structural damage from airblast is very rare, and usually minor. A blast can sound very loud and rattle windows even if the blast is well below levels set in the protocol or regulations or levels that would cause structural damage. The blaster must not exceed airblast limits of 134 decibels at the source. The blast contractor will be limited to airblast limits of 130 decibels at the property line Typically, windows will not break under 140 decibels.

Ground Vibration

Ground vibrations are caused by elastic waves emanating from a blast and are the most frequently cited cause (both real and imagined) of damage to structures. The most common type of damage associated with excessive ground vibration is the lengthening of existing minor cracks.

The ground vibration limits set forth for this development were derived from considerable research conducted by the United States Bureau of Mines. Through this research, it was determined that the peak particle velocity was the best measure of ground vibration as an indicator of potential impacts to structures. This provides for the best technical resource for predicting blast impacts on structures. Vibrations move differently through different rock types. The rock type found on this property is primarily shale and siltstone. Local drillers have advised that the ground vibrations or peak particle velocity dampens quickly in this shale.

The peak particle velocity is the speed at which a particle of earth moves, and not the distance. There are three different methods a contractor can use to determine the maximum allowable peak particle velocity. One method uses a scale distance formula, another method uses a maximum allowable peak particle velocity based on distance, and a third method allows a maximum peak particle velocity based on the frequency of the vibrations. Depending on the method used and the frequency of the vibration, the maximum allowable peak particle velocity will range between 0.75 and 2 inches per second. The blasting contractor will be limited to 2 inches per second, which will be monitored with a seismograph at the property line. This specification will not cause structural damage based on substantial research conducted by the United States Bureau of Mines.

For blasting that requires a deeper rock removal, it is common to conduct several smaller blasts in the same location. This requires the contractor to reduce the pounds per delay used in a specific blasting hole and blast several times rather than just once with more explosives. Smaller incremental blasts have lower ground vibration, or peak particle velocity and will not damage nearby sensitive receptors (homes in the case of this project). It is also expected that blasting will begin in areas in the center of the site, which will give the blasting contractor a better sense of subsurface geology and associated particle velocities before blasting in areas closer to the property boundaries.

Studies have shown that even repeated blasting conducted within the legal limits will not be a threat to public safety or structurally weaken buildings. The limits basically protect against even cosmetic damage (Cosmetic damage is damage that does not structurally weaken a building, such as hairline cracks in paint, plaster or drywall). Cosmetic damage is possible but highly unlikely during blasting activities. Blasting procedures do recognize that in rare cases, these limits will not protect all structures from threshold or cosmetic damage due to the age, condition or construction of a structure.

In this case, the blasting contractor can specify lower vibration limits to insure protection of the structure or structures. This does not mean that people living near an area of proposed blasting will not feel vibrations from a blast. The laws were not intended to eliminate annoyance caused by such activities, but to help in the elimination of property damage. Humans are very sensitive to ground motion and can perceive vibration levels far below legal limits. Also, the perception of ground vibrations can vary greatly. A person sitting in the house may experience a far greater sensation of ground movement than a person standing in the front yard.

It is very common for people to believe that their home was damaged by blasts that were far below established limits. Often the reason for this is that the homeowner does not notice or look for hairline cracks in their home until after they experience a blast. Careful examination by the homeowner will then reveal previously unnoticed hairline cracks in drywall, plaster and Stucco. A pre-blast inspection, as described below, will be conducted by the blasting contractor to establish any pre-blast damage of the structures within the vicinity of the blasting area.

Most homes develop hairline cracks over time. These can be caused by a number of environmental factors including humidity and temperature changes, settlement from consolidation, freeze-thaw cycles, variations in ground moisture and wind. Sometimes structural problems exist, such as building a portion of the house on improperly compacted fill, improperly sized footings or other structural elements not being built to building code requirements. Having inadequate drainage away from the home, or not having rain gutters to carry runoff from the roof away from the home, can also cause settling and cracking.

Preblast Surveys

The purpose of a preblast survey is to determine the condition of a dwelling or structure and document any preblast damage or other physical factors that could reasonably be affected by blasting. The survey can also be used to document that damage occurred after the survey was conducted.

At least 30 days before the initiation of blasting, the blasting contractor must notify, in writing, all residents and owners of existing dwellings or other structures located within 500 feet of the permit area as to how to request a preblasting survey.

Any resident or owner of a dwelling within 500 feet of the permit area may request a preblast survey. The request must be made in writing, directly to the Town Engineer, who shall promptly notify the applicant. The survey will include visual inspection of foundations and exposed walls, as well as photographic and/or video documentation of conditions prior to

blasting. In locations where existing wells will also be monitored, the condition of the well, depth of casing and depth to water elevation will also be measured and recorded.

The blasting contractor shall promptly conduct a preblast survey (at his expense) and prepare a written report of the survey. Copies of the report shall be provided to the Town Engineer and to the person requesting the survey. The operator shall perform an updated survey of any additions, modifications, or renovations to the structure, if requested by the resident or owner within the time frame of anticipated blasting. It is recommended that anyone eligible to receive a preblast survey request this service.

Complaints

Formal complaints about blasting, can be sent to the Town Engineer, which should include the dates and times of the blast (if known) and the owner's name, address and telephone number. A representative from the Town Engineer and blasting contractor will follow-up all complaints with an inspection of the activities in question and respond to you in writing.

In the case of blast damage complaints, the Town Engineer and blasting contractor will interview the person involved, locate the structure, determine the distance and direction to the blasts, check the preblast survey, check the blast and seismic records and consider the probable or actual measured levels of energy from blasting at the structure.

If it is determined that blasting has caused damage, a Notice of Violation will be written. The notice will require action to prevent the recurrence of the violation. Monetary reparation for damage will be settled between the contractor and the citizen.

People concerned about blasting should keep a record of the date and time of any blast that produces unusually high airblast or ground vibration. It would also be helpful to record the date that any suspected damage to a well or structure occurs that may be blasting related.

Blasting Protocol and Plan

The blasting plan will meet all New York State and Town of Newburgh (Section 66 of the Newburgh Code) requirements for blasting. New York State regulations require insurance and licensing for the contractor. Chapter 66 of the Town of Newburgh Code requires work to be completed under a New York State blaster's license, as well as a Blasting Permit issued by the Town of Newburgh Building Inspector.

The Town of Newburgh Blasting Code requires contractors to provide a certificate of insurance and the posting of a bond with the Town. According to the Town Code, the applicant must submit to the Town a certificate of general public liability insurance in the amount of one million ($1,000,000) dollars for personal injury and one hundred thousand ($100,000) dollars for property damage.

Wells

A few of the nearby residences on Hilltop and Fern Avenues use private wells for water supply. The Town of Newburgh Receiver of Taxes was contacted to obtain a list of properties in the vicinity of the Marketplace at Newburgh site that are on municipal water.

Based upon the Receiver of Taxes information, approximately 28 residents on Hilltop Avenue, Fern Avenue, New Street, and Highland Avenue utilize private wells. Approximately 20 residences with private wells are located within 500 feet of areas that may require blasting.

Blasting rarely affects wells if the work is completed according to current industry standards and uses current technologies. Interviews with Putnam County, Orange County and Westchester County Health department officials have indicated no recorded incidents of well failure as a result of blasting activities in those communities *(interview with Michael Budzinski, PE, Putnam County Health department 10/27/05, e-mail from Keith Miller, Orange County Department of Health, and interview with Edward Delaney, PE, former Westchester County Health Department 10/27/05).*

Variations in subsurface conditions or contractor negligence could theoretically result in impacts to existing structures and/or wells, but the use of proper blasting techniques and mitigation measures will minimize the potential effects of blasting. Blasting mitigation measures are described in Section 3.1.3, Mitigation Measures, below.

Rock Processing

It is expected that a single rock crusher will be used on an intermittent basis to process the rock associated with the blasting activities. The crusher will be used for the preparation of roadway subgrade material and for the processing of rock to exceptable size for the use of fill for areas on the site. According to the NYSDEC publication, *Assessing and Mitigating Noise Impacts* (2000), rock crushers have noise levels of 89 dB(A) at 100 feet and 69 dB(A) at 1,000 feet. At a recent project built by the applicant in Westchester County, the rock crusher used had a maximum noise level of less than 85 dB(A). Some rock crushers are not as loud as other crushers. This publication is based on an average noise level. If the rock crusher is located in the southwestern portion of the property boundary, it would be approximately 1,200 feet from the homes on Hilltop off the northeastern boundary of the site, approximately 1,400 feet from the homes off the northern boundary of the site, and approximately 1,800 feet from the homes off the southeastern boundary of the site. Rock processing machines have become very quiet with recent advances, and at 69 dB(A) at the property line are not expected to have a long term impact to surrounding areas.

Potential Soil Erosion

When soil is disturbed and vegetation is removed, there is an increased potential for siltation to occur in areas downgradient of the disturbed areas. Soil erosion and sediment control measures during construction will be essential to minimize downstream impacts. A key concern is the prevention of uncontrolled stormwater runoff in the southeast corner of the site in the vicinity of Quassaic Creek as well protection of on-site regulated wetlands. With the proper construction, installation and maintenance, soil erosion control measures will minimize potential on-site and off-site impacts.

There have been instances in the town where erosion control was not properly implemented with poor results. For example, the Meadow Winds Development at Lawrence Farms under construction since the late 1990's, has a documented history of stormwater management problems which has reportedly resulted in the flooding to several residential basements and

yards and siltation of Winona Lake and other wetlands and low areas along the Quassaic Creek upstream from the Marketplace site.

However, there are numerous differences between the Meadow Winds problems and the Marketplace which are as follows:

1. Construction and soil disturbance at the Meadow Winds project commenced prior to the enactment of more stringent design measures for stormwater management and erosion control by NYS DEC.
2. The Meadow Winds project reportedly went through two owners and many of the problems were passed along to the new ownership group who reportedly did not address NYS DEC guidelines and address violations.
3. NYS DEC filed two notices of violation, threatening fines and sanctions for their continued violation.
4. The soils at Meadow Winds are primarily a clay soil which in times of significant storm flows remains in solution and, in this instance, did not fall out of solution until it entered a large body of water (Algonquin and Winona Lakes).

The Marketplace at Newburgh would *not* result in soil erosion and sedimentation issues as experienced at Meadow Winds for the following reasons.

1. In 2003, the NYS DEC promulgated new statewide regulations for storm water management on-site both during and post construction (GP-02-01) . The NYS DEC reviews all SWPPP plans and issues a permit after their complete review.
2. The NYS DEC SPDES permit requires constant monitoring and reports by the developer and the developer's engineer or storm water management consultant.
3. The developer of the Marketplace has a long track record of developing properties in New York State and following applicable NYS DEC stormwater management and erosion control guidelines.

3.1.3 Mitigation Measures

Soil Erosion and Sediment Control

Potential impacts associated with this development include soil erosion and sedimentation during construction. A soil erosion and sediment control plan has been prepared by the project engineer and is provided in Appendix C, Erosion Control Report. The Erosion Control Report includes specific erosion prevention measures, beyond what is required by New York State guidelines, including inspection and monitoring schedules, stabilization, and temporary erosion control measures. Detailed soil erosion and sediment control measures are shown on Sheets SP-5.0, Erosion & Sediment Control Plan, and SP 5.1, Erosion Control Details, of the site plan accompanying the DEIS.

The objectives of the Erosion & Sediment Control Plan are as follows:

- control erosion at its source with temporary control structures;
- minimize the amount of sediment-laden runoff from areas of disturbance, and control runoff prior to discharge to off-site areas;
- de-concentrate and distribute stormwater runoff through natural vegetation or structural means before discharging to critical zones such as streams or wetlands.

The Erosion & Sediment Control Plan demonstrates how these objectives would be met. The measures incorporated in the plan would reduce the potential for soil erosion from areas exposed during construction and would prevent siltation, especially to on-site regulated wetlands, Quassaic Creek and areas downstream of the Marketplace. The erosion control plan has been prepared in accordance with the requirements of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-02-01).

In addition to the NYSDEC requirements, erosion control measures have been designed to comply with the Clearing and Grading Control Law of the Town of Newburgh (Chapter 83 of the Town Code). The Clearing and Grading Control Law requires a permit from the Town for specific clearing and grading activities. A purpose of the law is to prevent soil erosion and negative impacts to wetlands, streams and lakes.

The Erosion Control Report provides a construction schedule to minimize areas of exposed soils and manage stormwater runoff during the construction time frame. The construction schedule includes five phases with specific areas of disturbance, areas of cut and fill, and temporary stabilization. The plans include measures for stabilizing steep slope embankments, including the use of jute netting or erosion control blankets. The location of rock crushing facilities is also provided in the phasing plans. Refer to Appendix C for the phasing of construction activities.

The Erosion Control Plan indicates that one (1) primary construction access will be constructed during Phase 1A of the erosion control plan. During Phases 1C and 1E the connections to and access roads from Route 52 and Meadow Avenue will be completed. These secondary entrances will be used on a limited basis as construction entrances in the later phases of construction.

The Erosion and Sediment Control Plan (Drawing SP-5.0) provides locations for these four construction entrances: two at Meadow Avenue and South Plank Road, one at the Union Avenue (Route 300) entrance and one at the South Plank Road (Route 52) entrance. The contractor will be required to maintain the construction entrances as well as adjacent and nearby roads to ensure that soil from the project site is not tracked onto the public road system.

Following construction, erosion will be prevented by re-establishing vegetation and by the permanent stormwater management devices that are shown on the site plan. The permanent stormwater management systems will be constructed in the first phase of the development in conjunction with the grading activities to install the internal driveway system so that "sediment traps" are functional as early as possible in the construction period.

As previously stated, the NYSDEC will review the development's specific stormwater management and erosion control plans for the Marketplace, and will issue a SPDES General Permit only when the requirements of the permit have been met by the applicant. As part of the requirements of a permit, adequate construction monitoring and maintenance by the applicant will be required.

Blasting

As described previously, the applicant will be required to conduct all blasting activities in accordance with New York laws and the Town of Newburgh Blasting Law (Chapter 66 of the Town Code). Chapter 66 requires work to be completed under a New York State blaster's license, as well as a Blasting Permit issued by the Town of Newburgh Building Inspector. The applicant will obtain a Blasting Permit from the Town prior to any work being initiated.

The Blasting Permit contains specific requirements for insurance and the posting of a bond with the Town. In addition, the Town Code and the Permit include technical requirements for the conduct of blasting work. Unless otherwise authorized by the Town of Newburgh, rock drilling and blasting shall be limited to weekdays from 8:00 AM to 6:00 PM or sunset, whichever is earlier. Adjacent property owners will be notified prior to the commencement of blasting activities; at that time, an estimate will be provided as to the duration of blasting in the area. Blasting will begin in the center of the site and proceed toward the northern boundary. After the initial stages of rock removal, the blasting contractor will understand the size and duration of charges that are working best for the site rock, and adjust blasting measures accordingly.

All required blasting at the site would be conducted using methods to mitigate potential impacts to neighboring properties and residences. Where blasting is required, the blasting protocol below would be followed.

- All blasting will be conducted in accordance with New York State requirements (Title 12 of the New York Code of Rules and Regulations (12 NYCRR Part 39).
- All blasting will be conducted in accordance with Chapter 66 - Blasting Law of the Town of Newburgh.
- Blasting will be conducted by qualified and insured blasting contractors.
- Pre-blasting inspections will be conducted of all off-site structures and wells located within 500 feet of the blasting area upon authorization by the property owner. These inspections will include photographic and/or video documentation.
- The contractor will conduct test blasting and seismographic monitoring prior to carrying out blasting operations in order to determine appropriate on-site blasting techniques.
- Seismographic monitoring will continue throughout the periods of blasting at the site, and daily logs of seismographic data, explosive use and field conditions will be maintained.
- When deemed necessary to control fly rock, blasting mats will be used for blast locations within 250 feet of adjacent structures or property lines.

The blasting contractor would be liable for any damage to off-site properties resulting from potential blasting activities.

While there is potential for impacts to nearby private wells, any documented impact to private wells will be remedied by the blasting contractor and the developer. Remedies may include the installation of particle filters if turbidity (suspended sediment) is found in private wells. If wells are damaged or if their pre-blasting yield is affected, remedies may include deepening or replacing affected wells. The applicant will develop a well monitoring plan to

obtain water level data on select wells within 500 feet of blasting sites, before, during and after blasting.

The applicant will continue to address local resident concerns regarding blasting in consultation with the Town Building Inspector, Town Engineer, and Town fire official, and specific mitigation measures as outlined above may be incorporated in the Town Blasting Permit issued for this development.

3.2 Wetlands

3.2.1 Existing Conditions

A detailed wetland delineation (Appendix D) was conducted in April and May, 2004, on the project site in accordance with the three parameter approach described in the US Army Corps of Engineers (ACOE) Wetland Delineation Manual[1]. Background data on the site were obtained and analyzed as recommended in the guidelines.

US Geological Survey quadrangle maps, US Fish and Wildlife Service (USF&WS) National Wetlands Inventory Maps, New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetland Maps, United States Department of Agriculture soil survey maps for Orange County[2] and other pertinent information were examined to determine potential locations for freshwater wetlands.

The manual presents technical guidelines to identify wetlands as well as to determine the location of the outer limits of a wetland boundary. The field studies and secondary source reviews provide data regarding determinations of the extent of regulatory jurisdiction of freshwater wetlands on the project site.

The site's topography ranges from rolling low hills to areas with steep slopes. Typical slopes range from approximately three percent to greater than 15 percent in the steeper portions of the site. Most of the slopes consist of moderately sloping areas to steeply sloping areas containing rock outcroppings. Some of the highest elevations (up to 440 feet above mean sea level) are in the eastern portion of the site. Wetlands are located within the lower elevations of the site, at approximately 300 feet above mean sea level, in the western and northern portions of the property.

Soils were characterized in order to delineate the boundaries of hydric soils proximate to the wetland areas. "Hydric soils" are defined as soils that are saturated, flooded, or pond long enough during the growing season to develop anaerobic conditions in the upper part. Such soils usually support hydrophytic plants. Identification of hydric soils can be based on three categorical references: 1) local hydrological characteristics; 2) soil series and phases described in the national and state hydric soils lists; and 3) vegetative indicators.

The Orange County Soil Survey (Sheet #20) indicates the general types of soils within the project area. The soil survey for the project site lists eight primary mapping units (see Section 3.1, Figure 3.1-3), including: Bath-Nassau (BnB) shaly silt loams (typically on 3-8 percent slopes); Canandaigua (Ca) silt loam (typically on slopes <2-3 percent); Farmington (FAC) silt loam, sloping (typically on 1-15 percent slopes); Mardin gravelly silt loam on 3-8 percent slopes (MdB); Mardin gravelly silt loam on 8-15 percent slopes (MdC); Rock outcrop-Arnot complex on moderately steep slopes (RKD); undulating Rock outcrop-Nassau complex (RSB) typically on 3-8 percent slopes with exposed rock ledges; Pittsfield gravely loam on 3-8 percent slopes (PtB); and, Chenango gravelly silt loam (CnB) typically on 3-8 percent slopes. Most of these soil types, including BnB, FAC, RKD, RSB, PtB, CnB and the Mardin soils are not listed as hydric soils in New York State.

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[1] U.S. Army Corps of Engineers. 1987. Wetlands Delineation Manual, Technical Report Y-87-1.
[2] USDA Soil Conservation Service. 1981. Soil Survey of Orange County, New York.

Canadaigua soils, listed as hydric soils in New York, are associated with Wetlands A and B observed on the western section of the site. The water table for the "Ca" soil mapping unit is typically at or near the surface for prolonged periods. Some areas become ponded for brief periods during the spring. Surface runoff is very slow, and the available water capacity is high.

The NYSDEC is responsible for mapping freshwater wetlands that are 12.4 acres in size or larger, or those smaller wetlands that are of unusual local importance (Environmental Conservation Law, Article 24). The project site can be identified on the NYSDEC Freshwater Wetlands Map #23 for Orange County (see Figure 3.2-1). There are no state regulated wetlands located on the site.

As a result of field investigations, it was determined that there are wetlands on and adjacent to the project site as depicted in Figure 3.2-2. On-site wetlands total 16.1 acres, and include the wetlands along Quassaic Creek (Table 3.2-1).

Table 3.2-1
Site Wetlands

Wetland ID	Wetland Area (ac.)	Wetland Type	Wetland Description	Regulatory Jurisdiction
A	9.70	Depressional	Swamp	ACOE
B	4.36	Depressional	Swamp	none
C	0.52	Depressional	Swamp	none
D	0.06	Slope	Groundwater Discharge	none
E	1.47	Riparian	Quassaic Creek	ACOE
Total	16.10			
Total ACOE-Regulated	11.17			

* includes a portion of the Quassaic Creek (0.29 acres) on the New York State DOT property to the south.
Source: Wetland delineation performed by the Chazen Companies.

On-site Wetlands and NYS DOT Property Wetlands

Wetland A, the largest wetland, encompasses approximately 9.7 acres in the northern portion of the property and abuts NYS Route 52 (South Plank Road) and Meadow Avenue. Soils mapped within this wetland are Mardin gravelly silt loam, a non-hydric soil in New York State, and Canandaigua silt loam, a New York State hydric soil. This wetland is associated with the unnamed stream corridor in this area and appears on the National Wetland Inventory maps as a palustrine forested wetland. It is hydrologically connected to the drainage from Orange Lake (see Section 3.4) which flows to Quassaic Creek and then to the Hudson River, and is thus regulated under existing ACOE regulations and Chapter 157, Stormwater Management, of the Town of Newburgh Code (see §157-3, Definitions). The Jurisdictional Determination from the ACOE is provided in Appendix D.

Wetland B encompasses approximately 4.36 acres at the southwest corner of the site, continuing off-site across the southern property boundary. The soils mapped within this wetland are Canandaigua silt loam, a New York State hydric soil. This wetland is shown as palustrine forested wetlands on the National Wetland Inventory maps. This wetland is isolated from its historic drainage as a result of the construction of I-84 in the 1960's. Due to its isolation, the wetland has been determined to be exempt from ACOE jurisdiction under the SWANCC ruling.

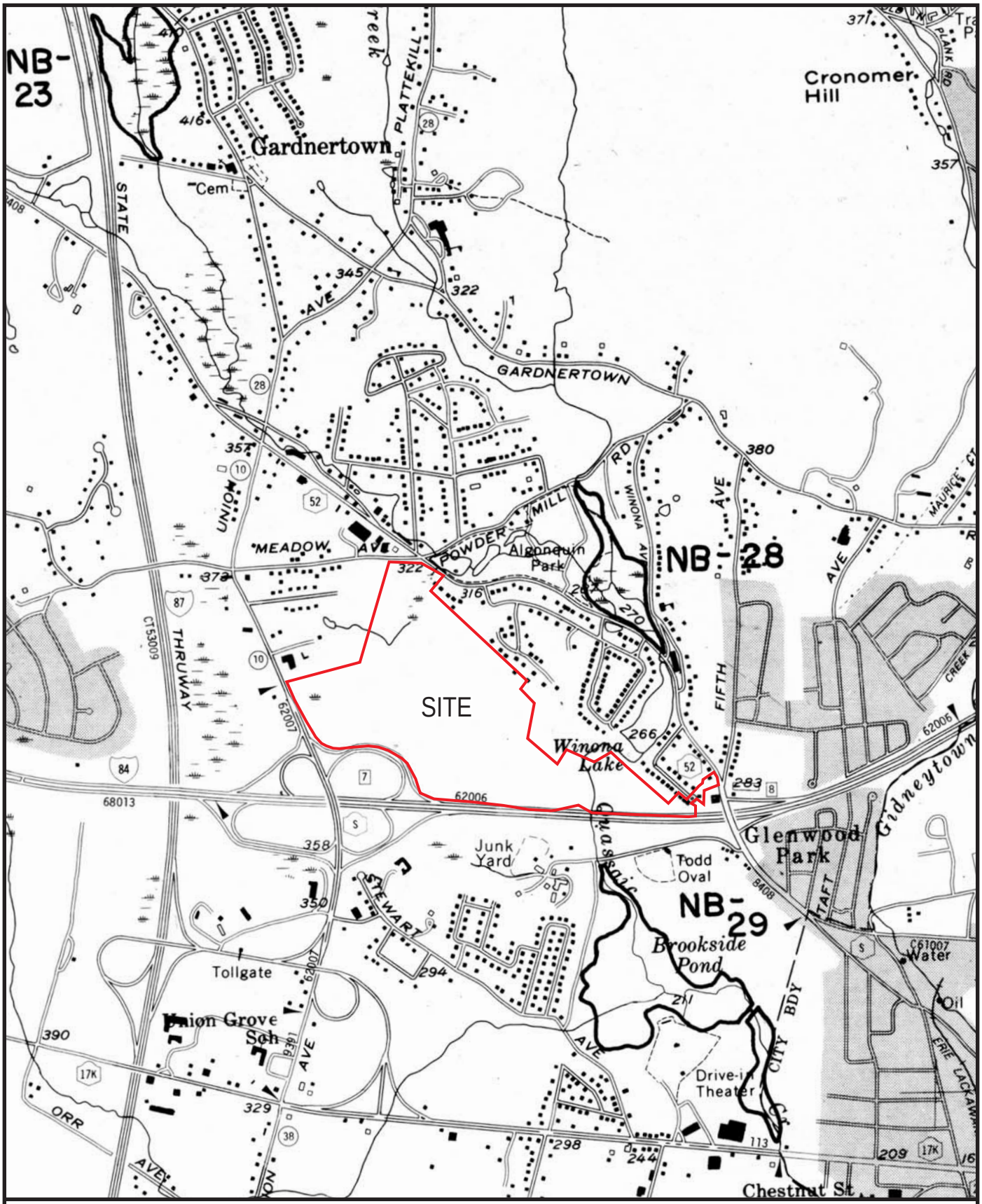

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Figure 3.2-1: NYSDEC Freshwater Wetlands Map
The Marketplace at Newburgh
Town of Newburgh, Orange County, New York
Source: NYSDEC Freshwater Wetlands Map, Newburgh Quad (1987)
Scale: 1 inch = 1,600 feet

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Figure 3.2-2: On-Site Wetland Delineation

The Marketplace at Newburgh
Town of Newburgh, Orange County, New York
Source: Chazen Engineering and Land Surveying Co., P.C. , Rev 9/30/05
Scale: 1 inch = 400 feet

Wetland C is small and occupies approximately 0.52 acres of palustrine forested wetlands in the south-central portion of the site, several hundred feet east of Wetland B. This wetland extends off site across the southern property boundary and continues to flow into the I-84 exit ramp ditch system. Similar to Wetland B, this wetland has been impacted by highway construction and is isolated from its historic drainage pattern. Therefore, it is not subject to ACOE jurisdiction under SWANCC.

Wetland D is a small area of groundwater discharge to the west of Quassaic Creek. Overflow from this seepage point flows to Quassaic Creek just north of the culverts under Route 84. Vegetation is a mix of emergent herbaceous species (soft rush, fringed sedge) and occasional shrubs (dogwood species).

A series of smaller wetlands were identified along the Quassaic Creek in the southeastern portion of the site (Wetland E). These areas serve as flood plain overflow during storm events, and are sufficiently saturated to support a dominance of hydrophytic vegetation including red maple and American elm, skunk cabbage and sensitive fern. The Quassaic Creek and these wetlands are regulated by the US Army Corps of Engineers. The total area of this wetland contained on the project site, as well as a portion of the wetland that was delineated on the DOT property to the south of the site, is approximately 1.47 acres.

Hydrophytic vegetation is defined as macrophytic plant life that grows in water, soil or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. An area has hydrophytic vegetation when, under normal circumstances, more than 50 percent of the dominant species of a vegetation unit represent species that are typically encountered growing in wetland conditions.

Within Wetland A and Wetland B, the dominant species are red maple (*Acer rubrum*), American elm (*Ulmus americana*), spicebush (*Lindera bengion*), dogwood (*Cornus* spp.), northern arrowwood (*Viburnum recognitum*), sedges (*Carex* spp*.)* sensitive fern (*Onoclea sensibilis*), and skunk cabbage (*Symplocarpus foetidus).* Wetland C had an analogous community of wetland vegetation, including all of the above species as well as green ash (*Fraxinus pennsylvanica*) in the upper story and highbush blueberry (*Vaccinium corymbosum*) in the shrub layer.

These wetlands are “red maple/hardwood swamps”, a community type which is found widely throughout New York State. This community is recognized by the presence of hydrophytic vegetation, including red maple and American elm in the upper story. The understory shrub layer is generally dominated by highbush blueberry, and arrowwood. The herbaceous layer may consist of sensitive fern, tussock sedge (*Carex stricta)* and skunk cabbage.

Off-site NYS DEC Regulated Wetlands

New York State wetlands are mapped downstream of Wetland A and are not located on the project site. These wetlands are designated as NB-28 and NB-29, both on the Quassaic Creek. One of these, NB-28, located approximately 0.5 miles downstream of Wetland A’s discharge, is the upper basin of Winona Lake, which was drained when the existing dam was breached. NB-29, which includes the area of Brookside Pond, is approximately 0.5 miles below Winona Lake. The margins of Brookside Pond include extensive areas of deep and shallow emergent marshes and floodplain swamp/forests. Narrow-leaved sedge (*Carex*

amphibola), a state-listed rare plant, has been collected from forested areas downstream of Brookside Pond.[3]

Wetland Values and Benefits

Wetland benefits include fish and wildlife habitat, recreation, flood control, and water quality improvement for surface waters and aquifers. The wetland areas located on site have specific functions and benefits, although none of the wetlands have open water or open-canopied areas which would provide nesting or feeding habitat for migratory waterfowl.

Wetland A receives and treats the surface stormwater runoff from a sloping hillside section of the property. The northern portion of the wetland also receives some runoff directly from Meadow Avenue and NYS Route 52. Wetland A includes a diversity of wooded and herbaceous wetland vegetation which provides wildlife forage and nesting habitat. Wetland A is likely to provide a significant benefit to water quality in those areas closest to adjacent development, filtering possible pollutants from runoff prior to discharge into the tributary carrying flows to Algonquin Park.

As described in Section 3.3, Ecology, Wetland A supports some species of wetland tolerant and wetland dependent wildlife, including salamanders, turtles and frog species. This wetland also functions as a flow path and conveyance for stormwater runoff, which leaves the site in a northerly flow under NYS Route 52 and into a pond located within Algonquin Park.

Wetland B functions primarily as a stormwater storage basin and as wildlife forage and nesting habitat. It encompasses 4.36 acres of wooded swamp, but has been isolated from its historic downstream drainage system with the construction of I-84. It presently has no surface outlet into any tributary of the Hudson River, and was determined by the Army Corps of Engineers as being hydrologically "isolated". Some microhabitat is available for salamanders and frogs. Based on seasonal observations, this is generally a "dry" wetland. The relatively permeable soils just below the surface do not hold surface waters for long periods of time, resulting in a vegetative community that is on the drier end of the spectrum and more transitional in nature.

Wetland C is small and functions primarily to provide storage for snowmelt and rain events. Like Wetland B, it provides some small amount of habitat value for wetland dependent species, but is limited in this function by its small size.

Wetland D is little more than a seepage point for groundwater discharge, and is off-site to the south on the NYSDOT property. It does provide seasonal modification of stream flow by adding base flow to the Quassaic Creek. It is likely that this discharge point was uncovered when road work associated with Route 84 occurred, and there has not been sufficient time for this area to develop as a more mature wetland with well developed hydric soils. Due to its small size, exposure and close proximity to the interstate it does not provide significant wildlife habitat or benefits.

[3] Barbour, J. G. 2004. Biodiversity Survey and Natural Resources Inventory and Assessment. Final Report. Quassaic Creek Estuary Preserve and Trail Project. City of Newburgh, NY. 54 pp.

Wetland E along the Quassaic Creek provides storage for stream bank overflow. The creek itself supports some aquatic species. A more detailed discussion of Quassaic Creek is provided in Section 3.4, Water Resources.

An assessment of the benefits provided by the on-site wetlands using the criteria set forth in Article 24 of the NYS Environmental Conservation Law is provided in Table 3.2-2.

Table 3.2-2
Assessment of Freshwater Wetland Benefits

	Wetland A	Wetland B	Wetland C	Wetland D	Wetland E (Quassaic Creek)
(a) Flood and storm control by the hydrologic absorption and storage capacity of freshwater wetlands.	Medium	Medium	Medium	Low	High
(b) Wildlife habitat by providing breeding, nesting and feeding grounds and cover for many forms of wildlife, wildfowl and shorebirds, including migratory wildfowl and rare species such as the bald eagle and osprey.	Medium	Low	Low	Low	Medium
(c) Protection of subsurface water resources and provision for valuable watersheds and recharging groundwater supplies.	Medium	Low	Low	Low	Low
(d) recreation by providing areas for hunting, fishing, boating, hiking, bird watching, photography, camping and other uses:	N/A	N/A	N/A	N/A	N/A
(e) Pollution treatment by serving as biological and chemical oxidation basins.	Medium	Medium	Low	Low	Low
(f) erosion control by serving as sedimentation areas and filtering basins, absorbing silt and organic matter and protecting channels and harbors.	Low	Low	Low	Low	Low
(g) education and scientific research by providing readily accessible outdoor bio-physical laboratories, living classrooms and vast training and education resources.	Low*	Low*	N/A*	N/A*	N/A*
(h) open space and aesthetic appreciation by providing often the only remaining open areas along crowded riverfronts and coastal Great Lakes regions.	N/A*	N/A*	N/A*	N/A*	N/A*

(i) Sources of nutrients in the freshwater food cycles and nursery grounds and sanctuaries for freshwater fish.	Medium	Low	Low	Low	Low
* - This site is not accessible to the public, and thus does not provide these functions to any significant degree. Sources: Environmental Conservation Law, Article 24, Title 1, Section 24-0105-7 and Tim Miller Associates, Inc., 2005.					

3.2.2 Potential Impacts

The site plan shows a disturbance of 1.76 acres of federally-regulated wetlands in four areas. All of these disturbances are related to access roads into the development. No federally regulated wetlands are proposed to be disturbed other than areas for road access. Of the total disturbance of 1.76 acres, 1.45 acres or 82 percent of the wetlands disturbance occurs at the intersection of Route 52, Meadow Avenue, Powder Mill Road and the proposed Marketplace access at this location. Figure 3.2-3 shows the locations and impacts of the wetland disturbances.

As the three proposed access locations have been incorporated into the site plan to conform to NYS DOT standards and have been located to minimize other impacts (primarily traffic generation), the wetland impacts from these three access locations are considered unavoidable. An analysis of the loss of wetland function is provided, as well as measures to minimize these impacts and mitigate for functional as well as a real loss of wetlands.

As stated above, the proposed site access road at NYS Route 52, Powder Mill Road and Meadow Avenue result in the largest impact (1.45 ac.) to ACOE-regulated Wetland A. For the wetland disturbances, the applicant will require an individual permit from the ACOE, and will thus be in compliance with Chapter 185, Zoning (185-22), of the Town Code. Wetland permits are not required from the NYS DEC.

The proposed access roads cross Wetland A in two locations, and require grading along the edge of the wetland in four other locations. Disturbance to Wetland A totals 1.47 acres. None of the disturbance is related to building or parking lot construction. Without these disturbances, road construction and safe traffic circulation would not be possible for this development that otherwise meets the Town's zoning regulations. To ensure adequate access to the site from existing state roads, and distribute traffic evenly to minimize traffic effects of the proposed development, the wetland disturbance is unavoidable. A portion of this disturbance is the result of asphalt surfaces; the remaining impact areas are stabilized embankments which will be revegetated following construction.

The loss of these areas associated with Wetland A will result in a reduction of the stormwater quality and quantity management function that is currently provided by it. While the loss of wetland dependent wildlife habitat is expected to be minimal, the two road crossings may affect wildlife mobility through the wetland. The mitigation plan, described below, establishes corridors through the wetland to ensure continued wildlife movement. The wildlife surveys done for this project, which are discussed in Section 3.3 of the DEIS, did not identify any highly mobile wetland dependent species as being likely to utilize this site.

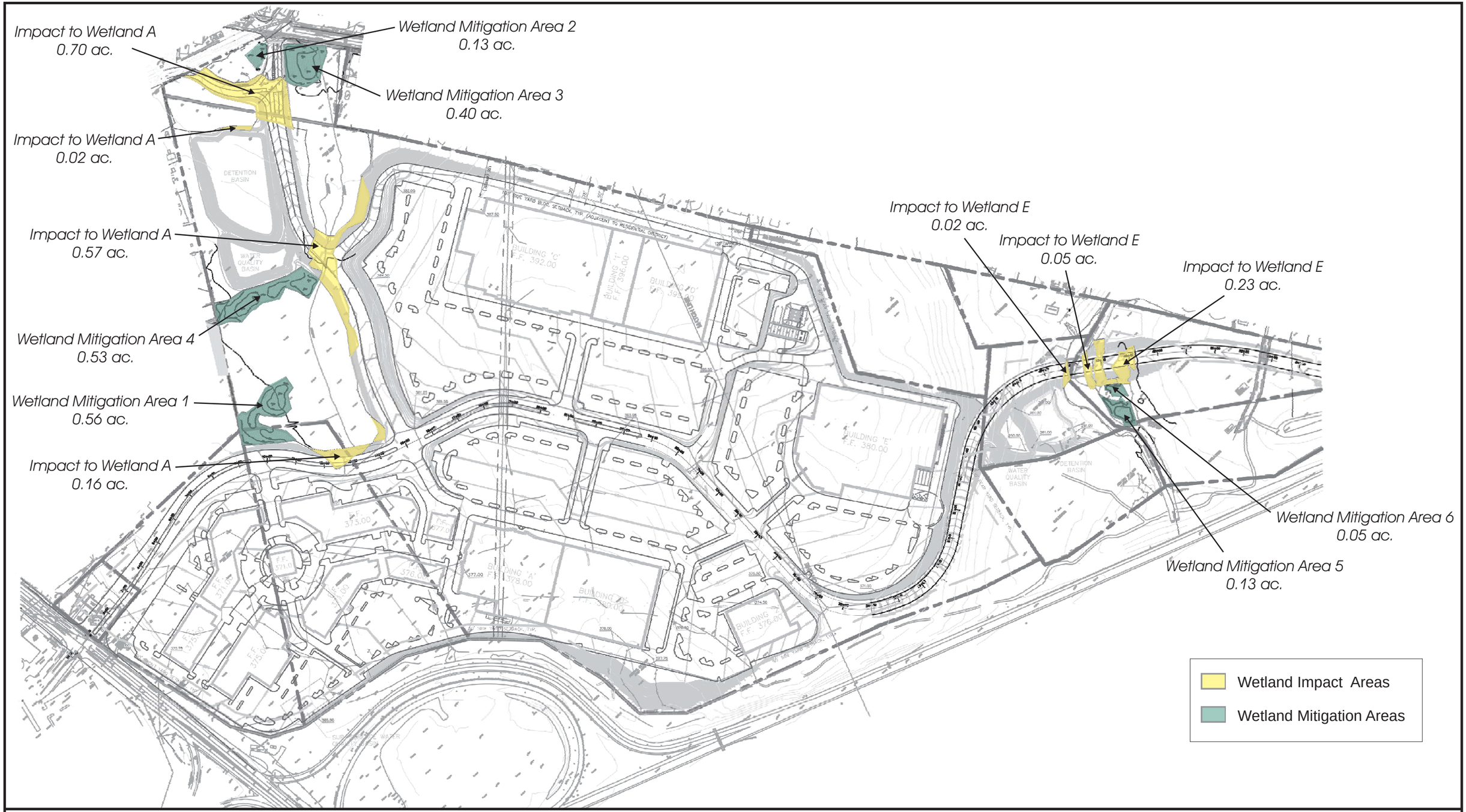

Figure 3.2-3: Wetland Impact and Mitigation Areas
The Marketplace at Newburgh
Town of Newburgh, Orange County, New York
Base: Divney Tung Schwalbe, 2005
Approx. Scale: 1 inch = 400 feet

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At the east end of the site, a road crossing over Quassaic Creek is proposed in order to provide access to NYS Route 52 near the Route 84 interchange. Direct impacts would occur to Wetland E as a result of the filling necessary to construct footings for the large box culverts that are proposed. It is estimated that 0.29 acres of regulated area will be affected. Since the function of Wetland E is primarily to convey Quassaic Creek stream flow and occasional overflow from storm events, maintenance of this function has been considered in the mitigation plan presented below.

Isolated Wetlands B and C, constituting 4.88 acres, are located within the area of proposed development. These wetlands are not regulated. The primary function of Wetland B and C, i.e., the storage of stormwater runoff, will be replaced by proposed on-site stormwater management basins.

Qualitative Analysis of Construction-Related Impacts

Erosion and sedimentation are potential indirect impacts to wetlands. An Erosion and Sediment Control plan has been developed and included as part of the site plan submission. All soil erosion and sediment controls will be installed in accordance with NYS DEC Best Management Practices and the Town of Newburgh municipal code. All soil erosion and sedimentation controls such as silt fencing will be installed prior to construction activities. Refer to Section 3.1 of the DEIS for a description of erosion and sediment control measures to be implemented.

Although construction of the project will require grading much of the site, existing drainage patterns will generally remain the same. However, as a result of additional impervious area, more surface runoff would occur. A hydrologic analysis has been prepared to estimate the increase in runoff from the proposed development and is described in Section 3.4, Water Resources.

The proposed development could increase pollutant loadings found in stormwater runoff if not mitigated. During construction activities, potential short-term construction impacts from grading activities and stockpiling of soil materials can impact surface water quality both on site and downstream.

Long-term changes to surface water quality can result once the development is complete and operational. Increased pollutants typically associated with commercial land use activities, including stormwater runoff from the paved areas and rooftops, can be expected. Issues related to stormwater management and protection of sensitive site features during construction are addressed in Section 3.4, Water Resources.

3.2.3 Mitigation Measures

Four locations on site have been chosen for the mitigation of the impacts to site wetlands. A total of 1.79 acres of new/expanded wetlands would be created. The locations of these areas are shown on Figure 3.2-3. An initial application package has been sent to the Army Corps of Engineers to commence the permitting process. It is the applicant's expectation that the 1.79 acres of mitigation will be acceptable to the Corps for the mitigation of lost wetland function. If the Corps determines that additional mitigation is necessary, additional on-site and off-site areas are available and will be considered.

The wetland mitigation areas associated with Wetlands A and E will be excavated in a manner that is consistent with the existing wetlands, and will be re-planted with trees, shrubs and herbaceous vegetation that are indigenous to the site. Only native species will be utilized, and a maintenance and monitoring plan will be prepared to ensure long term success of the plantings and the establishment of hydrology. Planting and grading plans for the wetland mitigation areas are provided in Appendix J.. A list of species to be used in these wetland expansion areas is included as Table 3.2-3.

The species listed in Table 3.2-3 have been selected as indicative of common native wetland species in the Town of Newburgh and surrounding areas, and provide food sources and cover for local wetland species. The species are particularly adaptable to variable hydrologic conditions. Only native species will be used. Exotic invasive species that are identified in close proximity of the mitigation areas will be removed by hand to limit introduction of exotic seed and root stock into the new wetlands.

The creation of stormwater basins will mitigate against the loss of the functions that Wetland B and C provide. The stormwater basins will be planted with herbaceous wetland vegetation, and provide wetland habitat as well as control of stormwater quality and quantity. While no direct credit is being taken for these basins as wetland creation areas, they will in fact perform several wetland functions and result in a net increase of wetland function and benefits to the site following construction.

A possible indirect impact that may result from the activities in Wetland A is the diversion of surface and shallow lateral groundwater flow from one area of the wetland to another. Construction of the road crossings could prevent water from flowing to portions of the wetland, creating isolated areas that do not receive the requisite amount of water to maintain wetland conditions. This would be mitigated by installation of a number of culverts that will ensure the continued hydrologic connection between the existing wetlands, as well as providing necessary hydrology to the wetlands that will be created.

Table 3.2-3
Recommended Plant Species for Wetland Mitigation

	Scientific Name	Common Name
Trees		
AR	Acer rubrum	Red maple
FP	Fraxinus pennsylvanica	Green ash
QP	Quercus palustris	Pin oak
Shrubs		
LB	Lindera benzoin	Spicebush
IV	Ilex verticillata	Common winterberry
AC	Amelanchier canadensis	Shadblow
SD	Salix discolor	Pussy willow
AS	Alnus serrulata	Speckled alder
VT	Viburnum trilobum	American cranberrybush
VC	Vaccinium corymbosum	Highbush blueberry
VD	Viburnum dentatum	Arrowwood
VL	Viburnum lentago	Nannyberry
CA	Clethra alnifolia	Summersweet
SC	Sambucus canadensis	Elderberry
Herbaceous Plants		
OR	Osmunda regalis	Royal fern

OS	Onoclea sensibilis	Sensitive fern
OC	Osmunda cinnamomea	Cinnamon fern
CS	Carex stricta	Tussock sedge
CC	Carex crinita	Fringed sedge
JE	Juncus effusus	Soft rush
LC	Lobelia cardinalis	Cardinal flower
MR	Mimulus ringens	Monkey flower
LO	Leerzia ozyroides	Rice cutgrass
SE	Sparganium eurycarpum	Giant burreed
SF	Symplocarpus foetidus	Skunk cabbage

Source: Tim Miller Associates, Inc., 2005.

Erosion and Sediment Control Plan

Erosion and sedimentation from construction and development are potential indirect impacts to adjacent wetland areas. An Erosion and Sediment Control plan has been developed and provided with the site plan. All erosion and sediment controls will be installed in accordance with Best Management Practices of the NYS DEC Soil Erosion and Sediment Control Manual[4], Orange County Soil Conservation Service, and the Town of Newburgh municipal code.

The primary aim of this plan is to minimize the potential for soil erosion from areas exposed during construction and prevent sediment from reaching the downgradient wetlands and watercourses. Prior to the commencement of any phase of this project that will result in the disturbance of soils, erosion and sediment control measures will be placed in accordance with the specifications on the engineered drawings. These measures will be maintained and left in place until permanent vegetative cover is established.

The construction contractor will be responsible for installing all sediment and erosion control measures and maintaining them throughout the entire construction process. These measures will be monitored during construction by the Town Engineer and/or other representative as well as the project engineer.

The proposed plan minimizes the area of soil exposed at any one time to the greatest extent practicable in accordance with the conditions of the NYSDEC SPDES General Permit (GP-02-01) for Stormwater Discharges from Construction Activities. Erosion and sediment control measures specified on the Erosion Control Plan are developed specifically for this project to provide both temporary controls during the construction period and permanent controls to be in place and functioning at the completion of construction.

As described in Chapter 3.1 and depicted on the full size plan, the erosion control plan includes the following elements.

- Installation of protective fencing around trees and other features to be preserved.
- Installation of a stabilized construction entrance and temporary perimeter silt fencing around the construction area.
- Construct permanent water quality and detention basins and install temporary swales and berms as needed to direct runoff to the basins. The basins will be utilized as temporary sediment traps during construction.

[4] NYS DEC. April, 2005. Soil Erosion and Sediment Control Manual.

- Clear and grub vegetation, remove existing structural debris. Strip and stockpile topsoil as indicated on the erosion control plan.
- Provide temporary sediment protection at all stormwater inlets.
- Maintain silt fence barriers, sediment traps, and other erosion control measures in working order throughout the construction period.
- Plant, seed or pave all disturbed areas in a timely manner to prevent or minimize erosion.
- Monitor site to ensure establishment of all landscape plantings and other permanent erosion control measures at the site. Promptly stabilize and restore damage to plantings and seeded areas.

To mitigate the increase in stormwater runoff that would result from construction of the project, stormwater facilities have been designed to prevent impacts to on site wetlands and downstream areas. Water detention sub basins are proposed to reduce post-development peak flow rates to levels at or below existing rates.

Stormwater Management Plan

To address impacts to surface water quality, stormwater quality measures have been engineered in accordance with NYS DEC requirements. These designs, which are discussed in greater detail in Section 3.4, incorporate the standards presented in the New York State Stormwater Management Design Manual. The intent of these measures is to also meet the requirements of Section 157 of the Town of Newburgh Code. Implementation of the proposed stormwater management plan will intercept existing stormwater runoff which presently drains toward the residences along Route 52, resulting in septic and flooding problems, and stormwater would be redirected to the on-site wetlands to eliminate these problems.

Road Crossing

To mitigate the impact to wetlands and wetland habitat at the proposed location of the Quassaic Creek crossing, the developer will install a single arched culvert approximately 40 feet in diameter to span the creek, thereby preserving significant portions of the wetland along the stream banks and the stream bed, and allowing fish and other aquatic species to pass unimpeded under the arch.