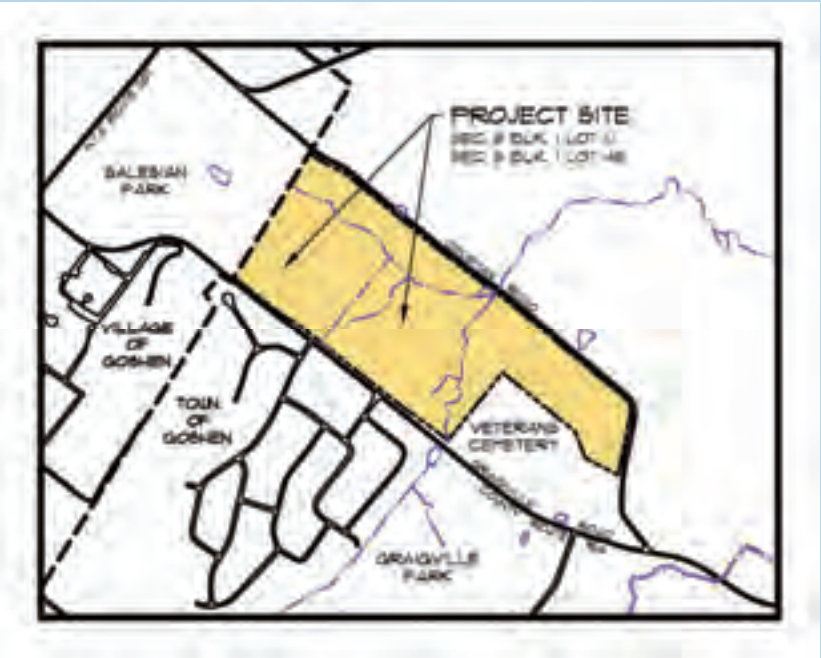
# Maplewood Village At Goshen



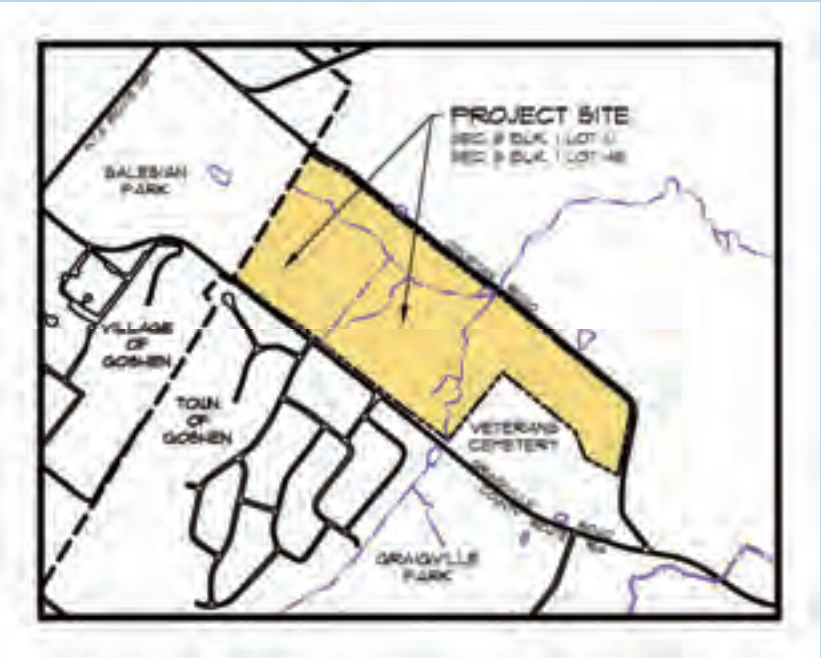

# Draft Environmental Impact Statement

**Town of Goshen**
**Orange County, New York**

# Volume I

May 2008

# Maplewood Village At Goshen




# Draft Environmental Impact Statement

**Town of Goshen**
**Orange County, New York**

# Volume I

May 2008

**DRAFT**

**ENVIRONMENTAL IMPACT STATEMENT**

# Maplewood Village at Goshen

COLEMAN ROAD AND CRAIGVILLE ROAD
TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Tax Map Designation: Section 8, Block 1, Lot 1.1
Section 8, Block 1, Lot 48

Volume 1 of 3

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1995 Broadway, Suite 1200
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Submitted: August 2007
First Revised: January 2008
Final Revision: May 2008

Lead Agency Acceptance Date: May 1, 2008

Public Hearing Date: June 19, 2008 @ 7:30 p.m.

Deadline Date for Comments on the DEIS: July 3, 2008 @ 5:00 p.m.

| **Primary Preparer and Contact Person:** | **Responsibilities:** |
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| **Consultants Participating in Preparation of Draft Environmental Impact Statement:** | **Responsibilities:** |
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| John Collins Engineers, P.C.<br>11 Bradhurst Avenue<br>Hawthorne, NY 10532<br>Contact: Philip J. Grealy, Ph.D., P.E.<br>Phone: 914-347-7263 | Transportation, Traffic and Vehicular Accident Analysis |
| Robert G. Torgerson, LA<br>3 Main Drive<br>Nanuet, NY 10954<br>Phone: 845-642-8939 | Wetlands Delineation |
| Ecological Solutions, LLC<br>1248 Southford Road<br>Southbury, CT 06488<br>Contact: Michael Nowicki<br>Phone: 203-264-8691 | Ecological Conditions, Threatened and Endangered Species Evaluation |
| Leggette, Brashears & Graham, Inc.<br>4 Research Drive, Suite 301<br>Contact: Thomas P. Cusack, CPG<br>Phone: 203-929-8555 | Hydrogeology and Groundwater Resources |
| BTK Associates, Inc.<br>P.O. Box 527<br>Goshen, NY 10924<br>Contact: Charles Thomas, RPA<br>Phone: 845-457-4217 | Cultural and Archaeological Evaluation |

Coppola & Associates
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Contact:  Anthony J. Coppola, RA
Phone:  845-561-3559

Architectural Design

## Names and Addresses of Involved and Interested Agencies

**Involved Agencies:**

US Army Corps of Engineers
26 Federal Plaza
Jacob Javits Building
New York, New York 10278

NYS Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1010

NYS Department of Health
Corning Tower
Empire State Plaza
Albany, New York 12237

Attorney General's Office
Justice Bldg. Room 255
Albany, New York 12224

Orange County Department of Public Works
2455-2459 Route 17M
P.O. Box 509
Goshen, New York 10924

Orange County Department of Planning
& Economic Development
124 Main Street
Goshen, New York 10924

Orange County Department of Health
124 Main Street
Goshen, New York 10924

Village of Goshen
276 Main Street
Goshen, New York 10924

Town of Goshen Highway Department
Town of Goshen Town Board
41 Webster Street
Goshen, New York 10924

Town of Goshen Planning Board
P.O. Box 217
Goshen, New York 10924

**Interested Agencies:**

NYS Department of Parks, Recreation
and Historic Preservation
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P.O. Box 189
Waterford, New York 12188-0189

NYS Department of Transportation
3 Burnett Boulevard
Poughkeepsie, New York 12603

NYS Department of State
Secretary of State
41 State Street
Albany, New York 12231-0001

NYS Dept of Public Service
3 Empire State Plaza
Albany, New York 12223-1350

Orange County Department of Public Works
2455-2459 Route 17M
P.O. Box 509
Goshen, New York 10924

Town of Goshen Building Department
P.O. Box 217
Goshen, New York 10924

Town of Goshen Highway Department
P.O. Box 217
Goshen, New York 10924

Goshen Central School District
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Goshen, New York 10924

Orange & Rockland Utilities, Inc.
390 West Route 59
Spring Valley, New York 10977

**Federal Agencies**

US Army Corps of Engineers
26 Federal Plaza
Jacob Javits Building
New York, New York 10278

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# I. PROJECT INTRODUCTION AND EXECUTIVE SUMMARY

## 1.1 Introduction and Project History

The Draft Environmental Impact Statement ("DEIS") has been prepared on behalf of ADC Orange, Inc., 1995 Broadway, Suite 1200, New York, New York 10023, ("Project Sponsor") and the application regarding Maplewood Village at Goshen ("Proposed Action") for the submission to the Town of Goshen Planning Board ("Planning Board") and its consultants for review of completeness and acceptance for public review. This document has been prepared in compliance with the New York State Environmental Quality Review Act ("SEQRA"), Article 8 of the Environmental Conservation Law 6 NYCRR, Part 617.

The DEIS is limited to the specific issues that have been identified in the Final Scoping Document adopted by the Planning Board on June 15, 2006. The Final Scoping Document was a result of the Planning Board and its' consultants review of the Draft Scoping Document as well as public comment received during the Public Scoping Session held on May 18, 2006. Prior to this acceptance, the application was determined to be a Type 1 Action under SEQRA. A Type I Action requires a coordinated review and approval by a variety of regulatory agencies. The Planning Board had concluded that the Proposed Action could have potential adverse environmental impacts, thus requiring the preparation of a DEIS. On March 16, 2006, the Planning Board issued a Positive Declaration and filed it in accordance with §617.7 and §617.12 of SEQRA.

The Proposed Action includes all permits, approvals and compliance determinations required from the Planning Board, other Town agencies, County agencies, State agencies and Federal agencies to authorize the intended subdivision as a "Hamlet Residential Development" in accordance with the Hamlet Residential ("HR") Land Use District, subject to the standards and regulations set forth in §97-15, *HM and HR Districts for Traditional Neighborhood Development (TND).*

- "The HM and HR Districts are intended to implement the concept of Traditional Neighborhood Development ("TND"). TND is the development of complete communities that include single-family homes, apartments, workplaces, shops, restaurants and recreational facilities. Its goal is to promote a pedestrian-orientated environment in which residents and those who work in the development can walk comfortably between different land uses".

- Additionally, the Proposed Action is to authorize the subdivision as an "Open Space Development" in accordance with the Rural Residential ("RU") Land Use District, subject to the standards and regulations set forth in §97-20, *Standards for Open Space Development.* Open Space Development allows units to be located or clustered on those portions of a property most suitable for development, while leaving portions as undeveloped open space. Open Space Developments are intended to offer the landowner greater flexibility, and may include a variety of lot sizes, ranging from large farm or estate lots to small hamlet sized lots. Open Space Developments result in the preservation of contiguous open space and important environmental resources, allowing compact development to occur.

The Subdivision Drawings and DEIS build upon a Conservation Analysis presented to the Planning Board by Lanc & Tully Engineers ("Project Engineer") in September 2004 and accepted through Resolution of Findings on November 18, 2004. The prepared drawing was a basis for more detailed site evaluation, in planning and design of the intended mixed-use development. The Conservation Analysis identified areas to be conserved to the greatest extent practicable through two key purposes:

- Identification of primary and secondary conservation areas, determining those parts of the Proposed Site suitable for development.

- To preliminarily demonstrate the build-out potential or density of the Proposed Site in terms of allowable number of residential units that may be permitted under the base density and/or aquifer calculations.

See DEIS Figure 1-1, *"Conservation Analysis"* and Exhibit 10.1, *"Conservation Analysis Findings"*.

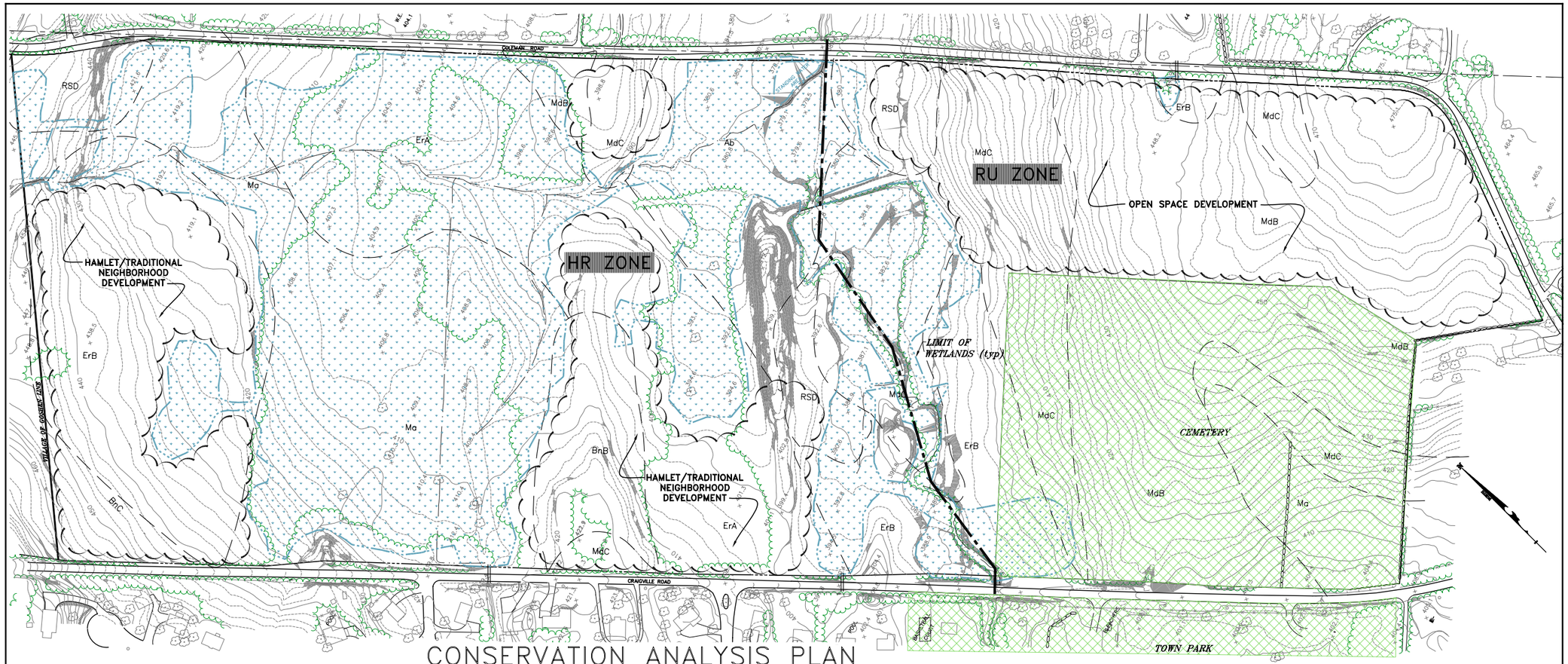
During the concept development process, the Project Sponsor subsequently submitted a Sketch Plan in January 2005, with revisions up through February 2006, along with a Full Environmental Assessment Form ("EAF") certified by Arthur Tully, PE. During this process the Project Sponsor worked closely with the Town's Planning Consultants in developing a concept that complied with the intended development concepts of the HR and RU Land Use Districts.

See DEIS Figure 1-2 *"Overall Development Plan"* and DEIS Exhibit 10.2 *"Full EAF Part 1 & 2"*.

The Planning Board's designation as Lead Agency under SEQRA was established at the Planning Board meeting of September 15, 2005, subsequent issuance of a Positive Declaration on March 16, 2006, and a Draft Scoping Outline was submitted by the Project Sponsor on April 16, 2006, based upon the above cited Sketch Plan.

See DEIS Exhibits 10.3, *"Notice of Intent"*, 10.4 *"Positive Declaration"* and 10.5 *"Scoping Outline"*.

The DEIS includes extensive Exhibits and Appendices setting forth communication, plans, reports and other technical data relied upon in the preparation of the DEIS. The aforementioned material is both referenced and summarized as pertinent throughout the document.




# CONSERVATION ANALYSIS PLAN

N.T.S.

SITE

## LOCATION PLAN

1 INCH = 2000 FEET


## AERIAL PLAN

N.T.S.

## PROPERTY DENSITY COMPUTATIONS

TOTAL PROJECT AREA WITHIN HR ZONE = 70 AC. ±
TOTAL PROJECT AREA WITHIN RU ZONE (AQ-6 OVERLAY)= 26 AC. ±
TOTAL PROJECT AREA = 96 AC. ±

HR ZONE DENSITY COMPUTATIONS (SECTION 97-15 J.)

TOTAL PROPERTY WITHIN HR ZONE = 70 Ac. ±

MAXIMUM DENSITY = 70 AC X 3 UNITS/AC. = 210 UNITS

*-PUBLIC SEWER AND WATER WILL BE PROVIDED

RU ZONE DENSITY COMPUTATIONS W/ AQ-6 OVERLAY (SECTION 97-27 & 97-20)

TOTAL PROPERTY WITHIN RU ZONE = 26 Ac. ±

MAXIMUM OVERLAY DENSITY = 26 AC X 1 UNIT PER 6 AC. = 7 UNITS

HOWEVER, PUBLIC SEWER AND WATER WILL BE PROVIDED

THEREFORE:

UTILIZING MAXIMUM OPEN SPACE DEVELOPMENT DENSITY

DENSITY = $\frac{\text{UNCONSTRAINED} - \text{CONSTRAINED AREA (26 AC.)}}{3}$

MAXIMUM DENSITY = 11 UNITS

## LEGEND:

- CULVERT CROSSING
- 410 EXISTING MAJOR CONTOUR
- 412 EXISTING MINOR CONTOUR
- REGULATED WETLAND BOUNDARY
- REGULATED WETLAND AREA
- STREAM
- EXISTING STONEWALL
- SLOPES GREATER THAN 25%
- EXISTING TREELINE
- EXISTING TOWN PARK/CEMETERY
- ZONING LIMITS
- SOILS LIMITS
- ANTICIPATED LIMITS OF DEVELOPMENT



LANC & TULLY
ENGINEERING AND SURVEYING, P.C.
P.O. Box 687, St. 207
Goshen, N.Y. 10924
(845) 294-3700

CONSERVATION ANALYSIS PLAN
PREPARED FOR

SALESIAN VILLAGE
FIGURE I-1

TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

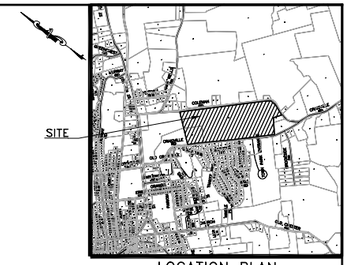
Date: SEPTEMBER 28, 2004
Revisions:
CAD File: LNC-CON-ANALYSIS.DWG
Sheet No.: 1 OF 1
Drawing No.: A-00 - 0167

| Drawn By: | Checked By: | Scale: | Tax Map No.: |
|---|---|---|---|
| CRV | JOR | 1" = 100' | |

## COLEMAN ROAD
## DRIVEWAY SIGHT DISTANCES:

1. LEFT (NORTHWEST) SIGHT DISTANCE: 460± FEET
2. RIGHT (SOUTHEAST) SIGHT DISTANCE: 530± FEET*

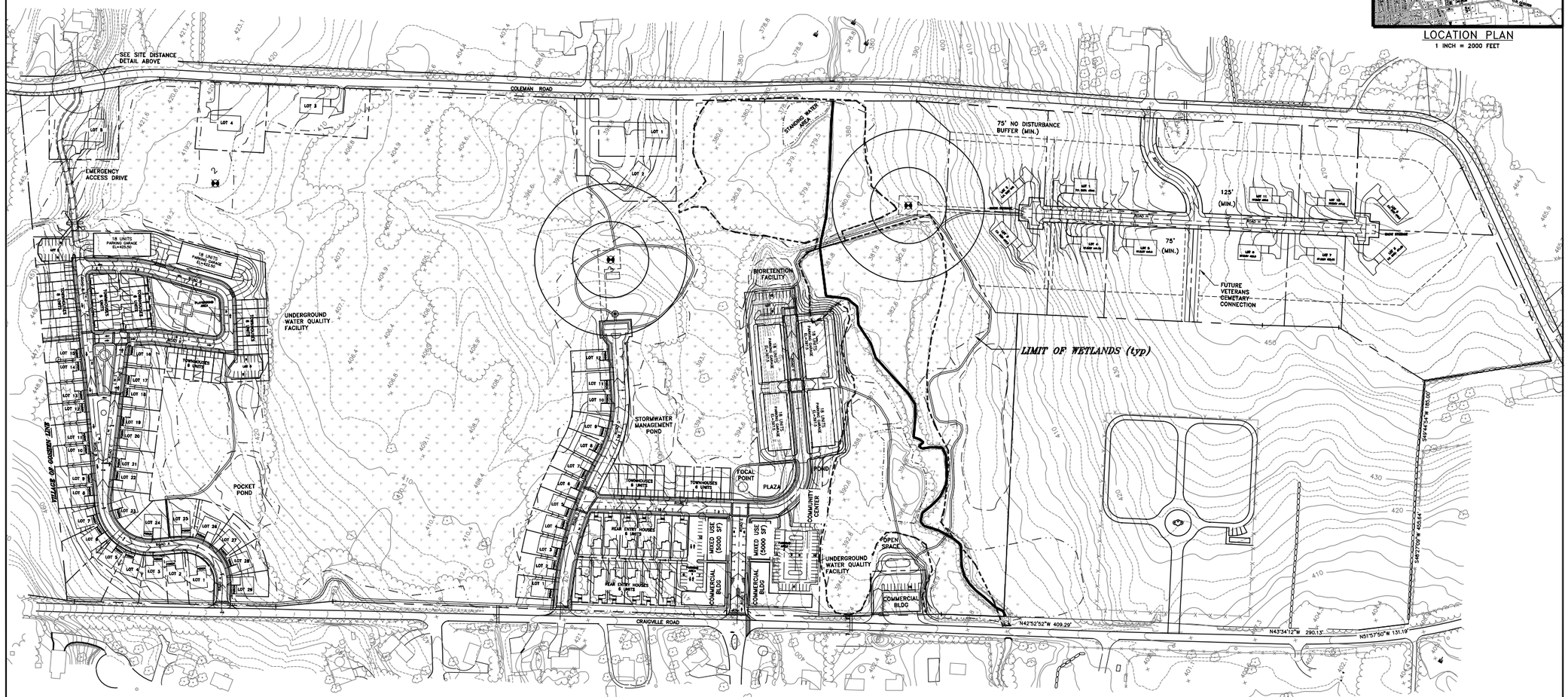
*INDICATES THAT THE SIGHT DISTANCE IS IMPROVED FROM 325 FEET WITH MINOR CLEARING AND GRADING.







LOCATION PLAN
1 INCH = 2000 FEET




| DENSITY BREAKDOWN | PROPOSED DEVELOPMENT |
|---|---|
| TOTAL NUMBER OF UNITS | 229 |
| ESTATE LOTS (>1 AC.) | 16 |
| 55' x 100' UNITS | 41 |
| 45' x 110' REAR UNITS | 12 |
| 24' x 40' TOWNHOUSE UNITS | 44 |
| MULTIFAMILY UNITS | 108 |
| MIXED USE APARTMENTS | 8 |

LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING DRAINAGE
- PROPOSED SIDEWALK/TRAIL
- EXISTING 100 YEAR FLOODPLAIN (APPROXIMATE)
- EXISTING WELL
- EXISTING WELL TO BE UTILIZED FOR PROPOSED POTABLE WATER SYSTEM





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OVERALL DEVELOPMENT PLAN
PREPARED FOR

# MAPLEWOOD VILLAGE AT GOSHEN FIGURE I-2

TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

| | |
|---|---|
| Date: | JANUARY 1, 2005 |
| Revisions: | FEBRUARY 3, 2005<br>APRIL 14, 2005<br>OCTOBER 7, 2005<br>NOVEMBER 10, 2005<br>DECEMBER 12, 2005<br>JANUARY 20, 2006<br>FEBRUARY 9, 2006<br>MAY 4, 2007 |
| Job No: | 2004-07<br>EXHIBIT-CONCEPTS.DWG |
| Issued: | OVERALL DEV |
| Sheet No: | 2 OF 22 |
| Drawn By: | CRV |
| Checked By: | |
| Scale: | 1" = 100' |
| Tax Map No: | 8 - 1 - 45 &<br>8 - 1 - 11 |
| Drawing No: | A - 00 - 0167 - 00 |

As work on the DEIS has progressed, the site plan and subdivision drawings have progressed in terms of design. The drawings are being developed in order to adequately determine potential environmental impacts and how mitigation measures can be implemented. The drawings must also meet the Town of Goshen plan requirements for site plan and subdivision approval.

**1.2 Project Site Existing Conditions**

The proposed project site ("Proposed Site") consists of two (2) tax map parcels bearing the designation of Section 8, Block 1, Lots 48 and 1.1, containing approximately 96± acres of land. The parcels are situated within the Town of Goshen, County of Orange and State of New York. The Proposed Site is bound to the northeast and east by Coleman Road, along with Craigville Road (County Route 66) to its southwest. The remainder is bound to the south by the Orange County Veteran's Cemetery and its northwest boundary by the Village of Goshen/Town of Goshen Municipal Line, and Salesian Park.

The Proposed Site is located within the Town of Goshen's HR and RU Land Use District and in part within Stream Corridor ("SC"), Scenic Roadway Corridor ("SR") Overlay Districts, and overlain by the Aquifer Overlay District ("AQ-6"). Finally, the Proposed Site is located within the Goshen Central School District and Goshen Fire District No. 1.

The Proposed Site is completely undeveloped and consists of rolling topography with a mixture of vegetation from open meadow, successional growth to forest. The topography starts from two high points at either end of the Proposed Site and slopes toward a bisecting stream corridor. This stream is an intermittent stream that is an unnamed tributary to the Otterkill Creek. There exists approximately 41± acres of federally regulated wetlands; the US Army Corp of Engineers issued their Jurisdictional Determination ("JD") of the wetland boundaries on December 8, 2004.

See DEIS Chapter III, *"Existing Conditions, Anticipated Impacts & Proposed Mitigation"*.

**1.3 Project Description**

The Project Sponsor proposes a 213-unit Hamlet Residential development on approximately 96± acres off Craigville Road in accordance with Traditional Neighborhood Design concepts as described in the Town of Goshen Zoning Code for the HR/HM districts. The Proposed Action further intends to develops approximately 30,000± square feet (sq. ft.) of mixed/commercial use that will focus on providing goods and services to existing and future local residents. In addition, the Project Sponsor intends to develop 16 residential lots along Coleman Road in the RU district in accordance with the requirements for an Open Space Development as described in the Town's Zoning Code. In total, 229 residential units and 30,000± sq. ft. of mixed/commercial space is anticipated for the Proposed Action.

The current site design before the Planning Board is proposing a total 61.95± acres or 65% of gross area as protected open space. This represents 66% of the gross area in the HR Land Use and 54% of the gross area within the RU Land Use. The HR development is to gain access via 3 proposed interior roads that connect onto Craigville Road, including the areas of commercial use. The estate lots gain access via Coleman Road, 5 lots have driveway access directly from Coleman Road and 11 lots are serviced via an internal road.

See Figure I-2, *"Proposed Layout"*.

The Proposed Action will be a phased project over three (3) to four (4) years, with an estimated build-out of approximately 2011 or 2012. Completion and implementation of the phases will be determined upon market demand for the variety of aspects included with the Proposed Action.

**1.4 Project Purpose and Need**

The Project Sponsor has declared intention to satisfy a continuing need for quality, well-serviced "for sale" single family and affordable housing along with

supporting commercial development that is consistent with the guidelines established in the Zoning Code.

The residential component of the Project will provide a variety of housing types including detached estate and modest single-family homes, town homes and flats. Affordable units are to be provided in accordance with §97-15 and §97-24 of the Zoning Code. These units will be incorporated throughout the "HR" Zone and will make up 10% of each unit type. The Town of Goshen recognizes the need for individuals, couples and young families with moderate incomes to find housing that is affordable in the Town. Section 97-24 of the Zoning Code is designed to encourage the construction of housing units that will be affordable to households earning 60% to 150% of the Town of Goshen median income.

The Proposed Action will provide pedestrian connectivity to the easterly portion of the Village and to this area of the Town. Through a network of proposed trails and sidewalks, existing parks and residential neighborhoods will be connected. The pathways that will be constructed will provide a pedestrian friendly environment and minimize reliance on the automobile to access a variety of locations in this portion of the Town and Village of Goshen.

The Proposed Action will provide the missing piece, completing a land use puzzle. Residents of the Village of Goshen will be able to safely walk from the Central Business District, Public Library, Harness Museum or County Government Center through a network of existing sidewalks along Main Street (NYS Route 207) ending in the newly renovated Salesian Park. In the Park, residents will be able to stroll through the park and eventually connect to the pathways which are proposed throughout Maplewood Village. Pedestrians utilizing the Maplewood Village pathways will be provided the opportunity to enjoy proposed on-site open space, park benches and/or nature observation areas. If the users of the pathways are on bike, there will be a number of bike racks

located within the Proposed Action to allow the rider to dismount and rack their bike.

See DEIS Appendix A "Site *Plan and Subdivision Drawings"* for pathway locations, bench details, observation bench details, pavilion details and Village Green details.

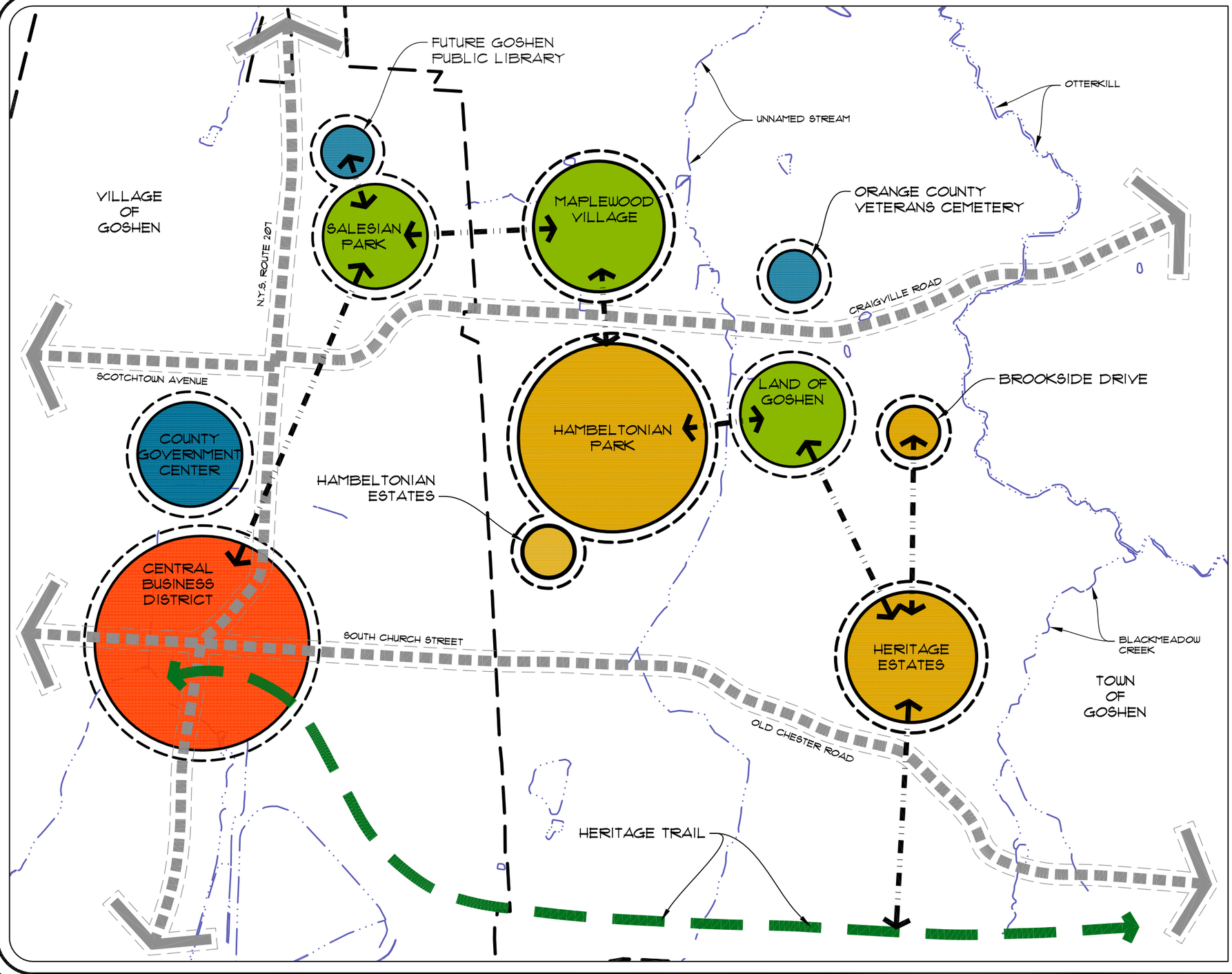
Pedestrians travelling from the Village of Goshen through Maplewood Village will be able to connect to the existing Town residential neighborhood known as Hambletonian Park or the County Veteran's Cemetery. Once across Craigville Road via a proposed crosswalk, pedestrians would be able to travel throughout Hambletonian Park or continue to the Town's major park known as Land of Goshen Park. The existing park facilities provide the pedestrian a trail system, ball fields, picnic pavilion and playgrounds. The Proposed Heritage Estates located southeast of Land of Goshen Park is proposing a pedestrian connection from the park through the subdivision and along the Otterkill Creek to Old Chester Road. From this point a pedestrian may access the County owned Heritage Trail, a rail trail that runs from the Town of Goshen to the Village of Monroe. The County is currently preparing plans to extend the Heritage Trail through the Town of Wawayanda and City of Middletown to Howells in the Town of Wallkill. The Heritage Trail currently runs through the Village of Goshen providing a loop of these proposed and existing trails.

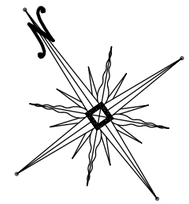
DEIS Figure 1-3, *"Conceptual Connectivity Diagram"*

## 1.5 Existing Conditions, Potential Impacts and Proposed Mitigation

The following section briefly describes the existing conditions, potential impacts and proposed mitigation associated with the Proposed Action.

See DEIS Chapters II and III, "*Project Description" and "Existing Conditions, Anticipated Impacts and Proposed Mitigation"* for a more in depth discussion.




1000 0 500 1000

GRAPHIC SCALE:
1 IN. = 1000 FT.

## CONNECTIVITY DIAGRAM LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING WATER COURSE
- MAIN ROADWAYS
- HERITAGE TRAIL
- PUBLIC PARKS
- INSTITUTIONAL / PUBLIC FACILITIES
- VILLAGE CENTER
- EXISTING / PROPOSED DEVELOPMENTS
- CONNECTIVITY

E.I.S. FIGURE 1-3

**CONCEPTUAL CONNECTIVITY DIAGRAM**

SCALE: 1 IN. = 1000 FT.

ESPOSITO & ASSOCIATES
262 GREENWICH AVENUE, SUITE B
GOSHEN NY, 10924
845.294.0558 Fax 845.294.0580

### 1.5.1 Land Use, Zoning and Public Policy

The entirety of the two (2) tax parcels is subject to a variety of laws, codes and regulations set forth by the enacted Zoning Code. The Proposed Action consists of a "New Hamlet" and "Open Space Development" adjacent to the Village of Goshen. The surrounding land uses within close proximity of the site consist of a mixture of agriculture, single-family homes, a cemetery and Town/Village Parks. The parcels associated with the Proposed Action will provide a pedestrian friendly link between the Village of Goshen, Salesian Park, the Project Site, Hambletonian Park (and the proposed Hambletonian Estates), Land of Goshen Park, Heritage Estates, Brookside Drive and the Heritage Trail through a proposed trail system. The Project construction will continue beyond one year and will involve more than one phase. The Project Site is zoned Hamlet Residential (HR) and Rural (RU) with a Scenic Road Corridor Overlay District, Stream Corridor and Reservoir Watershed Overlay District with an AQ-3 and AQ-6 Overlay District. The implementation of the Proposed Action will inevitably cause change to the existing landscape. The Proposed Project is in conformity with the Town of Goshen Zoning Code and consistent with the existing land uses currently available. Furthermore, the Proposed Action is consistent with a variety of publications adopted by the Town and County, directing growth in and around existing Villages and Hamlets to maximize use of existing infrastructure. These publications include Town of Goshen Comprehensive Plan, Town of Goshen Zoning Code, and Water Testing protocols, Building Form Guidelines, Hamlet Design Guidelines and Subdivision Regulations. The Orange County Comprehensive Plan was considered along with the Southern Wallkill Biodiversity Plan during the initial design development.

A portion of the Project Site has been designated as a Hamlet Residential Zoning which permits higher density development. The hamlet development will provide beneficial affordable housing obtainable by individuals, couples and young families with moderate incomes. The Plans for the Proposed Action currently before the Board consist of 229 units, of which 21 are to be affordable. §97-15(k)

of the Zoning Code permits a maximum of 207 units of three or more bedrooms. §97-20 of the Zoning Code permits a base density of 7 units in the RU Zoning District. Through fractional density calculations and potential bonus densities the final unit count of 229 may be developed. To offset potential impacts, mitigation measures will be implemented, but not limited to:

- Adherence to the adopted Hamlet Design Guidelines.
- Conformity to a variety of development publications by the Town and County.

See DEIS Chapter III, Subsection 1 *"Land Use, Zoning and Public Policy"* for a more in depth discussion.

### 1.5.2 Visual Character

The Proposed Action is located within an area identified as having scenic value, resulting in a change to scenic views, and may be visible from various heavily traveled ways. The Project Sponsor had examined the visual character of the Proposed Site and presented photographs and cross-sectional views that illustrate existing and proposed development conditions. The existing conditions allow minimal visual intrusion into the Proposed Site. Dense vegetation associated with the periphery as well as off-site combined with the physical orientation of potential viewers and the limiting factors.

Implementation of the Proposed Action will cause a visual change from within the immediate vicinity of the Proposed Site. Substantial clearing will be necessary within the TND areas for the compact layout; which will ultimately open up areas visible from outside the periphery of the Proposed Site. The largest visual impact is anticipated from the views from the entrances to Hambletonian Park, specifically Oakwood Drive. Oakwood Drive is not identified in the Town of Goshen Open Space and Farmland Protection Plan dated July 2003 as an aesthetic community resource. Views from this point would be similar to the view down Main Street of the Central Business district in the Village of Goshen. There are no sites in proximity of the site that have been inventoried as an aesthetic resource

by NYSDEC nor cross policy thresholds of inventorying aesthetic resources. To offset potential impacts, mitigation measures will be implemented, but not limited to:

- Adherence to the adopted Hamlet Design Guidelines.
- Conformity to a variety of publications by the Town and County.
- Preservation of existing vegetation along periphery.
- Enhance and maintain buffer zones.
- Supplement existing vegetation through a landscape plan.
- Utilization of colors and styles consistent with the surrounding landscape and character of the Town.

See DEIS Chapter III, Subsection 2 *"Visual Character"* for a more in depth discussion.

**1.5.3 Vegetation and Wildlife**

The existing flora and fauna on the Proposed Site is consistent with what has been observed and recorded in the region. According to the New York State Department of Environmental Conservation and United States Department of the Interior Fish & Wildlife Service ("USDIFWS"), there are no threatened, endangered or significant vegetation and/or wildlife documented within the Proposed Site. Indiana Bat and Bog Turtles have been witnessed within the contiguous area; and documented by the USDIFWS having a presence in Orange County. Therefore, a possibility for their presence onsite exists. The Proposed Action shall cause the disturbance of approximately 34± acres of vegetation and habitat, causing forest and habitat fragmentation. To offset the potential impacts, mitigation measures will be implemented, but not limited to:

- Clearing of vegetative cover at appropriate times of the year.
- Strict adherence to the Stormwater Pollution Prevention Plan ("SWPPP").
- Re-vegetation and habitat creation through a landscape plan.
- Intensive protection and care of environmentally sensitive areas.

See Chapter III, Subsection 3, *"Vegetation and Wildlife"* for a more in depth discussion.

### 1.5.4 Wetlands and Surface Hydrology

The Proposed Site contains approximately 41± acres of ACOE wetlands as delineated by the Project Wetland Delineator within the wetland areas and watercourses that are tributaries to the Otterkill and its associated drainage basin. The low-lying lands that are contiguous with the watercourses and wetlands are prone to flooding as part of the 100-year floodplain.

The Proposed Action may cause these resources to be impacted from construction activities and post construction occupancy. The Proposed Action will introduce new impervious surface areas that may increase stormwater runoff above current conditions.

The preferred development plan will have an impact on the resources, approximately 1% temporary and/or permanent disturbance of the ACOE wetlands. To offset the potential impacts, mitigation measures will be implemented, but not limited to:

- Limit impacts to the maximum extent practicable, where feasible.
- Strict adherence to the SWPPP.
- Conformity to Local, State and Federal Standards, including NYSDEC, ACOE and FEMA.

See Chapter III, Subsection 4, *"Wetland and Surface Hydrology"* for a more in depth discussion.

### 1.5.5 Geology, Topography and Soils

The Proposed Site is consistent with the aspects of the Martinsburg Formation of the Wallkill Valley Region of the Appalachian Mountains. Existing topography has a variety of slopes with a majority of concentrated within the 0-15% range and a topographical range in elevation from 470 ft. to 300 ft. creating a valley towards the bisecting unnamed stream. The soils that are present on-site range from poorly drained to areas that are excessively drained, with a variety of aspects dependent upon their classification, established by the United States Department of Agriculture, Soil Conservation Service.

The Proposed Action will inevitably cause change to the structure and configuration of the geology, topography and soils. Clearing, grading, and blasting of the Proposed Site along with newly introduced materials are some practices to be undertaken. To offset the potential impacts, mitigation measures will be implemented, but not limited to:

- Strict adherence to the enacted Zoning Code.
- Strict adherence to the SWPPP
- Balanced grading and cut/fill procedures along with reuse of stockpiled material.
- Follow blasting protocol of Town, County and/or State should the need arise.

See Chapter III, Subsection 5, *"Geology, Topography and Soils"* for a more in depth discussion.

### 1.5.6 Ground and Surface Water Resources

The immediate vicinity of the Proposed Site has a variety of individual and municipal wells in use. These wells are adequate for their use with some drawdown associated with drought conditions; one year in 30 drought record is approximately 69% of the average annual precipitation. The precipitation within Orange County is approximately 43" per year which equates to an aquifer recharge of approximately 60,000 gpd.

The proposed Action will require the design and formation of a centralized water system to serve the new commercial and residential structures. The source for the central water system will be from on-site bedrock wells. Four wells have been drilled on the Proposed Site to date. Well 4 was installed in 1998. In August 2006, the Project Sponsor submitted a well testing application to the Town in accordance with Article II, *Well Testing*, of the Zoning Code. The pump test plan incorporate the Town of Goshen protocols for well installation, testing and reporting as applicable to bedrock wells.

The well depths range from 425' to 600' into shale bedrock. The projected water demand estimate approved by the Orange County Department of Health ("OCDOH") for the proposed mixed-use development at full build-out is approximately 65. New York State Department of Health ("NYSDOH") requires that the water supply shall equal or exceed maximum daily demand or twice the average estimated water demand. Therefore, the water supply must have the capacity to produce a minimum of about 91.4 gpm, with the best well out of service. The well testing program was undertaken and Data presented in the Project Hydro geologist's reports indicate Well 1, the best well, can be independently pumped at rates up to 250 gpm and Well 3 be pumped at 92 gpm. The combined yield of Wells 1 and 3 is 340 gpm, indicates a combined yield of 492,480 gpd. Concluding the well testing program confirms the capability of Wells 1 and 3 to meet the cited water supply requirement for the community water system under terms of the Town's Water Protocol without significant adverse impact on groundwater resources. To off-set the potential impacts, mitigation measures will be implemented, but not limited to:

- Strict adherence to the SWPPP.
- Conducting well testing during and after construction.

See Chapter III, Subsection 6, *"Ground and Surface Water Resources"* for a more in depth discussion.

### 1.5.7 Stormwater Management

The existing stormwater deposited on-site starts from two existing high points, flowing towards a central location. At the central location the stormwater enters the unnamed stream bisecting the Proposed Site, converging on a culvert under Coleman Road. From this point, the flow of water enters the Otterkill drainage basin. The bulk of the stormwater is maintained on site within wetlands and/or percolation where it ultimately recharges the underlying bedrock aquifer.

The Project Engineer has prepared a Stormwater Pollution Prevention Plan "SWPPP" to address the interrelated topics of stormwater management,

stormwater quality, erosion and sediment control, and stormwater infrastructure maintenance for the Proposed Action both during the construction period and occupancy period. The SWPPP also sets forth both erosion and sediment control measures to be incorporated during construction consistent with guidelines presented in the NYSDEC publication entitled *Stormwater Management Design Manual* and includes discussion of stormwater infrastructure maintenance requirements and the presentation of related "checklists" prepared by the NYSDEC.

The SWPPP has been prepared in accordance with the NYSDEC standards to address any potential significant adverse impact concerning either storm water quantity or quality during both the construction period and in the occupancy phase of the development. Appropriate legal arrangements for long-term ownership, operation and maintenance of the stormwater management facilities paid for by the benefited property owners and not on a Town-wide basis are also intended, including formation of a Town Drainage District that will own and maintain the stormwater facilities serving the Proposed Action. To off-set potential impacts, mitigation will be implemented, but not limited to:

- Strict adherence to the SWPPP.

See Chapter III, Subsection 7, "*Stormwater Management"* for a more in depth discussion.

### 1.5.8 Infrastructure and Utilities

The Proposed Site currently has no infrastructure or utilities that are servicing it. There are ample opportunities for the required services to be provided. Electric service currently exists in Craigville Road and may be provided from Orange and Rockland Utilities. Gas service currently is available and supplied from New York State Electric and Gas. Central water shall be provided through on-site wells and central sewer shall be provided by a proposed on-site Wastewater Treatment Plant. After Preliminary Approval the Project Sponsor may apply to the Utility Companies for services including Orange and Rockland Utilities, Frontier Communications and Time Warner Cable.

The private utilities are ready and willing to provide service to the Proposed Action. Additionally, there are other potential vendors to provide a variety of services within the local market place. The on-site infrastructure, roadways, water system, sewer system and stormwater management system are to be offered for dedication to the Town of Goshen to ensure proper maintenance and upkeep. To off-set any potential impacts, mitigation will be implemented, but not limited to:

- Dedication of infrastructure to the Town of Goshen.
- Connection to existing utilities and infrastructure where available.

See Chapter III, Subsection 8, *"Infrastructure and Utilities"* for a more in depth discussion.

### 1.5.9 Traffic and Transportation

The Project Traffic Engineer has undertaken a Traffic Impact Study ("TIS") to assess the character of the existing local roadway network and evaluate in a single document the combined effect of the Proposed Action as well as two other developments, Hambletonian Estates and Heritage Estates, on the existing road network. The TISE has been prepared in accordance with methodology and trip generation rates by land use type established by the Institute of Traffic Engineer's ("ITE") and accepted by NYSDOT. The TIS investigated thirteen (13) intersections within the vicinity to the Proposed Site, anticipating a 1.5% acknowledged growth factor as established by NYSDOT and other site-specific traffic projected to be generated by Harness Estates and Goshen Executive was considered in the TIS. The Design Year utilized in the Study was 2015.

Deficiencies under either the "Existing" Conditions and/or the "No Build" Conditions are identified for specified movements and peak hour periods at the analyzed intersections.

The Proposed Action will generate increased vehicular traffic that would rely on Craigville Road, Coleman Road and may further exacerbate existing traffic congestion along nearby collector roads and in the Village of Goshen. The

anticipated traffic generation is upwards of 105 additional vehicles under peak traffic conditions.

Many of the analyzed intersections would continue to provide levels of service consistent with existing conditions. Others do provide levels of services below existing conditions, yet the Project Traffic Engineer has determined the effected intersection would produce similar results with or without the Proposed Action. To off-set the potential impacts, mitigation measures will be implemented, but not limited to:

- Existing roadway improvements as suggested by the Project Traffic Engineer.
- Opening connector roads through various other proposed developments.

See Chapter III, Subsection 9, *"Traffic and Transportation"* for a more in depth discussion.

**1.5.10 Noise & Odors**

Observations by the Project Sponsor are that no extraordinary noise or odors are present within or at the periphery of the Proposed Site, inhibiting its potential for commercial, residential and/or open space recreational use associated with the Proposed Action. In order to provide scientific support of this perception in the matter of the ambient noise conditions, noise levels at representative locations have been taken by the representatives. These measurements document daytime ambient noise levels ranging from forty-nine (49) to fifty-eight (58) decibels, with the higher reading occurring in the elevated and open areas. These measurements are within the range of noise levels typically experienced within a suburban residential neighborhood, through in part within the high side of the range apparently due to the effect of Craigville Road Traffic.

The Proposed Action will inevitably cause increased noise and odors within the vicinity of the Proposed Site. The noise and odors may be substantially increased during periods of construction. To offset the potential impacts, mitigation measures will be implemented but not limited to:

- Strict adherence to noise regulations of the Town.
- Monitoring and disabling equipment.
- Proper design of mechanical equipment.
- Utilization of natural features for attenuation.

See Chapter III, Subsection 10,*"Noise & Odor"* for a more in depth discussion.

**1.5.11 Air Quality**

The air quality in and around the Proposed Site is in compliance with National Air Quality Standards. The Proposed Action has the potential for degradation of air quality, most likely the result of increased traffic and construction activities. To offset the potential impacts, mitigation measures will be implemented but limited to:

- Strict adherence to air quality monitoring and town regulations.
- Traffic improvement suggestions to minimize idling.
- Utilization of dust control measures.

See Chapter III, Subsection 11, *"Air Quality"* for a more in depth discussion.

**1.5.12 Community Services and Facilities**

The Proposed Action will introduce new school-aged children to the Goshen Central School District, along with an increased demand on the Town of Goshen emergency services, and open spaces and recreation programs. The anticipated proportional demand caused by the future residents on such community services as police protection, fire protection, emergency medical services, solid waste management and general government services, including highway maintenance, is minimal. The Project Sponsor has determined no significant adverse impacts are to occur based upon the Proposed Action.

Development of the Proposed Action will be self-sufficient throughout with respect to water supply source and have no effect on either the supply or other aspect of an existing municipal water system. Potential benefits to existing

services are proposed, supplementing water to the Hambletonian Park Water District.

The Proposed Action intends conveyance of sanitary sewage generated to the Village of Goshen Wastewater Treatment Plan ("WWTP"). Accommodation of this flow would reduce the residual capacity of this municipal utility by the estimated annual daily design flow of 65,800 gpd. This reduction in residual capacity is less than 4% of the two (2) million gpd expansion in capacity of the Village's WWTP under its NYSDEC Sanitary Sewage SPDES Permit created through the on-going upgrading of the WWTP.

An alternative to the above is to construct an on-site WWTP, shown on the drawings. This facility would be designed and constructed to intermittent stream standards as required by the NYSDEC which regulates the design, operation and discharge of such facilities.

The future residents of the Proposed Action will benefit from the close proximity of their homes to Land of Goshen Park and Salesian Park. The current plan before the Board includes trail system, picnic and bird watching areas, bike racks, benches and park space associated with the development cluster. The Town will benefit from the approximate 62± acres of conserved, natural and developed open space within the Proposed Action, anticipated for dedication to the Town. Currently, there is no safe pedestrian-friendly access to the existing Town and Village parks and trails. Therefore, reliance on an automobile is required by users to access the existing parks and trails. Approval of the Proposed Action is the first step in providing the connectivity needed to promote a safe pedestrian-friendly circulation system that minimizes reliance on the automobile to access the parks and trails. Through this "link", pedestrians may access the Village of Goshen, Salesian Park, Maplewood Village, Hambletonian Park, Veterans Cemetery, Land of Goshen Park, Heritage Estates, Brookside Drive and the Heritage Trail through one continuous, circular path.

The natural and developed open space within the Proposed Action is to be offered for dedication to the Town; however, should the offer be denied, the amenities will be owned by the proposed Homeowner's Association. The Project Sponsor will be making a per lot recreation fee payment as required under the Town's Land Subdivision Regulations.

The Environmental Impact Statement has evaluated the Proposed Action with respect to potential impacts to existing natural, cultural and community resources and through this evaluation has identified impacts to these existing resources. To mitigate the potential impacts to existing resources, measures will be implemented into the project to include:

- Increased user fees and tax revenue.
- Adequate fire flows and hydrants.
- Preservation of substantial open space.
- Trail systems to be dedicated to the Town to reduce reliance on the automobile.
- Participation in the Orange County recycling program.
- Supplement existing marginal Town and Public Water System.
- Provide affordable housing units.
- Provide mixed commercial use that will have positive tax revenue.

See Chapter III, Subsection 12, *"Community Facilities"* for a more in depth discussion.

**1.5.13 Fiscal Impact**

In its current, vacant state, the Proposed Site generates approximately $26,000 in revenues for the involved taxing jurisdictions that consist of the County of Orange, Town of Goshen, Goshen Fire District #1 and the Goshen Central School District, and the Goshen Public Library. At full build-out, the anticipated revenue is approximately $1,150,000. The anticipated revenue is calculated based upon the assessed value, in conjunction with the 2005-2006 real property tax rates. The Proposed Action would increase tax revenues to the principal taxing jurisdictions including the County of Orange, Public Library, the Town of Goshen and Town

of Goshen Fire District #1. Ultimately, the Goshen Central School District would experience negative fiscal impact.

To offset the potential impacts, mitigation measures will be implemented, into the plan to include:

- Potentially certifying the Goshen Central School District as a homestead assessing unit, allowing the condominiums to be assessed at full market value.

See Chapter III, Subsection 13, *"Fiscal Impact"* for a more in depth discussion.

**1.5.14 Cultural Resources**

The Project Archaeologist has completed a Phase 1A Literature Search and Feasibility Study, a Phase 1B Field Investigation and a Phase II Site Evaluation for the Proposed Site in accordance with the New York State Standards for Cultural Resource Investigation (CRI). The Project Archaeologist has determined the Proposed Action will have no significant adverse impact on historic, cultural or archeological resources listed on, or eligible for listing on, the State or National Register of Historic Places. Areas of concern have been identified and are anticipated to be salvaged during construction activities. The Site will be clearly marked during construction Activities.

See Chapter III, Subsection 14, *"Cultural Resources"* for a more in depth discussion.

**1.5.15 Agricultural Resources**

The Proposed Site is not currently used for any type of agriculture. There are though, a variety of active and inactive farm operations within one-half (1/2) mile of the Proposed Site. The closest, immediately across Coleman Road includes pasture, hay fields and horse farm paddocks. The potential impacts have not been substantially evident, the Project Sponsor has anticipated limited, if any. No mitigation is anticipated for agricultural resources.

See Chapter III, Subsection 15, *"Agricultural Resources"* for a more in depth discussion.

**1.6 Construction Impacts and Phasing**

The construction time frame will be dependent upon market demand. Throughout the duration of construction a number of impacts may be associated with the development of the Proposed Action. Any potential impacts will be mitigated to the maximum extent practicable and have been identified as follows, but not limited to:

- Construction traffic on the adjacent roadway network.
- Construction noise on adjacent and nearby properties.
- Degradation of air quality from construction activities.
- The potential for erosion within the Proposed Site and its periphery.
- The potential degradation of water quality within wetlands and stream courses.
- The removal of vegetation in areas where vegetative cover will be restored in the form of lawns, meadows and landscaped areas.
- The displacement of wildlife in areas where suitable habitat will be restored for like or similar species.
- Visual impact associated with site preparation and construction activities.
- Potential impacts to adjacent properties from blasting.
- The control and disposal of construction debris.
- Possibility for "Contactor Error" in implementing environmental protection.

The Project Sponsor will mitigate the potential impacts identified in the DEIS to the maximum extent practicable. Construction scheduling, scheduling deliveries to the site, minimizing site disturbance at any one time, stabilizing disturbance areas during construction, implementation of a sediment and erosion control plan, stormwater pollution prevention plan and the planting of a landscaping plan will be utilized to mitigate any anticipated impacts during construction and post construction. The proposed mitigation found throughout the DEIS has been designed to address short-term construction impacts that may affect on-site and

off-site natural resources, existing transportation system, municipal operations and services.

See Section V *"Construction Impacts"* for a more in depth discussion.

The Project Sponsor is projecting a completion of building construction within four (4) phases, over three (3) to four (4) construction years, with an anticipated buildout of 2011 or 2012. The mixed-use occupancy may commence at a slower rate from the residential use. This will be dependent on the developing demand for commercial space. The phasing plan and schedule are intended to provide beneficial cash flow, ensure the timely and complete installation of supporting infrastructure, the opportunity to market a variety of housing types and mix use buildings, comply with NYSDEC and other requirements concerning the extent of site disturbance that may occur at any one time.

See Chapter II, Subsection 2 and Section V *"Construction Impacts"* for a more in depth discussion.

**1.7 Alternatives**

The alternatives section of the DEIS describes and evaluates a range of reasonable alternatives to the Proposed Action that are feasible considering the objectives and capabilities of the Project Sponsor. The evaluation of each alternative will be sufficient to permit a comparative assessment of the alternatives.

Specifically, three (3) alternatives were studied to further understand the relationship between the Proposed Site and potential development. The alternatives consist of the following:

- The "No Action" alternative in this instance would be withdrawal of application by the Project Sponsor or failure of approval by the Planning Board upon consideration of the requirements in the Zoning Code. This alternative would cause no significant change to the privately owned Proposed Site.

- Conventional Residential Development – Develop the Proposed Site as an Open Area Development in accordance with §97-20 of the Town of Goshen Zoning Code.
- Alternative Layout – incorporating the Proposed Action with surrounding existing subdivisions and amenities including pedestrian and bicycle connections to Land of Goshen Park, Hambletonian Park Subdivision and Salesian Park.

See Chapter V *"Alternatives"* for a more in depth discussion.

**1.8 Potential Growth Inducing Factors**

The potential for the Proposed Action to induce growth based on anticipated increase in local expenditures that would be made by new residents through purchases of goods and services. The Project Sponsor acknowledges the future growth and has deemed the development will not directly induce significant growth that would not have otherwise occurred.

The Proposed Action at full build-out will induce growth to the Town of Goshen of approximately 616 residents, about a 5% increase of the 2000 census population. The population increase will in turn create a demand for retail, business and other services in the Town and Village of Goshen as well as surrounding municipalities. The Project Sponsor's opinion is that the Project benefits far outweigh the potential impacts and the Proposed Action is in accordance to Local Laws as well as nationally recognized TND Development Guidelines. Ultimately the Town does not need to make any precedent-making policy and/or legislative decisions for the approval of the Proposed Action.

See Section VII *"Potential Growth Inducing Impacts"* for a more in depth discussion.

**1.9 Unavoidable Adverse Impacts**

The Proposed Action shall cause adverse impacts with or without mitigation. The unavoidable effects, as deemed by the Project Sponsor, are so insignificant as to suggest that the Proposed Action should not go forward include the following:

- Disturbance of land, vegetation and wildlife
- Creation of impervious surface
- Noise above ambient levels during construction
- Traffic due to construction
- Increase in local traffic volumes above current conditions
- Impacts on existing visual corridors
- Consumption of energy and water
- Impacts on community facilities and services

See Section VII *"Unavoidable Adverse Impacts"* for a more in depth discussion.

**1.10 Project Impact on Energy Use and Solid Waste Management**

In the opinion of the Project Sponsor, the Proposed Action will not put a significant demand on energy or solid waste. The capacity for connection to existing services is available. The Clustered and TND development enables the creation of pedestrian environments, limiting dependency on fuel-powered vehicles. Construction will be done in accordance with energy efficient building standards. Construction waste will be properly disposed of off-site in a licensed facility, allowing for a variety of recycling alternatives. Domestic solid waste will be picked up by a licensed hauler and will be disposed of in a licensed facility.

See Section V, *"Project Impacts on Energy Use and Solid Waste Management"* for a more in depth discussion.

**1.11 Irreversible and Irretrievable Commitment of Resources**

The Proposed Action shall cause irreversible or irretrievable commitments of the following:

- Commitment of capitol to project development and home purchases.
- Disturbance to land and vegetation will be removed on a portion of the Proposed Site for the development.
- Existing slopes and soils will be altered on a portion of the Proposed Site.

- A maximum of 0.56± acres of ACOE Wetland will be altered, in a temporary and/or permanent basis in accordance with applicable Nationwide Permits.
- Existing wildlife habitat will be lost.
- Consumption of energy and water.
- Commitment of construction materials, lumber, fuel and electric to the construction of the Proposed Action.
- Loss of residual capacity will occur with respect to existing highways and intersections within the vicinity of the Proposed Site due to the generation of additional traffic.
- Water taken from deep wells drilled into the bedrock aquifer will occur.
- Discharge of treated effluent generated by sewage flow from an onsite WWTP will occur, either to a tributary of the Otterkill Creek or as additional discharge from the Village of Goshen WWTP, with preferred accommodation of this sewage by the Village WWTP causing a commensurate reduction in the residual capacity of the Village's facility.
- Demand for increased public services will be experienced, including education, recreation, fire protection, police protection and other emergency services, and other general governmental function, due to a projected resident population.
- Additional maintenance responsibility will be borne by the Town of Goshen with respect to roadway and related improvements and by a Town Water District, a Town Sewer District and a Town Drainage District, respectfully, in the matters of the proposed central water system, central sanitary system, and stormwater improvements.

See Section IX, *"Irreversible and Irretrievable Commitments of Resource"* for a more in depth discussion.

### 1.12 List of Involved and Interested Agencies

The regulatory agencies and their areas of jurisdiction have been identified on the following pages.

**Town of Goshen Planning Board**

- Completion of SEQRA compliance in Lead Agency role
- Subdivision Plat Approval
- Special Use Permit(s) and Site Plan Approval

**Town Board of the Town of Goshen**

- Formation of Town Sewer District and Acceptance of Offers of Dedication of Central Sanitary Sewage System on behalf of Town Sewer District
- Town Water District and Acceptance of Offer of Dedication of Central Water System on behalf of Town Water District
- Acceptance of Offer of Dedication of Subdivision Boulevard and Roadways and Associated Improvements, Lands and Easements
- Acceptance of Offer of Dedication of Open Space Land(s)
- Acceptance of Offer of Grant of Open Space
- Formation of Town Drainage District
- Formation of Town Lighting District

**Village of Goshen**

- Village Board of Trustees Approval of Contractual Agreement Accepting Sanitary Sewage Flow for Treatment at WWTP
- Village Department of Public Works Permit for Highway Work Permit

**Orange County Health Department**

- Realty Subdivision Plat Approval
- Design Approval of Water System

**Other Orange County Agencies**

- Department of Planning Referral under Section 239 General Municipal Law

- Department of Public Works consideration of certain recommended area-wide Roadway Intersection Improvements

**New York State Department of Environmental Conservation**

- NYSDEC Water Taking Permit
- NYSDEC Approval of Sanitary Sewage System Design Plans
- NYSDEC Protection of Waters (Stream) Permit
- Compliance with NYS General Permit for Stormwater Discharges from Construction Activities or Individual Stormwater SPDES Permit
- 401 Water Quality Certification

**Other New York State Agencies**

- NYS Health Department Design Approval of Plans for Water Supply Improvement
- NYS Office of Parks, Recreation and Historic Preservation "Sign-Off" pursuant to Inter-Agency Agreement
- NYS Department of State Authorization for Incorporation of Homeowner's Association
- NYS Attorney General's Office Authorization of Filing of Offering Plan
- NYS Department of Transportation for consideration of certain recommended area-wide Roadway Intersection Improvements

**U.S. Department of the Army/New York District Corps of Engineers**

- Compliance with Nationwide Permit standards and requirements or securing of Individual Permit for encroachments with Federal jurisdictional wetlands

See DEIS Chapter II, Subsection 2.5, "*Reviews, Permits, Approvals and Compliance Requirements"* for a more in depth discussion.

**1.13 Exhibits and Appendices**

Sections I through IX of the DEIS, within which are incorporated more than 48 Figures, are followed by more extensive Exhibits and Appendices setting forth communications, plans, reports and other technical data relied upon in the preparation of the DEIS. All of this material is listed in the Table of Contents and both referenced and summarized as pertinent throughout the DEIS.

The Appendices incorporate and reference Appendix A, Site Plans and Subdivision Drawings, a set of 22 sheets compiled by the Project Engineer, entitled Maplewood Village at Goshen/Town of Goshen, Orange County, dated January 1, 2005 and revised May 4, 2007 and the following technical reports:

- Appendix B Well Testing Program
- Appendix C Engineering Report, Water System
- Appendix D Engineering Report, Sanitary Facilities
- Appendix E Stormwater Pollution Prevention Plan
- Appendix F Goshen Area Traffic Impact Study
- Appendix G Traffic Engineer's Memorandum
- Appendix H Supplemental Maplewood Village at Goshen Traffic Analysis
- Appendix I Phase 1 and 2 Cultural Resources Survey
- Appendix J Natural Resources Survey

# II. PROJECT DESCRIPTION

## 2.1 Location and Site Definition

The Proposed Site consists of two (2) tax map parcels designated Section 8, Block 1, Lots 1.1 & 48. These lots are contiguous to the each other and are located within the limits of the Town of Goshen, the County of Orange and the State of New York.

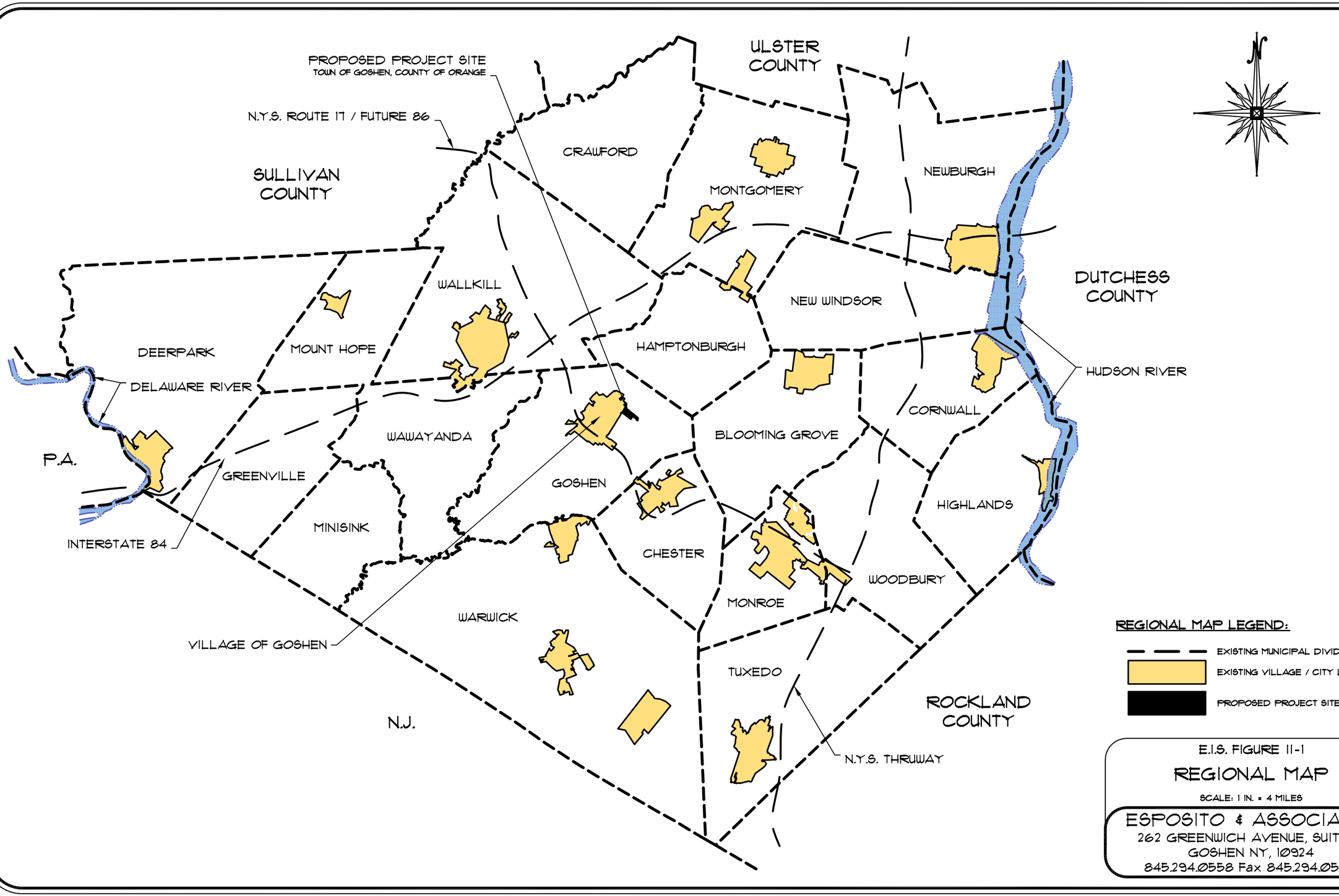
See DEIS Figure II-1, "*Regional Map"*.

The Proposed Site consists of approximately 96± acres and is bound by Coleman Road to the northeast and east, along with Craigville Road/County Route 66 to its southwest. The remainder is bound at its southern edge, by the Orange County Veterans Cemetery, and its northwest edge, by the Village of Goshen/Town of Goshen municipal line, as well as Salesian Park. The Proposed Site is located within the two (2) Land Use Districts. The first is the HR Zone or Hamlet Residential and the other is RU Zone or Rural Residential. Aspects of the Proposed Site are subject to provisions regarding the Scenic Road Overlay along Craigville Road/County Route 66; the Stream Corridor/Reservoir Overlay along the bisecting unnamed stream and the parameters of the AQ-6 Aquifer Overlay. These items are consistent with the Zoning Maps that accompany the Town of Goshen, New York Enacted Zoning Code.

See DEIS Figure II-2, *"Location Map"*

The approximately 96± acres that make up the Proposed Site is completely undeveloped with a mixture of vegetative cover types. The rolling topography is derived of approximately 80% upland and wetland forest. The remaining 20% is a mixture of wetland meadow, scrub/shrub areas, and minimal amounts of watercourses.

See Chapter III, Subsection 3, *"Vegetation and Wildlife"* for a more in depth discussion.




REGIONAL MAP LEGEND:

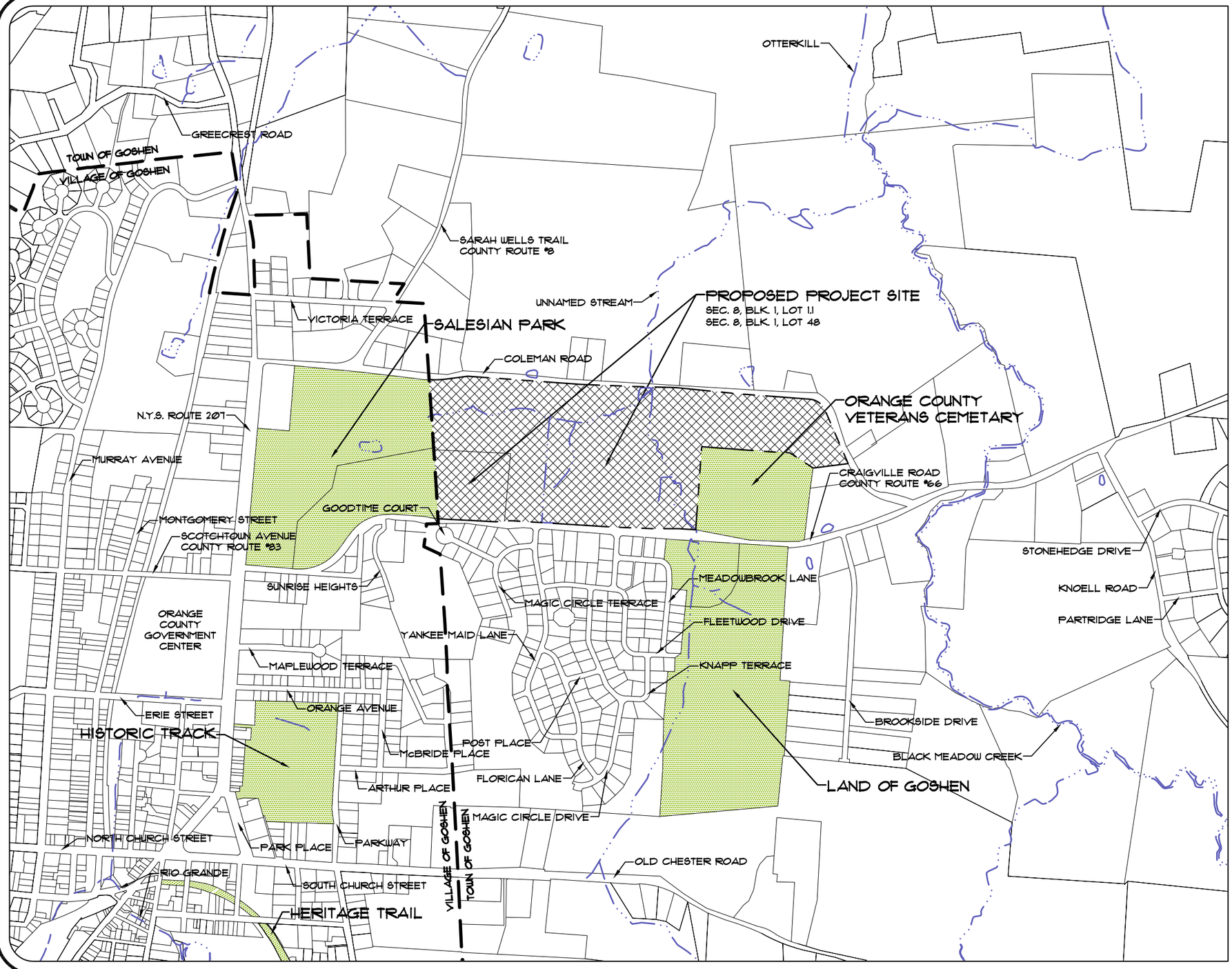
- EXISTING MUNICIPAL DIVIDE
- EXISTING VILLAGE / CITY LIMITS
- PROPOSED PROJECT SITE

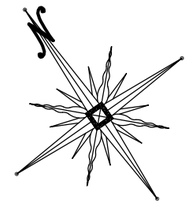
E.I.S. FIGURE II-1

# REGIONAL MAP

SCALE: 1 IN. = 4 MILES

ESPOSITO & ASSOCIATES
262 GREENWICH AVENUE, SUITE B
GOSHEN NY, 10924
845.294.0558 Fax 845.294.0580




1000 0 500 1000

GRAPHIC SCALE:
1 IN. = 1000 FT.

## LOCATION MAP LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING TAX PARCELS
- EXISTING WATER COURSE
- EXISTING GREENSPACE / PARK
- PROPOSED PROJECT SITE

E.I.S. FIGURE II-2

# LOCATION MAP

SCALE: 1 IN. = 1000 FT.

ESPOSITO & ASSOCIATES
262 GREENWICH AVENUE, SUITE B
GOSHEN NY, 10924
845.294.0558 Fax 845.294.0580

The entirety of the Proposed Site is located within the Goshen Central School District, Goshen Fire District and is patrolled by the New York State police, Orange County Sheriff's Department and Town of Goshen Police Department.

## 2.2 Project Description

The overall layout of Proposed Action within the HR Land Use District is consistent with the requirements of "HM and HR Districts for Traditional Neighborhood Development (TND)" defined in Article III, §97-15 of the Zoning Code. The Hamlet Residential is defined in the code as follows:

- "The HM and HR Districts are intended to implement the concept of Traditional Neighborhood Development ("TND"). TND is the development of complete communities that include single-family homes, apartments, workplaces, shops, restaurants, and recreational facilities. Its goal is to promote a pedestrian-oriented environment in which residents and those who work in the development can walk comfortable between different land uses."

The Hamlet Guidelines, in the Appendix of the Zoning Code, are set forth by the Planning Board to help produce and reintroduce a character to our neighborhoods that has been lost in the ever-changing world. These guidelines arose due to the recognition that current urban sprawl and development trends that accompany it consume the landscape, waste energy, cause pollution, and leave our town centers forgotten and dilapidated. New development within a Hamlet provides the extension of small town America, with small lots, mixed-uses, and interconnected streets that provide vitality and affordability of a walkable neighborhood. Not only do these guidelines create a town character, they produce a close-knit, connected and walkable community.

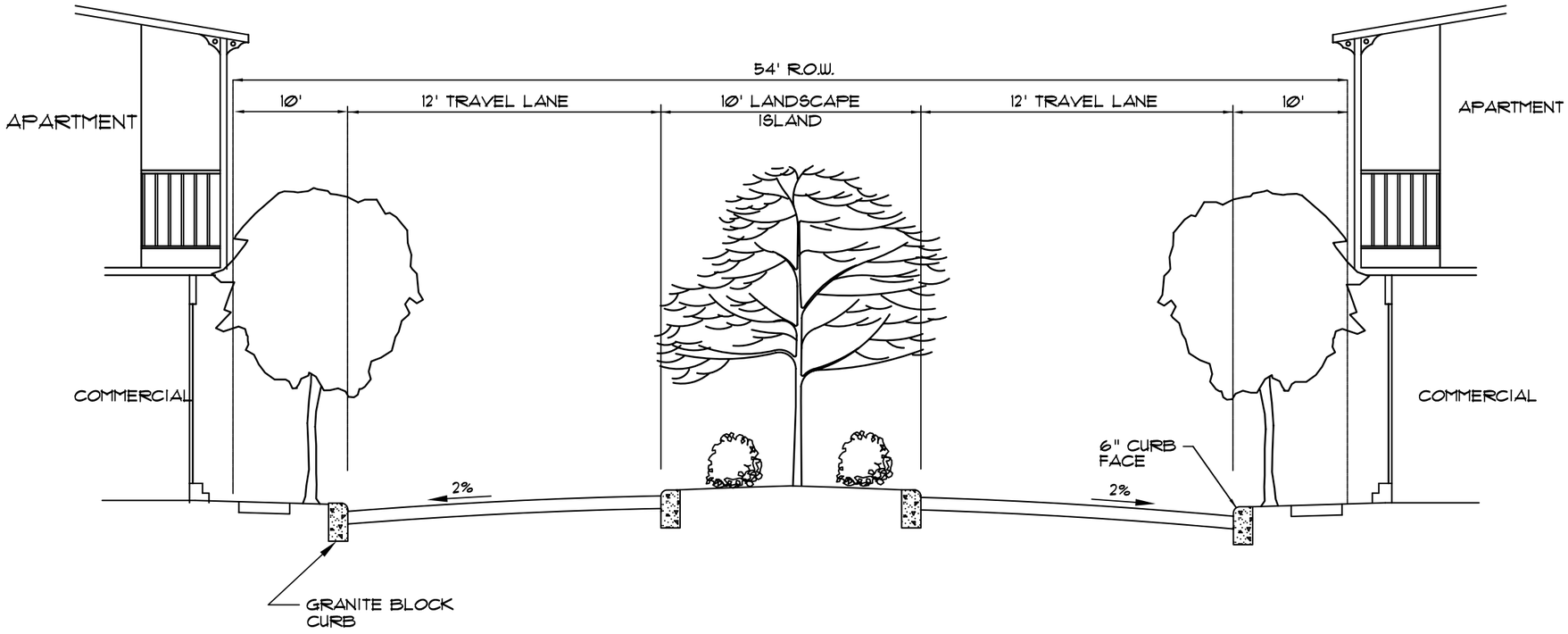
Streetscapes within a Hamlet are the strongest and most visible aspect of an area, they add to the overall character that is ideal to the community. Narrower streets not only continue the idea of a close-knit community, but provide traffic calming

that is directly relating to the safety within the Hamlet. Along with narrower streets the availability of parallel parking helps aid in traffic calming, as well as reduces the need for large over-sized parking lots, provide more convenient parking, as well as dispersing the overall parking throughout the neighborhood. This design feature encourages the pedestrian use and walkability within the community and its surrounding area. A streetscape's beauty and character is further enhanced through guidelines that keep structures aligned, regulate off street parking and suggestions to better serve the individual driveways. Building alignment should be obtained through the use of consistent setbacks, creating a defining edge for the public space within a community. This idea in combination with sidewalks and trees provide a desired character along with a canopied corridor.

Sidewalks are an integral part of the Hamlet Streetscape and in an effort to promote a walkable, pedestrian-friendly environment that determines the use and connection throughout the community. The streets and sidewalks of a Traditional Hamlet are planted with trees adding neighborhood character and to promote a Hamlet enabling a sense of community. They also provide a much-needed microclimate, by producing shade and reducing the amount of heat build-up of paved surfaces. Along with street trees, additional plantings and amenities like fences and walls are desired. These criteria define the sidewalks, as well as provide the pedestrian scale to the street corridor, all while continuing the uniformity and pleasant character of the Hamlet.

See Figures II-3A *"Boulevard Entrance"*, II-3B *"Major Street"*, II-3C *"One Way Street"*, and II-3D *"Rear Alley"*.

The overall layout of the Proposed Action within the RU Land Use District is consistent with the requirement of *Standard for Open Space Developments* defined in Article IV, §97-20 of the Zoning Code. The Open Space Development Plan is defined as follows:




## CHARACTERISTICS:

1. BALANCE MULTIMODAL MOBILITY WITH LAND ACCESS.
2. EMPHASIS ON WALKING, BICYCLING, NEIGHBORHOOD LIVABILITY, AND LAND ACCESS OVER MOBILITY.
3. MORE PEDESTRIAN ORIENTED, GIVING HIGHER PRIORITY TO LANDSCAPE MEDIANS, PLANTING STRIPS, SIDEWLAKS, AND BICYCLE LANES.

## HIGHER PRIORITY ELEMENTS:

1. DETACHED SIDEWALKS
2. STREET TREES IN PLANTING STRIPS
3. BIKE LANES ON DESIGNATED BICYCLE ROUTES
4. MULTIMODAL INTERSECTION DESIGN

## LOWER PRIORITY ELEMENTS

1. WIDTH OF TRAVEL LANES
2. VEHICEL CAPACITY
3. ACCESS MANAGEMENT
4. MEDIANS
5. DESIGN FOR LARGE VEHICLES
6. URBAN DESIGN FEATURES

## TRAFFIC MANAGEMENT FEATURES:

1. DIVERTERS
2. SLOW POINTS
3. TRAFFIC CIRCLES AND ROUNDABOUTS
4. RAISED CROSSWALKS

E.I.S. FIGURE II-3 A

BOULEVARD ENTRANCE

SCALE: N.T.S.

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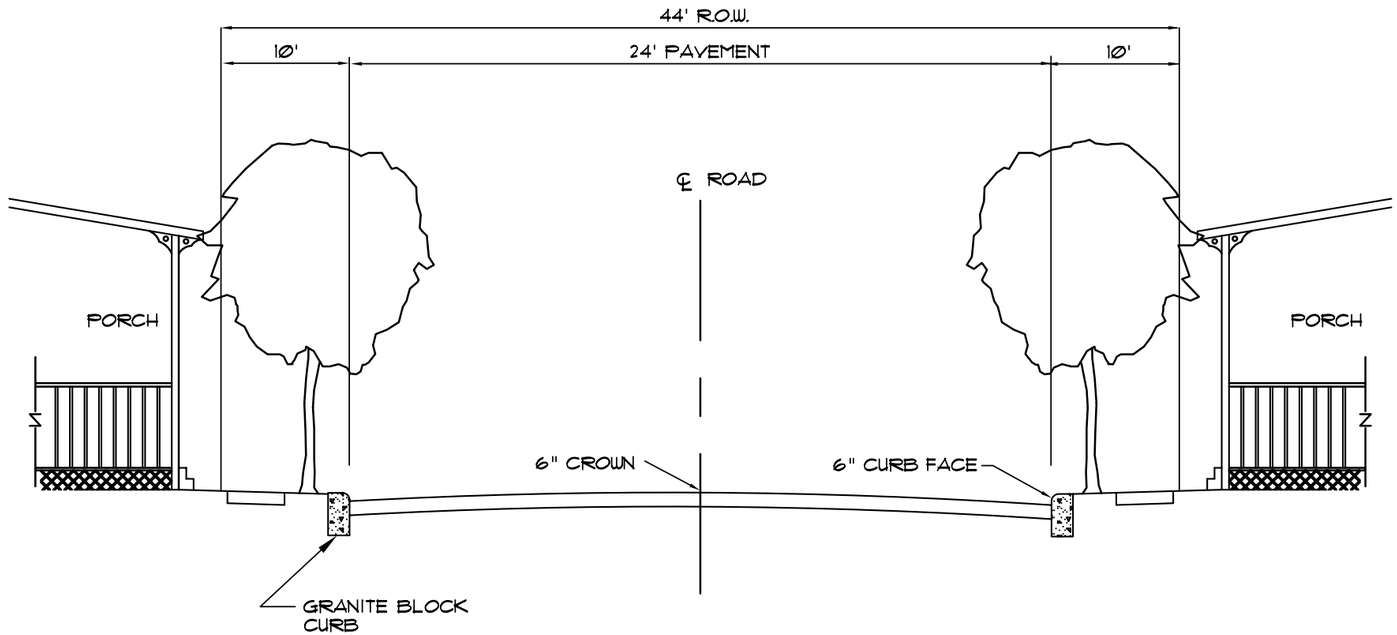
845.294.0558 Fax 845.294.0580

# TYPICAL BOULEVARD ENTRANCE




## CHARACTERISTICS:

1. SERVICING HIGH INTENSITY LAND USE, CONNECTING TO NEIGHBORHOOD CENTERS.
2. EMPHASIS ON PEDESTRIAN ACTIVITY AND HIGH TRAFFIC VOLUMES AT LOW SPEEDS.
3. BUILDING ORIENTATION IS TOWARDS THE STREET.

## HIGHER PRIORITY ELEMENTS:

1. SIDEWALKS WITH PUBLIC SPACES
2. STREET TREES AND PLANTING STRIPS
3. ON-STREET PARKING

## LOWER PRIORITY ELEMENTS:

1. TRAVEL LANE WIDTH AND QUANTITY
2. BIKE LANES
3. DESIGN FOR DIVERSE VEHICLES

## TRAFFIC MANAGEMENT FEATURES:

1. NARROW TRAVEL LANES
2. PEDESTRIAN BUFFERS
3. HIGH VISIBILITY AND/OR ALTERNATIVE MATERIAL CROSSWALKS
4. RAISED AND/OR SMALL CURB RADII AT INTERSECTIONS

* SIDEWALK LOCATIONS AS SHOWN ON PLAN MAY BE SINGLE OR DOUBLE WALK

E.I.S. FIGURE 11-3 B

MAJOR STREET

SCALE: N.T.S.

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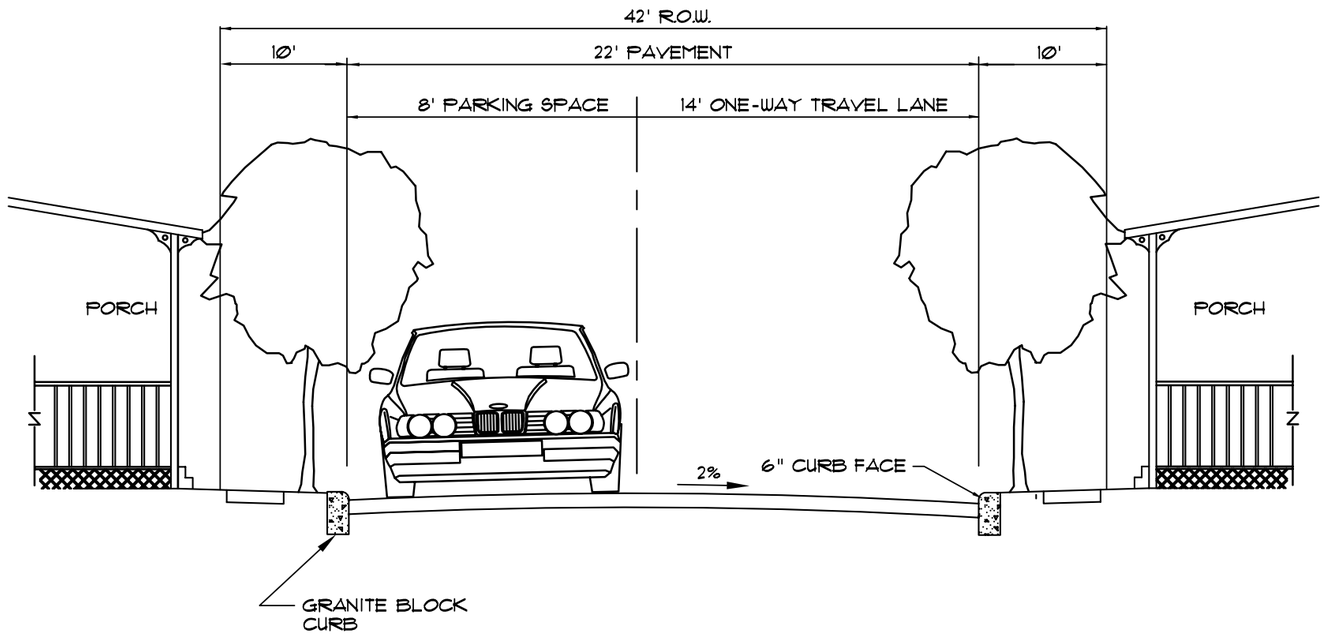
# TYPICAL MAJOR STREET




## CHARACTERISTICS:

1. BALANCE OF MULTI-MODAL MOBILITY WITH LAND ACCESS
2. EMPHASIS ON THE PEDESTRIAN FRIENDLY ENVIRONMENT AND NEIGHBORHOOD LIVABILITY.

## HIGHER PRIORITY ELEMENTS:

1. DETACHED SIDEWALKS
2. STREET TREES AND PLANTING STRIPS
3. ON-STREET PARKING
4. BIKE LANES
5. MULTI-MODAL INTERSECTION DESIGN

## LOWER PRIORITY ELEMENTS

1. MEDIANS AND URBAN DESIGN ELEMENTS
2. TRAVEL LANE WIDTH AND QUANTITY
3. ACCESS MANAGEMENT
4. DESIGN FOR DIVERSE VEHICLES

## TRAFFIC MANAGEMENT FEATURES:

1. DIVERTERS/CALMING DEVICES
2. TRAFFIC CIRCLES AND/OR ROUNDABOUTS
3. CHICANES/CURVES
4. RAISED AND/OR ALTERNATIVE MATERIAL CROSSWALKS

E.I.S. FIGURE 11-3 C

ONE WAY STREET

SCALE: N.T.S.

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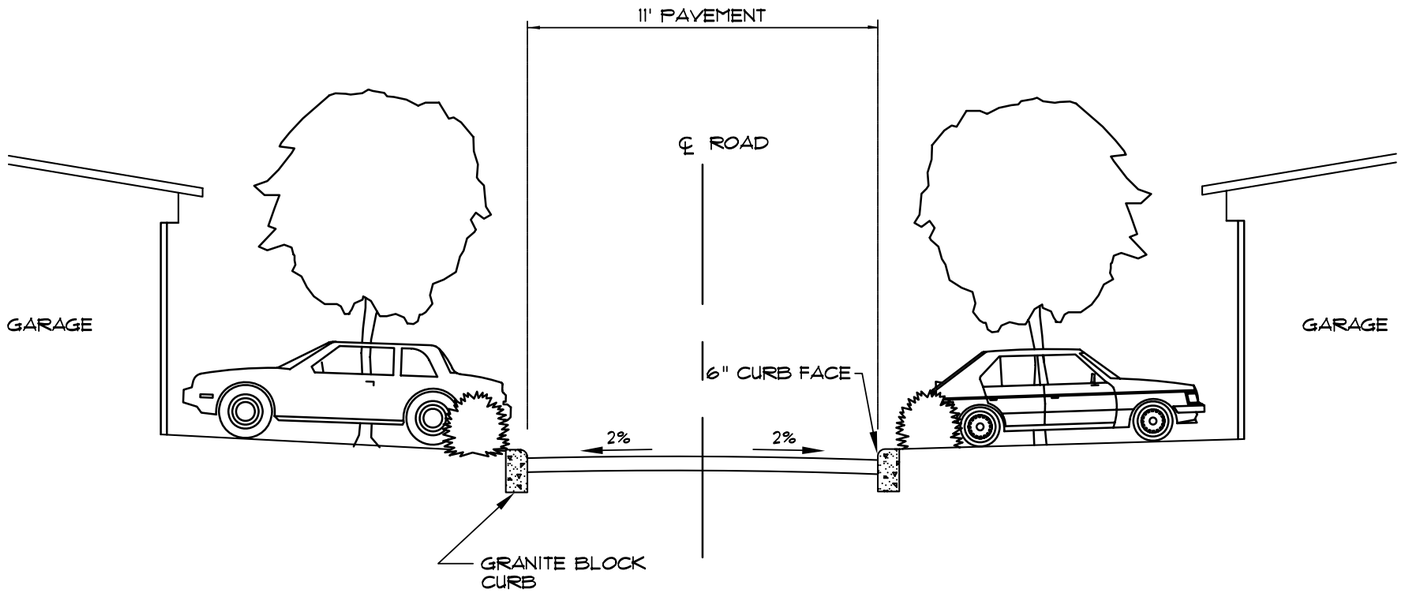
# TYPICAL ONE WAY STREET




## CHARACTERISTICS:

1. SERVICING THE REAR OF RESIDENTIAL LOTS
2. EMPHASIS ON LOW TRAFFIC VOLUMES AT VERY SLOW SPEEDS.

## HIGHER PRIORITY ELEMENTS:

1. ACCESS TO INDIVIDUAL GARAGES AND YARDS.
2. UTILITY CONNECTIONS
3. SANITATION ACCESS

## LOWER PRIORITY ELEMENTS:

1. GATED TO MINIMIZE ACCESS AND/OR SAFETY

## TRAFFIC MANAGEMENT FEATURES:

1. NARROW TRAVEL LANES
2. MINIMAL ACCESS

E.I.S. FIGURE 11-3 D

REAR ALLEY

SCALE: N.T.S.

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# TYPICAL REAR ALLEY

- "Open space development allows units to be located or clustered on those portions of a property most suitable for development, while leaving substantial portions as undeveloped open space. Open space developments are intended to offer the landowner great flexibility, and may include a variety of lot sizes, ranging from large farm or estate lots to small hamlet-sized lots. Open space development results in the preservation of contiguous open space and important environmental resources, while allowing compact development to occur."

The Overall Plan for the Proposed Action currently before the Planning Board appears in DEIS Figure I-2 and depicts the following site development components:

- Access and Streetscapes
- Single Family Estate Homes, 16
- Single Family Homes, 53
- Town Homes, 44
- Multi Family Condominiums, 108
- Mixed Use Apartments, 8
- Commercial Space, 30,000± sq. ft.
- Community Open Space, 61.95± acres or 65% of the site

The Single Family Estate Homes are mostly concentrated within the RU Land Use District within the eastern portion of the Proposed Site and they further sporadically sit along Coleman Road to the northwest. These individual lots will occupy approximately 19.80± acres with an average lot size of 1.24± acres. The proposed location of the estate homes is consistent with the existing rural landscape that is evident along Coleman Road.

See Figure II-4A, *"Typ. Estate Architecture"*.

The rest of the single-family homes are made up of two (2) unit types. The first consists of lots that average approximately fifty-five feet (55') by one hundred

E.I.S. FIGURE II-4 A

TYP. ESTATE ARCHITECTURE

SCALE: N.T.S.

feet (100'). These units make up 5.50± acres of the development and contain an average lot size of 0.13± acres. The two (2) types are to be serviced by front loaded garages. The second unit type consists of lots that average approximately forty-five feet (45') by one hundred ten feet (110'). These units occupy 1.2± acres of the development and have an average lot size of 0.10± acres. These unit types are to be serviced by rear-loaded garages accessed from a rear alley.

See Figure II-4B, *"Typ. Small Lot Architecture"*.

Another residential unit type within the Proposed Action is town homes. Similar to the single-family units, the town homes will be serviced by front loaded garages with a small percentage of them being rear loaded with access from the proposed rear lanes. The town homes will occupy approximately 1.99± acres of the development and consist of an average lot size of 0.05± acres.

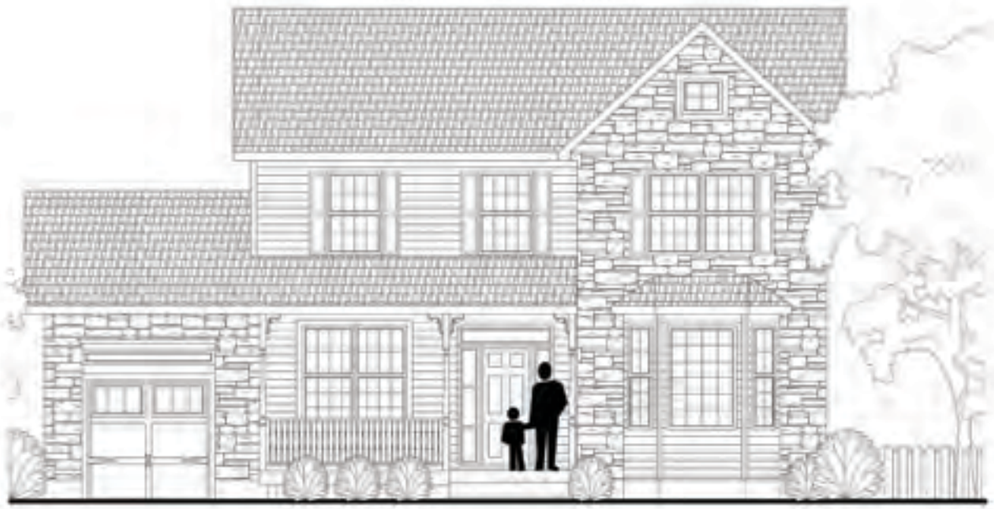
See Figure II-4C, *"Typ. Townhome Architecture"*.

The Proposed Action also proposes six (6), eighteen (18) unit multi-family condominium units. These units will be three (3) stories plus garage under parking and upwards of 50 feet in height. These structures will be the most predominant on the site. These units make up approximately 1.20± acres of development coverage and will be serviced by garage under-parking as well as surface parking.

See Figure II-4D, *"Typ. Condo Architecture*".

Additionally, the Proposed Action will also incorporate eight (8) mixed-use apartments. The apartments are split between two 5,000 sq. ft. buildings that are to be commercial storefront on the 1st floor and residential units on the second floor. The structures are ultimately to be serviced by surface parking.

The last structural component of the Proposed Action is commercial space. The commercial aspect of the design contains three (3) fully commercial structures



E.I.S. FIGURE II-4 B

TYP. SMALL LOT ARCHITECTURE

SCALE: N.T.S.

E.I.S. FIGURE II-4 C

TYP. TOWNHOME ARCHITECTURE

SCALE: N.T.S.

E.I.S. FIGURE 11-4 D

TYP. CONDO ARCHITECTURE

SCALE: N.T.S.

and two (2) mixed use structures that make up approximately 30,000± sq. ft. These building will be serviced by surface parking and can be divided up dependant of market demands and individual needs of potential end users.

The commercial component consisting of 30,000 sf. associated with the Project is proposed to address a variety of needs. The first would be to add ratable or beneficial tax revenue to the Town, with no additional impacts to the school system. A second benefit is to provide the opportunity for live/work experience and provide goods and services to the residents at a neighborhood level to future residents of the Project and existing residents within the vicinity of the Project Site. Providing mixed land use within the Hamlet ideally will limit the amount of vehicle trips and promote an increased sense of community. Most residents within the Town utilize facilities outside the Village and/or Town of Goshen for obtaining goods and services. Therefore, smaller neighborhood specific shops could boost the local economy and reduce local traffic.

The proposed commercial space may or may not be viable based upon the Proposed Actions' close proximity to the Village of Goshen where most or much market demand is being supplied. It could also boost Village commercial demand. In the event the commercial use is not marketable, the structures could be utilized as additional apartments and/or flats. This would increase the total amount of apartments and/or flats by twenty-four (24) units at a maximum.

See DEIS Chapter V, *"Alternatives"* for a more in depth discussion.

Each of the two (2) Land Use Districts associated with the Development requires a minimum of 50% of the gross acreage to be preserved in an acceptable form by the Town of Goshen. The current layout before the Planning Board consists of approximately 61.95± acres or 65% of the Proposed Site to remain as publicly accessible open space, consisting of a variety of amenities. Open space within the RU Zoning District is comprised of approximately 14.70± acres or 54% of the

gross area will be preserved. Approximately 8.20± acres will remain as publicly accessed, undeveloped and the remainder 6.50± acres will be preserved under private ownership with restricted easements within each of the estate lots. In the HR Zoning District, approximately 44.60± acres or 66% of the gross area will be preserved. Within the approximate 44.60± acres, a majority will be untouched by development, yet some will have minimal development through implementing stormwater basins, trails, park space, areas for bird watching, picnic areas and potential utilization of the on-site pond for ice skating purposes. Out of the total open space 1.07± acres will be reserved for easements that will contain on-site wells, emergency access and on-site a wastewater treatment plant.

The Proposed Action is to be serviced via a central water system that will be designed and implemented based upon applicable Town, County and/or State regulations. The water system will be supplied by two drilled bedrock wells. The preferred plan would pump the water supply up to a new 250,000 gallon water tank that would replace two (2) existing older tanks located within the existing Hambletonian Park subdivision. The existing tanks are owned and maintained by the Hambletonian Park Town Water District. Accompanying the central water system, the Proposed Action is to be serviced via a central sewage system that is to be designed and implemented based upon applicable Town, County, and State regulations. The preferred plan would pump the domestic sewage through a force main along Craigville Road. At a point connection would be made to the existing Village of Goshen sewer system, where effluent would be treated by their Wastewater Treatment Plant ("WWTP").

See DEIS Chapter III, Subsection 8, *"Infrastructure and Utilities"* for a more in depth discussion.

The Proposed Action is to utilize a variety of stormwater facilities for the treatment and detention of stormwater collected from the associated roadways and impervious surfaces. All of the facilities are subject to Town, County and State regulations for approval and will discharge waters with a quality at or above existing standards and a quantity at or below existing conditions.

See Chapter III, Subsection 7, "*Stormwater Management*" for a more in depth discussion.

Infrastructure, including roadways, water system, sewer system and stormwater management areas, of the Proposed Action are intended to be offered for dedication to the Town. This will be to ensure the health, safety and welfare of the residents, through proper installation, maintenance and upkeep. The preserved open space is also to be offered for dedication and/or subject to a Homeowners Association ("HOA") for maintenance and upkeep.

In regards to utility connections, including but not limited to electric, gas, cable, and telephone service, ample opportunities for the required services can be provided through a variety of alternatives, extensions of the public utilities will be needed for the proposed demand. Electric and gas service are existing and available along Craigville and Coleman Roads, telephone and cable services are also evident, and, should the public utilities have problem making connections and/or where to support the demand, a variety of outside suppliers and vendors are readily available within the local marketplace to supplement these services.

The development will inevitably cause change to the intensity of land use within the HR Zoning District. The development has been designed in conformity to the Hamlet Design Guidelines and TND standards. The concepts behind TND developments require close-knit compact development, ultimately making tree preservation impossible in the areas of development. The primary goal in the Hamlet Zoning District is to provide a variety of housing types; mixed-use pedestrian oriented development will preserve 50% of the District as open space. Based upon the underlying concepts for the development, a tree preservation plan was not completed; however, alternative preservation measures were incorporated in the design. In order to preserve a greater contiguous area of natural features, the Project Sponsor plans to utilize retaining walls to limit the amount of disturbance and clearing of vegetation. Additionally, natural landforms will be integrated with a portion of the new construction to enhance the underlying

concepts associated with a Traditional Neighborhood Development. If the Project Sponsor is permitted to utilize existing infrastructure within the surrounding area, the goals of the Town will be met through minimum disturbance to the existing onsite features. The residential units within the RU Land Use District, where the individual estate lots are proposed, will utilize building envelopes for selective clearing and preservation of existing vegetation maintaining the rural character along Coleman Road.

See Appendix A, *"Site Plan and Subdivision Drawings"*.

The clearing anticipated to be associated with the Proposed Action will be limited where feasible and supplemented with a mixture of evergreen and deciduous plant material. The landscape plan is to be completed and approved by the Planning Board prior to final approval. This will be to ensure any concerns are addressed satisfactorily.

Snow removal is intended to be accomplished by the Town, for the main roadways offered for dedication. Private driveways, sidewalks, parking lots, and rear alleys will be maintained via a combination of individual homeowners and/or private companies hired by them, the HOA, and/or commercial tenants.

Refuse produced by the future inhabitants of the Proposed Action will be picked up and disposed of at a licensed facility by private carting services. It will be up to the individual homeowners, HOA and/or commercial tenants to setup these services. Dumpster locations, if needed, will be located and detailed prior to final approval and after discussion with the Planning Board.

The Proposed Action is to be a phased project over a three (3) to four (4) year duration. This will cause a potential buildout year of 2011 or 2012 dependent upon market demand. Construction will start approximately six (6) to eight (8) months after final approval, with the commencement of phase one (1). The remainder of each phase will be driven upon market demand as previously

mentioned, and completed within a timely manner so as to limit the duration of disturbances.

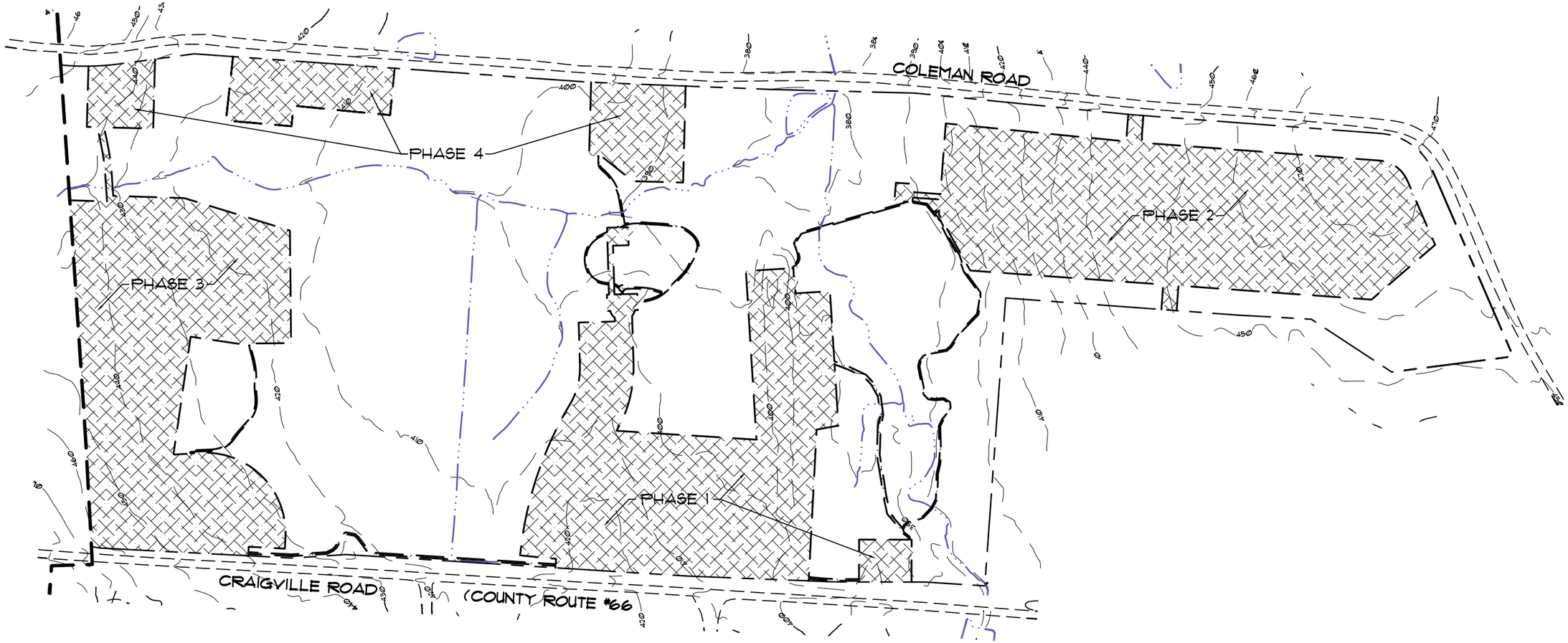
See DEIS Figure II-5, *"Phasing Plan"* and Chapter IV, Subsection 1, *"Anticipated Construction Impacts"*.

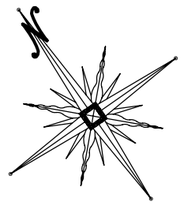
The Proposed Action at full buildout will provide the Town and its residents a variety of beneficial amenities. These benefits include, but are not limited to:

- Increased tax revenue.
- Satisfy the need for quality homes in a variety of unit types.
- Satisfy the need for affordable work force housing.
- Preservation of approximately 65% of the Proposed Site as open space.
- Safe pedestrian connections from the Village and Salesian Park through to Land of Goshen Park.
- A variety of trails, nature areas, pocket parks and additional recreational amenities throughout the development.
- Supplemental supply of water to the Hambletonian Park Water Districts.

The open space and recreational amenities are intended for dedication to the Town of Goshen, ultimately allowing the whole Town to benefit. Being open to the public ensures vital use of these areas and potential future improvements, i.e. ice skating rink. The pond located near Coleman Road could potentially be utilized for ice skating in winter months. Further investigation would have to be accomplished as to impacts from clearing, wetlands, etc., should the town intend to accept the liability. The Open Space and recreational amenities will revert back to private ownership should the town fail to accept the Offer of Dedication, ultimately causing the Town to lose any potential benefits.

The Project Sponsors' opinion is the substantial positive impacts of the Proposed Action far out weight any minimal environmental impacts associated with the development.



300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

PHASING PLAN LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT AREA

E.I.S. FIGURE 11-5

# PHASING PLAN

SCALE: 1 IN. = 300 FT.

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**2.3 Project Purpose and Need**

The Project Sponsor has declared intention to satisfy a continuing need for quality, well serviced "for sale" single family and affordable housing within the Town of Goshen by delivering 208 market priced and 21 affordably priced units along with 30,000± sq. ft. of commercial space that is compliant with guidelines established by the enacted Town of Goshen Zoning Code.

**2.4 Reviews, Permits, Approvals and Compliance Requirements**

The Proposed Action began on September 28, 2004 with submission of a Conservation Analysis. The Conservation Analysis presented to the Planning Board by the Project Engineer was reviewed and examined in the field by the Planning Board. Upon completion of the review, the Planning Board adopted a Resolution of Findings to approve the Conservation Analysis on November 18, 2004. The Planning Board declared its intent to be Lead Agency at their September 15, 2006 meeting. Furthermore, under SEQRA, the Proposed Action was determined a Type 1 action and issued a Positive Declaration on March 16, 2006. With the Positive Declaration, the Project Sponsor is required to prepare a DEIS for coordinated review and approval by a variety of agencies. The following table lists the required approvals, permits, or reviews along with the associated agency:

**Table 1**
**Primary Required Approvals**

| Approval/Permit/Review | Agency |
|---|---|
| **Town of Goshen** | |
| Subdivision Approval | Planning Board |
| Site Plan Approval | Planning Board |
| Special Use Permit | Planning Board |
| Formation of Town Sewer District | Town Board |
| Authorization of Formation of Public Transportation Corporation for Water | Town Board |
| Acceptance of Dedication of Central Sanitary Sewage System on behalf of Town | Town Board |

| | |
|---|---|
| Sewer District. | |
| Acceptance of Turnover agreement for Water Treatment Facilities | Town Board |
| Acceptance of offer to Dedication of Roadways and Other Improvements, Lands and Easements. | Town Board |
| Acceptance of Offer of Dedication of Open Space Land(s). | Town Board |
| Acceptance of Offer of Grant of Open Space. | Town Board |
| Formation of Town Stormwater Management District | Town Board |
| Formation of Town Lighting District | Town Board |
| Recommendation of Acceptance of Offer of Road Dedication by the Town Board | Town Highway |
| Acceptance of Offer of Road Dedication by the Town Board | Town Highway |
| **Village of Goshen** | |
| Approval of Contractual Agreement Accepting Sanitary Sewage Flow for Treatment at WWTP. | Village Board |
| **Orange County** | |
| Distribution Designs | Department of Health |
| Reality Subdivision | Department of Health |
| Section 239-l, m and n Referral | Department of Planning |
| Curb Cut Highway Work Permit | Department of Public Works |
| **New York State** | |
| Authorization for Incorporation of Homeowners' Association Public Transportation Corporation(s). | Department of State |
| Authorization of Filing of Offering Plan and, as applicable, Concurrence of CPS-7 | Attorney General's Office |
| Public Water Treatment Facility Design | Department of Health |
| Water Supply Application | Department of Environmental Conservation |
| Sewage Treatment Plant and Sewage Collection System Designs | Department of Environmental Conservation |
| SPDES Permit for Waste Water Discharge | Department of Environmental Conservation |
| SPDES coverage under General Permit #GP- | Department of Environmental Conservation |

| | |
|---|---|
| 02-01 for Stormwater Discharge from Construction Activities | |
| Water Quality Certification | Department of Environmental Conservation |
| **Federal Agencies** | |
| Nationwide or Individual Wetlands Permit | US Army Corps of Engineers |

The following table shows a list of agencies that have ministerial approval authority, advisory roles or expressed a desire to partake an interest in the Proposed Action:

**Table 2**
**Secondary Required Approvals**

| Ministerial Approval / Advisory Role | Agency |
|---|---|
| Building Permits | Town Building Department |
| Highway Access and Driveway Permits | Town Highway |
| Highway Work Permit(s) | Town Highway |
| Recommendation of Acceptance of Offer of Dedication by the Town Board | Town Highway |
| Advisory Role | York State Department of Parks, Recreation and Historic Preservation |
| Curb Cut Highway Work Permit | Orange County Department of Public Works |

The following descriptions briefly describe the reviews that must be conducted and the permits, approvals and compliance requirements that must be obtained by the Project Sponsor as outlined above. These reviews, permits, approvals and compliance requirements, as listed below by jurisdiction, would authorize the Proposed Action.

To the extent these permits, approvals and compliance requirements involve the consideration of application forms, fees and legal instruments submitted to the Planning Board and other agencies of jurisdiction.

## Town of Goshen Planning Board:

**SEQRA**.

In accordance with Article 8 of the Environmental Conservation Law and Implementing Regulations set forth in Title 6 Part 617 NYCRR, the Planning Board has assumed SEQRA Lead Agency status for coordinated environmental quality review of the Proposed Action. This review must be completed prior to approval or permitting of any aspect of the Proposed Action by the Planning Board or any other involved agency.

**Subdivision Plat Approval**

The overall subdivision layout, including the configuration and number of lots and the design of required subdivision improvements, is subject to review and approval by the Planning Board in accordance with the Town of Goshen Land Subdivision Regulations and related provisions of the Town's Zoning Law. The portion of the Proposed Site that is zoned HR has been reviewed by the Town's expert consultants for compliance to Traditional Neighborhood Development Design Guidelines.

No lot may be sold, or offered for sale, within the Proposed Action until the Final Plat for either the entire subdivision or any Planning Board authorized section thereof has been approved by resolution of the Planning Board, stamped and signed by the Planning Board Chairperson, and filed in the Orange County Clerk's Office.

**Special Use Permit**

Special Use Permit will be required from the Planning Board for any structure that may be located within the Town's Flood Plain ("FP") Overlay District in accordance with the terms of §97-25, *Floodplain and Ponding Area Overlay District (FP)* of the Town's Zoning Law and the requirements of the National Flood Insurance Program.

**Site Plan Approval**

In accordance with the terms of Town Zoning Code §97-29, *Scenic Road Corridor Overlay District (SR),* site plan approval will be required for the development within five hundred (500) feet of Craigville Road. This includes construction of residential structures, commercial buildings, grading of other Proposed Site alteration affecting more than 5,000 square feet of natural landscape.

## Town Board

**Formation of Town Sewer District**

Based upon the Project Sponsor's preference that a municipal sewer district be created, the Project Sponsor intends to submit a petition for the formation by the Town Board pursuant to Town Law of a separate Town sewer district encompassing the entirety of the Proposed Action.

**Acceptance of Offer of Dedication of Central Sanitary Sewer System, including related Dedication of Lands and Grant of Easements.**

The Project Sponsor will offer for dedication a Town Sewer District for purposes of long-term ownership and maintenance of the installed central sanitary sewer system, including associated lands and easements, inclusive of either the assignment of an Agreement executed by the Village of Goshen for the treatment of sanitary sewage flow at the Village WWTP or a constructed on-site WWTP.

**Formation of Town Water District**

Based upon the Project Sponsor's preference that a municipal water district be created, the Project Sponsor intends to submit a petition for the formation by the Town Board pursuant to Town Law of a separate Town Water District encompassing the benefited portion of the Proposed Action.

**Acceptance of Offer of Dedication of Central Water Supply System, including related Dedication of Lands and Grant of Easements.**

The Project Sponsor will offer for dedication a Town Water District for purposes of long-term ownership and maintenance of the installed central water supply system, including associated lands and easements.

**Acceptance of Offer of Dedication of Roadways and Related Improvements within the Subdivision, including Associated Dedication of Lands and/or Grant of Easements.**

Except as may be otherwise provided for above, pursuant to §277 of the Town Law and §177 of the Highway Law, the Project Sponsor will offer for dedication certain requirement subdivision improvements and associated lands, rights-of-way and easement areas within the Proposed Action once the improvements have been installed by the Project Sponsor in accordance with Town-approved plans, inspected by the Town Engineer and/or Highway Superintendent and confirmed as to their installation through "as-built" drawings.

**Dedication of Open Space Lands**

The Town Board will be requested to accept for recreation and/or open space purposes the Project Sponsor's Offer of Dedication of Open Space to the Town of Goshen.

**Formation of Town Drainage District**

The Town Board will either, on its own initiative or, upon petition of the Project Sponsor, form a Town Drainage District encompassing the benefited portion of the Proposed Site.

**Acceptance of Performance Guarantee for Well Monitoring Program**

The Project Sponsor intends to post a performance guarantee with the Town Board to ensure the continuation of the well monitoring program discussed within Chapter III, Subsection 6, *"Groundwater Resources"*, for a period of two years beyond full build-out of the Proposed Action.

**Alternate Authorization of the Creation of Public Transportation Corporation for Sanitary Sewage**

Should the petition for creation of a Town Sewer District not be approved by the Town Board, the Project Sponsor would alternatively petition the Town Board for authorization to create a Public Transportation Corporation for Sanitary Sewage to provide for long-term private, operation and maintenance of the central sewer system.

**Alternate Authorization of the Creation of Public Transportation Corporation for Water**

Should the petition for creation of a Town Water District not be approved by the Town Board, the Project Sponsor would alternatively petition the Town Board for authorization to create a Public Transportation Corporation for Water to provide for the long-term private ownership, operation and maintenance of the central water system.

**Town Highway Superintendent**

The role of the Town Highway Superintendent with respect to the Proposed Action involves consideration of any improvements that may be proposed to a Town highway, the authorization of access to existing Town highways, and recommendation to the Town Board as to any proposed offer for dedication of roadways and associated land and/or improvements.

**Highway Access and Driveway Permits**

Authorization from the Town Highway Superintendent for the location and design of the individual private driveway and proposed cul-de-sac accessing the residential structures from Coleman Road.

**Highway Work Permits**

Highway Work Permits will be required from the Town Highway Superintendent to undertake any work within Town highway rights-of-way that may be associated with other subdivision improvements, e.g., the connection to the Village of Goshen sanitary sewer main.

**Acceptance of Land Dedication, Easements and Improvements**

A recommendation is also required from the Town Highway Superintendent as to whether the offer of dedication of subdivision improvements that will be placed within his jurisdiction should be accepted by the Town Board.

## Other Agencies

**Village of Goshen, Village Board**

Approval will be required by the Village Board of a contractual agreement whereby sanitary sewage flow from the Proposed Action is accepted for treatment at the Village of Goshen WWTP, whether such agreement ultimately exists with a Town sewer district, as proposed by the Project Sponsor, or with an alternate public transportation corporation.

Upon such approval, related consents and permits will be required from responsible Village officials, including the Sewer Commissioner and the Department of Public Works, for connection to existing Village sewer main including work within Village right-of-way or other easement areas.

## Orange County

**Orange County Health Department**

The County Health Department, as agent for the New York State Health Department, exercises Realty Subdivision Plat Approval for “realty subdivisions” and has additional plan approval authority with respect to the creation, extension or expansion of central water supply facilities and opportunity to review and advise NYSDEC as to its “concurrence” with respect to the creation, extension or expansion of central sanitary sewage facilities.

**Orange County Department of Planning**

Referral by the Town Planning Board of the Proposed Action to the Orange County Planning Department for review and issuance of an advisory opinion must be made as required under §239 l, m and n of the General Municipal Law.

**Orange County Department of Public Works**

Authorization and other participation would be required from the Orange County Department of Public Works for, and in the undertaking of, certain roadway intersection improvements recommended in the Traffic Impact Study included within this DEIS. The Proposed Action will require the issuance of a highway Permit for the proposed access roads off of Craigville Road (County Highway Route 66) and pedestrian walks with the County right-of-way, including a potential inter-municipal agreement with the Town for maintenance and upkeep.

## New York State

**New York State Department of Environmental Conservation**

NYSDEC permits are required for aspects of the Proposed Action involving water supply, sanitary sewage facilities and related effluent discharge, if on-site WWTP alternate is implemented, stormwater discharges and protection of wetlands and stream courses.

**NYSDEC Water Taking Permit**

A Water Taking Permit, or Potable Water Supply Application, is required from NYSDEC under Article 17, Title 17, of the Environmental Conservation Law to authorize from an "approved source" the intended taking of groundwater commensurate with the demonstrated combined safe yield of Water Supply Wells. The wells will provide adequate volume and quality of water to meet the domestic potable demand of the residential and commercial portion of the Proposed Action.

**NYSDEC Approval of Sanitary Sewage System Plans**

Design Approval for all components of the proposed central sanitary sewage system, including WWTP design and any sewer main installation and/or extension, must be secured from NYSDEC under Article 17, Title 15, of the Environmental Conservation Law.

Should sewage flow be directed to an on-site WWTP for treatment instead of the Village of Goshen WWTP, a State Pollutant Discharge Elimination System

Permit ("SPDES Permit") will be required for the intended sewage effluent discharge to the unnamed stream pursuant to intermittent stream effluent limitations.

**Stormwater Management**

The Project Sponsor must comply with NYSDEC storm water management regulations, 40 CFR 122, pertinent to construction related land disturbance activities in excess of one (1) acre by one of the following means:

- Demonstrating compliance with the New York State General Permit for Stormwater Discharges Associated with Construction Activity under SPDES General Permit #GP-02-01, including preparation of a Stormwater Pollution Prevention Plan, as presented at Chapter III, Subsection 3.7, *"Stormwater Management"*, and subsequently filing with NYSDEC a Storm Water Notice of Intent ("NOI").
- Securing an Individual Storm Water SPDES Permit.

**Water Quality Certification**

Both related to the above-cited NYSDEC Permits and any required federal ACOE wetlands permit will be necessary to secure a NYSDEC 401 Water Quality Certification.

**New York State Department of Health**
**Bureau of Public Water Supply Protection**

Design approval of Plans for Water Supply Improvements and for Water Quality and Treatment must be secured from the New York State Department of Health Bureau of Public Water Supply Protection.

**New York State Office of Parks, Recreation and Historic Preservation**
**OPRHP Field Services Bureau**

Review will be required under §14.09 of the New York State Parks, Recreation and Historic Preservation Law and/or pursuant to related interagency agreements between OPRHP and other agencies, including NYSDEC.

In recognition of this requirement, the Project Sponsor has already undertaken during the early stages of project planning the cultural resource investigations discussed within Chapter III, Subsection 14 *"Cultural Resources"*.

**New York State Comptroller's Office**
**Governor Alfred E. Smith State Office Building**

The financing arrangements for the proposed central water supply and sanitary sewage systems, including projection of unit debt charges and associated operation and maintenance costs, may require approval from the Office of the State Comptroller under either preferred Town special district or alternate public transportation corporation scenarios.

**New York State Department of State**
**Secretary of State**

Authorization for incorporation of the intended Proposed Action Homeowners Association ("HOA") and creation of the above-cited public transportation corporations, as may be pertinent, must be secured from the Office of the Secretary of State.

**New York State Attorney General's Office/Department of Law**
**Real Estate Financing Bureau**

Acting under the NYS General Business Law, §385-e *et seq*., and Part 22 of 13 NYCRR, the New York State Attorney General's Office must also grant approval of the incorporation of the HOA and accept filing of related Offering Plan documents, if required, which explicitly define the rights and responsibilities, including the long-term financial obligations, of the members of the HOA with respect to their common interests in real estate.

**New York State Department of Agriculture and Markets**
**Division of Agricultural Protection and Development Services**

Compliance with the provisions of the Agriculture and Markets Law will require satisfaction of certain notice and disclosure requirements, most particularly as necessarily set forth on the final subdivision plat.

**New York State Department of Transportation**
**Region 8 Office**

Authorization and other participation would be required from the New York State Department of Transportation for, and in the undertaking of, certain roadway intersection improvements recommended in the Traffic Impact Study associated with this DEIS.

## Federal

**Department of the Army**
**New York District, Corps of Engineers (ACOE)**

Compliance with federal wetland regulations administered by the Army Corps of Engineers pursuant to §404 of the Clean Waters Act will be required for any fill activity within ACOE-regulated wetlands. It is understood that such compliance would involve Application for an Individual Permit unless the criteria for Nationwide Permit 12 (Utilities), Nationwide Permit 14 (Roadways) Nationwide Permit 29 (Residential Developments), Nationwide Permit 39 (Commercial Developments), and or Nationwide Permit 42 (Recreational Facilities), as may be applicable, can be met, in which event only notification is required.

Pursuant to the terms of the Town of Goshen Zoning Code, certification of the federal wetland boundary delineation undertaken by the Project Wetlands Delineator retained by the Project Sponsor will also be required.

### 2.5 Affordable Housing

Affordable Housing will be provided in accordance with §97-15(M) of the Town of Goshen Zoning Code. The Code requires all Hamlet projects to provide 10% of the allowed unit count as permitted under §97-15(J) to be affordable. The affordable units are not counted towards the maximum allowable density. §97-24 of the Town of Goshen Zoning Code regulates distribution of units, size, eligibility and pricing of affordable units.

The intentions of the Zoning Code are to provide beneficial work force housing obtainable by the critical work force that is the backbone of a successful

community. The affordable housing associated with the Proposed Action is to be implemented in the following manner:

- Single Family, 5
- Townhomes, 4
- Multi-family Condominiums, 11
- Mixed Use Apartments, 1

The units will be intermixed throughout the Proposed Action allowing integration. The actual location and placement of such units are to be evenly intermixed with input from the Planning Board prior to final approval. Affordable units are to be of the same style and caliper as the rest of the development, in regards to the outside. The inner workings may be substantially different, in terms of amenities so as to make them economically viable.

# III. EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

## 3.1 LAND USE AND ZONING

### 3.1.1 Existing Conditions

The entirety of the two (2) tax parcels, along with any development within the Town of Goshen is subject to the variety of laws, codes and regulations set forth by the enacted Town Zoning Code and Subdivision Regulations.

The combined tax parcels of the Proposed Action make up approximately 96± acres that consist mostly of forest, intermixed with successional growth, fields and ACOE wetlands, with no existing development. The zoning designations of the Project Site are Hamlet Residential ("HR") and Rural Residential ("RU"). The goals of these Districts are to ensure the protection of certain tracts of land and cause development to occur in ways and areas that are within conformity to the goals and objectives laid out within the Town's adopted Comprehensive Plan. Within the Town of Goshen Zoning Code §97-15, *HM and HR Districts for Traditional Neighborhood Development (TND),* the land use is intended to implement the concepts of the TND which entail the development of complete mixed-use communities. TND's are to include single-family homes, apartments, work places, shops, restaurants and recreational facilities. The goal is to provide and promote pedestrian friendly environments where residents and those who work in the development can walk freely between land uses, limiting the reliance on the automobile. By right, the permitted use consists of mixed-use community promoting the following:

- Pedestrian-oriented environments
- Publicly accessed open space
- A variety of housing types
- Smaller lot sizes with minimal setbacks that will limit potential property tax exposure provide a financially sustainable residence.
- 10% of the development as affordable housing
- Public Water and sewer

- Small lots and denser development pattern will limit overall site disturbance.
- Sustainable community through preservation of natural site resources, reducing reliance on motor vehicles, providing on-site work places and providing on-site residential amenities.
- Development pattern reduces potential for "Urban Sprawl".

Based upon the Town of Goshen Zoning Code Article IV, *Development Options in the Rural Residential (RU) District*, there are three basic development alternatives. By right, the permitted uses are one and two family residential dwellings and may consist of one of the following design layouts:

- Small-Scale Development: Creation of no more than four (4) new residential lots from a parent lot, covering no more than 25% of the area of the subject parcel continuing with four (4) more over the next eight year period, etc.
- Open Space Development: Clustering of development within those portions of the Proposed Site suitable, creating flexibility and a variety of lot sizes, while leaving substantial portions as open space.
- Conservation Density Developments: Low-density subdivisions with average lot size of twenty (20) or more acres, while preserving open space through undeveloped land.

The associated bulk requirements that pertain to these development options vary allowing greater flexibility and preservation of natural attributes that may be evident on-site. The minimum requirements are determined dependent upon the chosen development option, the Zoning Code, as well as a case-by-case basis determined by the Planning Board.

See DEIS Figures III-1 *"Aerial Map"* and III-2, *"Zoning Map"*.

The Proposed Site is subject to §97-26, *Stream Corridor and Reservoir Watershed Overlay District*, contained within the Zoning Code. The totality of the unnamed stream, running southwest to northeast, bisecting the Proposed Site is subject to these regulations. The intent of this section is to protect water


N

500 0 250 500

GRAPHIC SCALE:
1 IN. = 500 FT.

AERIAL MAP LEGEND:

EXISTING MUNICIPAL DIVIDE
EXISTING PROPERTY LINE

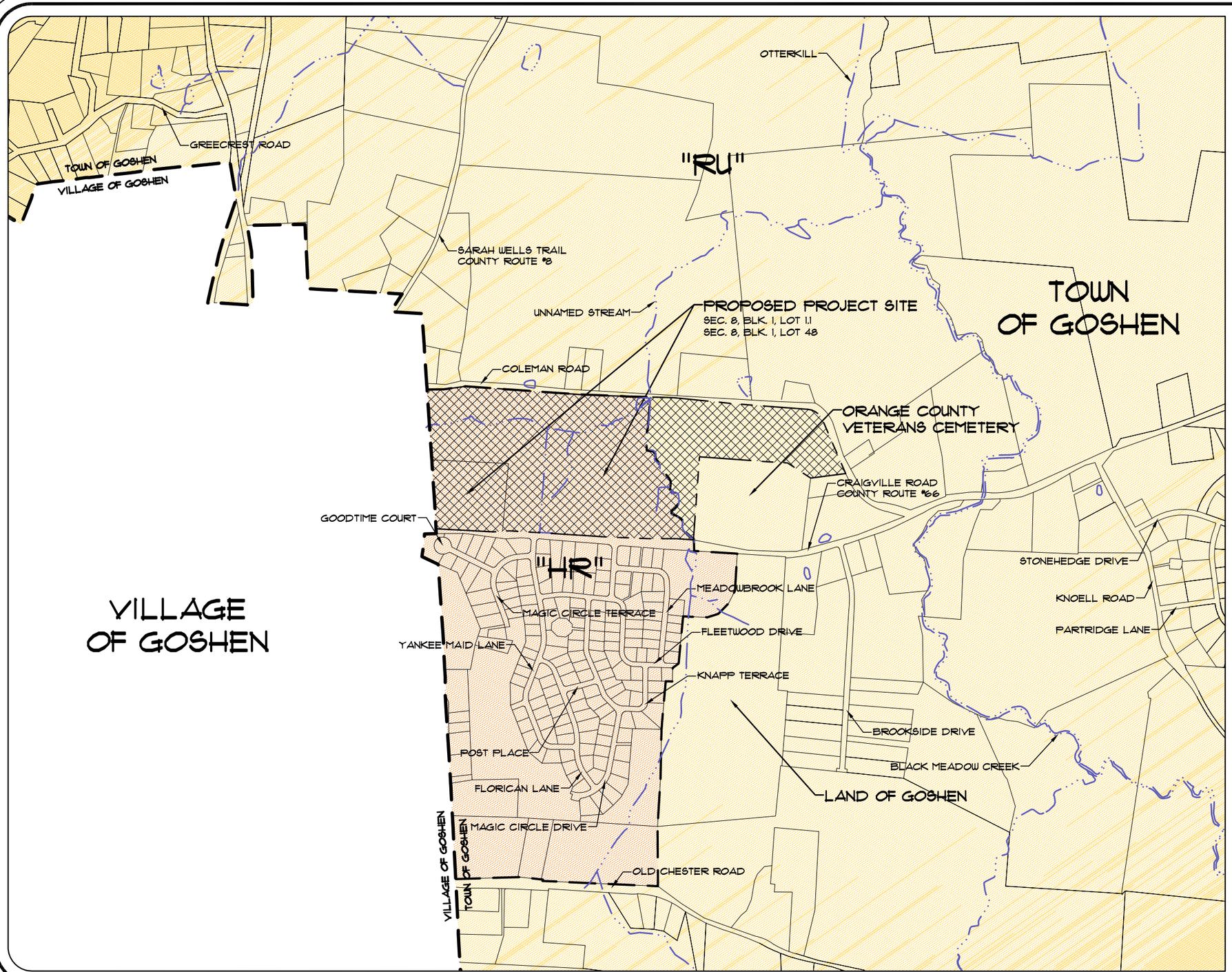
E.I.S. FIGURE III-1

# AERIAL MAP

SCALE: 1 IN. = 500 FT.

ESPOSITO & ASSOCIATES
262 GREENWICH AVENUE, SUITE B
GOSHEN NY, 10924
845.294.0558 Fax 845.294.0580

# VILLAGE OF GOSHEN




N

1000 0 500 1000

GRAPHIC SCALE:
1 IN. = 1000 FT.

LOCATION MAP LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING TAX PARCELS
- EXISTING WATER COURSE
- EXISTING ZONING BOUNDRY
- PROPOSED PROJECT SITE
- RURAL (RU)
- HAMLET RESIDENTIAL (HR)

E.I.S. FIGURE III-2

## ZONING MAP

SCALE: 1 IN. = 1000 FT.


ESPOSITO & ASSOCIATES
262 GREENWICH AVENUE, SUITE B
GOSHEN NY, 10924
845.294.0558 Fax 845.294.0580

quality, scenic resources, community appearance and flooding risk associated with the highlighted corridors.

Additionally, the Proposed Site is subject to §97-27, *Aquifer Overlay Districts*, contained within the Zoning Code. The Proposed Site is within the AQ-6 Sub-district. Based upon a Town-wide hydrological assessment, two (2) sub-districts were created to ensure the availability of groundwater resources, since groundwater supply and quality are limiting factors in the development of lands. The regulations are set forth in an attempt to determine the upper limit of density or intensity of development.

Finally, the Proposed Site is subject to §97-29, *Scenic Road Overlay District*, contained within the Zoning Code. The Proposed Site's entire road frontage along Craigville Road is subject to these regulations. The intent of this section is to regulate land uses and to protect the Town's scenic beauty and rural character, regulating the land use within these corridors through limiting the clearing and degradation of lands along scenic routes

See DEIS Figure III-3, *"Overlay Districts"*.

The Proposed Action along with the lands within, at a minimum, within one-half (1/2) mile radius of its boundary is subject to the aforementioned Land Use and Overlay Districts. The existing land uses are consistent with the Town's Zoning Code and are comprised mostly of residential homes and agriculture operations, with minimal commercial applications on the outskirts of the half-mile radius to the west within the Village of Goshen and the NYS Route 17 Corridor. The existing residential homes range from small-scale lots to suburban residential subdivisions. These are intermixed with large-scale estate lots and large parcels that are vacant and/or utilized for agricultural operations, comprised of, but not limited to, crop production, and horse farms. Across Craigville Road is Hambletonian Park, a 159 lot suburban residential development with homes on ¼ - ½ acre lots. The Project Site adjoins the Village of Goshen to the northwest,

TOWN OF GOSHEN
VILLAGE OF GOSHEN

AQ-6

AQ-3

SARAH WELLS TRAIL
COUNTY ROUTE #8

UNNAMED STREAM

PROPOSED PROJECT SITE
SEC. 8, BLK. 1, LOT 1.1
SEC. 8, BLK. 1, LOT 48

SALESIAN PARK

ORANGE COUNTY
VETERANS CEMETERY

CRAIGVILLE ROAD
COUNTY ROUTE #66

ORANGE
COUNTY
GOVERNMENT
CENTER

OTTERKILL

HISTORIC TRACK

LAND OF GOSHEN

BLACK MEADOW CREEK

RIO GRANDE

OLD CHESTER ROAD

HERITAGE TRAIL

AQ-3

AQ-6

N

1000 0 500 1000

GRAPHIC SCALE:
1 IN. = 1000 FT.

## OVERLAY DISTRICTS LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING WATER COURSE
- EXISTING PARK / RECREATIONAL
- AQUIFER DIVIDE
- PROPOSED PROJECT SITE
- SCENIC ROAD CORRIDOR
- STREAM & RESERVOIR

E.I.S. FIGURE III-3

# OVERLAY DISTRICTS

SCALE: 1 IN. = 1000 FT.

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GOSHEN NY, 10924
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within a close proximity to two (2) existing public parks. These existing land uses are consistent with the goals intended for development within the HR Zoning District and will inevitably complement any development of the Project Site.

### 3.1.2 Future Without the Proposed Project

The future land use and zoning without the Proposed Action would remain unchanged. This would stay true unless the Town of Goshen as a municipality would go into a moratorium and/or revise and update its enacted zoning code, establishing different land uses, development intensities or land restrictions.

### 3.1.3 Potential Impacts

The Proposed Action is in conformity with the Town and County plans for development of the area. The plans must be in conjunction with the Zoning Code and is subject to Site Plan and Subdivision approval from the Planning Board. It is anticipated by the Project Sponsor that the Proposed Action will have insignificant impacts to the existing contiguous land uses. As noted, the existing land uses in the vicinity of the Proposed Site are most residential homes and agricultural operations. Given the existing mix of land uses, the Proposed Action is compatible with its surroundings, specifically the Village of Goshen and Hambletonian Park. As part of the Village fringe the Project Site's zoning is consistent with the surrounding land uses. The Proposed Action will serve as a link between the Village of Goshen, Hambletonian Park, Salesian Park, Land of Goshen Park, Heritage Estates, Brookside Drive and the Heritage Trail, ultimately providing a safe continuous pedestrian friendly environment. Based upon correspondence from Joel Russell, the Town's TND Planning Expert, dated February 8, 2006, the Proposed Action conforms to the current Town of Goshen Zoning Code and the design and layout "meets the TND design objectives given the constraints of this particular site".

See DEIS Exhibit 10.6, *"Email from Joel Russell"*.

The Town of Goshen *"Comprehensive Plan"*, adopted June 2004, establishes the existing development structure of the Town and provides goals and guidelines to ensure controlled and quality growth within the municipality. The following are goals of the Town that are utilized in the development of the Proposed Action:

- **"Goal No.1 – Control inefficiencies created by suburban sprawl."** The development pattern of the Proposed Action is focused around a small mixed-use hub utilizing tradition neighborhood design principals. The Proposed Action concentrates development whereby limiting pressures on existing agricultural land and open space while providing connectivity of movement.
- **"Goal No. 2 – provide a range of housing alternatives that will meet the housing needs of a range of socioeconomic groups."** The Proposed Action anticipates providing a variety of housing types to meet the varying market needs including estate homes, single family detached dwellings, town homes, condominiums and rental apartments. **"Goal No. 3 – Develop a strong and balanced economic base." The Town's Master Plan encourages neighborhood business and mi**xed-hamlet areas. The Proposed Action implements mixed use, including 30,000± sq. ft. of commercial space.
- **"Goal No. 4 – Protect farmland, open space and environmental resources."** The Town's Comprehensive P**lan "encourages the use of traditional neighborhood and ope**n space design principles to create public and private open space within residential and commercial subdivisions". The Proposed Action utilizes both traditional neighborhood and open space design principles.
- **"Goal No. 5 – Protect and enhance the agricultural activities and character of the Town."** Provide a variety of housing types in a clustered high-density fashion in order to preserve outlying agricultural practices and concentrate densities near adjoining established Town and/or Village centers.
- **"Goal No. 6 – Ensure a development pattern that will provide for sustainable water use."** The proposed open space and on-site ACOE wetlands will be preserved in perpetuity to ensure areas for groundwater recharge and quality.

- **"Goal No. 7 – Encourage development that will help create an efficient transportation network."** The Town's Master Plan encourages a "modal mixed use pattern of development that inhibits sprawl and encourages pedestrian traffic". The Project Sponsor is proposing a network of trails to include connecting Salesian Park, Veterans Cemetery, Hambletonian Park and Land of Goshen Park. In addition, the plan consists of a mixed-use plan, enabling the potential for less of dependability upon automobiles.

The County of Orange has put together a document, *Orange County Comprehensive Plan*, adopted October 2001, that provides goals and guidelines for County Wide Development. The Proposed Action has conformity to this document through the following:

- **"Conserve the County's natural land resources in a sustainable, linked combination of parks, open space, agricultural lands and waterfront."** The County encourages the development of active and passive recreational facilities enhancing the quality of life. The concepts of TND incorporated into the Proposed Action provides for both types of recreation along with linking existing park space.
- "**Encourage the development of housing of all types that serve different age and income segments of the population".** As previously mentioned, the Proposed Action is intending to provide a variety of housing alternatives and choices including affordable housing enabling obtainable housing for different age and income levels.
- **"Enhance urban and village centers as compact economic centers which provide a sense of place and build on the unique strengths of each center."** Cluster high density and intensity developments adjacent to existing centers, i.e., Village of Goshen, as an alternative to standard suburban sprawl subdivisions which lack green space, utilize excessive roadways, and unconnected streets with destruction of farmland and open space. The Proposed Action in conjunction with existing and other proposed projects

will enhance the Village of Goshen and provide a wide range of connectivity.

Finally, the Proposed Action is in compliance with the *Orange County Open Space Plan*, adopted July 2004. The Plan establishes major resource areas for consideration of open space, particularly water resources, recreation and areas of biodiversity. The Proposed Action anticipates the preservation of approximately 61.95± acres or 65% of open space, which will aid in creating opportunities for all three (3) aspects. The permanently protected open space ensures the preservation of substantial buffers around existing watercourses and ACOE wetland areas creating a biodiversity mixture of upland and lowland vegetation and wildlife. The current plans depict future trail systems that can be utilized by the area's residents.

Through the Town's Comprehensive Planning process, the density alternatives were applied to the Proposed Site due to its close proximity to the Village of Goshen and existing infrastructure. It allows for connection to in-place infrastructure, encourages walkability, preserve large amounts of open space while further providing connections of existing open/park space. The potential density further allows for the ability to limit the amounts of infrastructure, which in turn aids in limiting the degradation of the land, impacts from urban sprawl and cutting future maintenance cost to the Municipality and its taxpayers.

The Zoning Code §97-20, *Standards for Open Space Development* was referenced and used to establish the allowable units ("Density") for the RU portion of the Proposed Action. It was additionally utilized to establish the potential density allowable under the HR Zone, should for one reason or another, revert to its underlying zoning of RU. The allowable density was configured through the inventory and analysis of the Proposed Site combined to produce a Conservation Analysis, this included slopes in excess of 25%, wetland areas, watercourses, floodplains and on-site cemeteries inventoried as primary constraints. Their totals

are subtracted from the gross acreage to establish the net acreage or building acreage then multiplied by an associated aquifer multiplier to establish the base density. The base density calculations for the Proposed Action are as follows:

- *AQ-6 within RU Zone: 26.74 ac. total – 4.72± ac. constrained = 21.75± ac. buildable 21.75± acres X 0.33 aquifer multiplier – 7± units*
- *AQ-6 within HR Zone: 68.98± ac. total – 36.62± ac. constrained = 32.36± ac. buildable 32.36± ac. X 0.33 aquifer divide – 11± units*

These calculations produce a base density of 7 and 11 allowable units, respectively. This density is subject to hydrological analysis and well testing of the Proposed Site since the maximum allowable density is established by §97-27 *Aquifer Overlay Districts* is lower. The aquifer density is the result of the gross acreage divided by the associated acres per unit. The aquifer density for the Proposed Action is as follows:

- *AQ-6 within RU Zone: 26.74± ac. total/6 ac. per unit = 4± units*
- *AQ-6 within HR Zone: 68.98± ac. total/6 ac. per unit = 12± units*

These calculations produce an aquifer density of 4 and 12 units respectively. The Project Sponsor has conducted hydrological testing, resulting in an estimated ground water supply sufficient enough to support the 7 and 11 allowable units and the Proposed TND. Central water and sewer are a requirement to implementing the TND.

See DEIS Chapter III, Subsection 5, *"Geology, Topography and Soils"*, Subsection 6, *"Ground and Surface Water Resources"* for a more in depth discussion.

The Zoning Code §97-15, *HM and HR Districts for Traditional Neighborhood Development TND,* was referenced and utilized to establish the density within the HR zone. The maximum allowable density is three (3) units to the acre, which is not an entitlement. This is to be achieved through approval from the Planning Board based upon satisfactory compliance with applicable requirements. The maximum allowable density is calculated as:

- *HR Zone: 68.98± ac. X 3 units per acre = 207± units*

This calculation establishes 207 units along with what is allowable in the RU portion of the Proposed Site, 7 units. The potential density for the Proposed Site is 214 units.

The base density for the HR Land Use District is 207 units. This is the upper threshold that the Project Site can potentially support based upon the zoning code. The HR District applies fractional multipliers to multi-family dwelling units depending upon the proposed bedroom count. Fewer bedrooms per unit will provide for a lower fractional density, in turn allowing the total number of units to increase. In accordance with §97-15K of the Zoning Code, the proposed unit types are broken down into actual and fractional densities within the following table:

**Table 3**
**Density Breakdown Calculations for the**
**HR Land Use District**

| Unit Type | Actual Density | Fractional Multiplier | Fractional Density |
|---|---|---|---|
| Estate Lots<br>4 bedroom | 5 | N/A | 5 |
| Premium Cluster<br>4 bedroom | 41 | N/A | 41 |
| Cluster<br>4 bedroom | 12 | N/A | 12 |
| Town House<br>3 bedroom | 44 | 1 | 44 |
| Condominium<br>2 bedroom | 108 | .75 | 81 |
| Mixed Use Apt<br>2 bedroom | 8 | .75 | 6 |
| **Total** | **218** | | **189** |

The Total number of dwelling units in multi-family dwelling may not exceed the total density allowable under §97-15K, which calculates out to 207 units. Based

upon the fractional density calculation, the current plans before the Board are proposing 189 units. This is approximately 18 units less than what the Project Sponsor is potentially entitled.

Bonus densities, given at the discretion of the Planning Board, are an entitlement and not guaranteed. The Project Sponsor is potentially entitled to these density bonuses according to §97-20(A)(3)(a) and (d) of the Zoning Code, only applicable to the RU Zoning District for open space developments. §97-20(A)(3)(a) provides Applicants up to 50% bonus if public access to preserved lands. The Project includes trails in the RU preserved open space promoting public access. Applying a 30% bonus to the base density would permit 2 additional units. The Proposed Action also utilizes §97-20(a)(3)(d). This section provides an additional 10% density increase for each 5% of preserved open space above the required 50%. The plan indicates 61.95± acres or 65% of the Zoning District as preserved open space. This is 15% above the required 50% allowing for a potential of 30% density bonus:

- *7 units X 0.30 = 2 bonus units*

The bonus units would bring the total density to 11± units in the RU District. The Project Sponsor is only asking for an additional 4 bonus density units in the RU Zoning District.

As part of the requirement for TND, affordable housing is an integral aspect of its concept. The general intentions are to provide beneficial workforce housing within the Town. These are not subsidized; the affordable housing is intended for the area's critical workforce. Affordable housing is to be implemented in coherence to §97-15(M) of the Zoning Code. This will provide 10% of the allowable unit count as permitted under §97-15(J) to be affordable. The affordable units are not to be counted towards the maximum density. Section 97-24 of the Zoning Code regulates distribution of units, size, eligibility and pricing of such units. The affordable housing associated with the Proposed Action, based

upon an anticipated 21 units, within the HR Zoning District is to supply the following breakdown:

- Single Family, 5
- Townhomes, 4
- Multi-Family Condominiums, 11
- Mixed-Use Apartments, 1

The units will be intermixed throughout the development allowing integration. The actual location and placement of such units are to be evenly intermixed with input from the Planning Board prior to final approval. Additionally, these units are to be of the same style and caliper as of the rest of the development in regards to the outside. The inner workings may be substantially different in terms of amenities so as to make them economically viable.

#### 3.1.4 Mitigation Measures

In attempts to mitigate potential impacts from the Proposed Action, the following practices will be used:

- Strict adherence to the goals and objectives of the Town and County's Comprehensive Plan as well as open space.
- Strict adherence to the enacted Town of Goshen Zoning Code.

The following are unavoidable adverse environmental impacts that are unable to be avoided upon land use and zoning due to the Proposed Action:

- Conversion of approximately 34± acres of the approximate 96± acre Proposed Site from vacant rural land to developed portion of the Proposed Action.

## 3.2 VISUAL CHARACTER

### 3.2.1 Existing Conditions

The Proposed Site is completely under vegetative cover and only allows visual access from limited vantage points along the publicly accessed roadways. The major visual access into the Proposed Site is from the Oakwood Drive entrance to the existing Hambletonian Park subdivision. The view is over scrub/shrub areas

that are surrounded by upland forest. Further up Craigville Road/County Route 66 there are some sporadic views into the Proposed Site across wetland meadow areas, again surrounded by a mixture of wetland and upland forest. Coleman Road contains minimal sporadic visual intrusions into the Proposed Site, similarly across wetland forest areas. The majority of the Proposed Site contains woodlands right up to the property line and in some cases beyond. With this being the case, it is often difficult to obtain views much past the property's boundary.

Due to the intensity of vegetation along with distance from the Proposed Site, any potential views of the Proposed Site from Land of Goshen Park are next to impossible. The vegetation also plays a big role in views from the Veteran's Cemetery. A vegetative buffer exists on the grounds of the Cemetery again creating next to impossible views into the Proposed Site. Finally, Salesian Park on the northwest edge provides limited, if any, views into the Proposed Site. This is again contributed to the intensity of vegetation found on-site as well as off-site.

### 3.2.2 Future Without the Proposed Project

The future of the Proposed Site in terms of visual character would remain insignificant. The natural processes would continue as they do now creating minimal change from year to year.

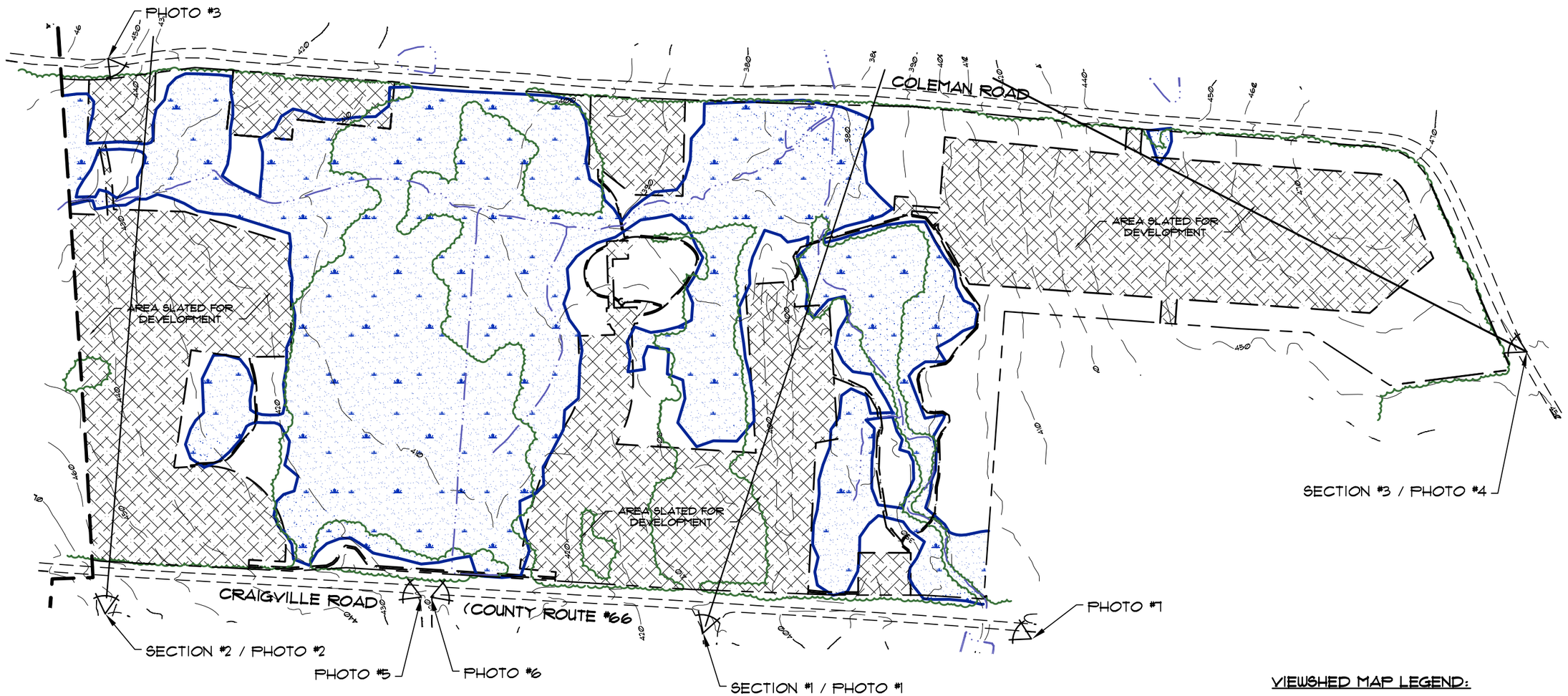
### 3.2.3 Potential Impacts

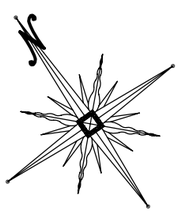
There are two (2) major views into the Proposed Action that will have the most significant visual impact. The first is from the Oakwood entrance to the existing Hambletonian Park subdivision. From this vantage point and approximately 500± feet to the northwest and 300± feet to the southeast, substantial clearing will be done upwards of 400± to 600± feet into the Proposed Site. The Project Sponsor has concluded views of the bustling commercial center of the Proposed Action will be limited from approaching cars on either side, due to the density of vegetation expected to remain undisturbed. Ultimately, the views from the

entrances of Hambletonian Park as the residents exit will be consistent with those within the Central Business District of the Village of Goshen. The view will include seeing two (2) story commercial buildings along Craigville Road back dropped with fifty foot (50') tall condominium buildings, smaller single family homes surrounded by natural and developed open space. The impact will be most substantial from potential views that are right near the development area. The next significant impact is from the Village/Town of Goshen municipal line to approximately 500± feet to the southeast. Again substantial clearing will take place upwards of 250± to 950± feet into the Proposed Site. Similarly to the previous view, visual impact will be insignificant from a distance; potential viewers near the development area will have the biggest impact. The remainder of the Proposed Action along Coleman Road will have limited visual impact on the surrounding areas. The larger estate homes can limit the amount of clearing to take place, providing buffers to the surrounding areas and is consistent with the character already established along the rural road.

The development of the Proposed Action will take the visual impact into consideration. The proposed structures will use architectural styles, color and material that are in conjunction with the general character of the surrounding area, as well as blending in with the natural environment. The lighting being considered will be shielded, utilizing night friendly features, where needed and the use of styles evident with the character of the area. Finally, the use of structures and plant material will be implemented to further maximize potential screening of the Proposed Action. The plant material to be selected for the proposed landscape plan will supplement the native vegetation to remain, enhancing to the maximum extent practicable, buffers around the Proposed Action. It will also help enhance the overall visual appeal associated with the change and intensity of land use.

See Figures III-4, *"Viewshed Map"*, III-5, *"Viewshed #1"*, III-6, *"Viewshed #2"*, III-7, *"Viewshed #3"*, and III-8, *"Site Views"*.




300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

VIEWSHED MAP LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- EXISTING TREELINE
- PROPOSED DEVELOPMENT AREA

E.I.S. FIGURE III-4

# VIEWSHED MAP

SCALE: 1 IN. = 300 FT.

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CROSS - SECTION #1 PRE-DEVELOPMENT


CROSS - SECTION #1 POST-DEVELOPMENT


EXISTING PHOTO #1

VIEWSHED # 1:

- THE ABOVE SECTIONS SHOWS THE RELATIONSHIP OF THE EXISTING PRE-CONSTRUCTION CONDITIONS (SECTION #1) WITH THE PROPOSED POST-CONSTRUCTION CONDITIONS (SECTION #2)
- THE PHOTO TO THE LEFT IS A PANORAMIC VIEW OF THE EXISTING PRE-CONSTRUCTION CONDITIONS FROM THE OAKWOOD DRIVE ENTRANCE TO HAMBELTONIAN PARK.

E.I.S. FIGURE III-5

VIEWSHED # 1

SCALE: 1 IN. = 120 FT.

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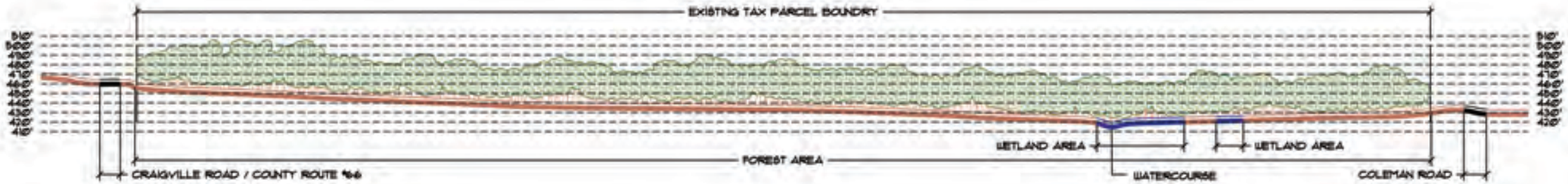
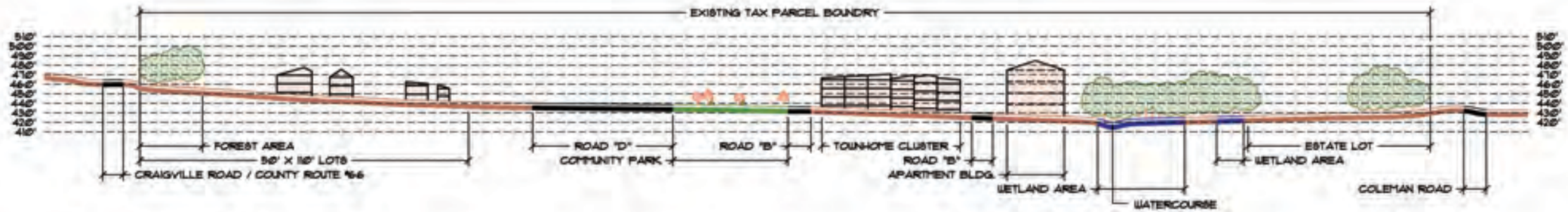



CROSS - SECTION #2 PRE-DEVELOPMENT




CROSS - SECTION #2 POST-DEVELOPMENT

EXISTING PHOTO #2

EXISTING PHOTO #3

VIEWSHED # 2:

- THE ABOVE SECTIONS SHOWS THE RELATIONSHIP OF THE EXISTING PRE-CONSTRUCTION CONDITIONS (SECTION #1) WITH THE PROPOSED POST-CONSTRUCTION CONDITIONS (SECTION #2)
- THE EXISTING PHOTO #2 IS A PANORAMIC VIEW OF THE PRE-CONSTRUCTION CONDITIONS FROM THE END OF GOOD TIME COURT. THE EXISTING PHOTO #3 IS A PANORAMIC VIEW OF THE PRE-CONSTRUCTION CONDITIONS FROM COLEMAN ROAD.

E.I.S. FIGURE III-6

VIEWSHED # 2

SCALE: 1 IN. = 120 FT.

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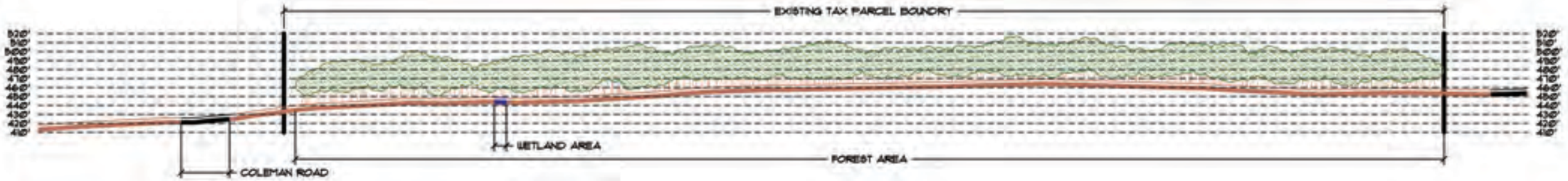
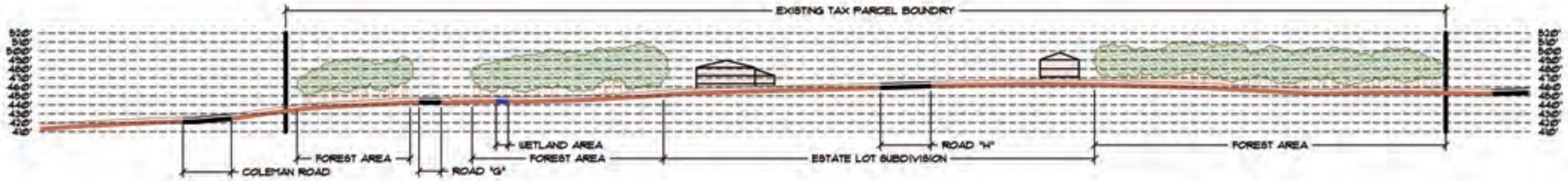



CROSS - SECTION #3 PRE-DEVELOPMENT




CROSS - SECTION #3 POST-DEVELOPMENT

EXISTING PHOTO #4

VIEWSHED # 3:

- THE ABOVE SECTIONS SHOWS THE RELATIONSHIP OF THE EXISTING PRE-CONSTRUCTION CONDITIONS (SECTION #) WITH THE PROPOSED POST-CONSTRUCTION CONDITIONS (SECTION #).
- THE EXISTING PHOTO #4 TO THE LEFT IS A PANORAMIC VIEW OF THE EXISTING PRE-CONSTRUCTION CONDITIONS FROM COLEMAN ROAD TO THE NORTH.

E.I.S. FIGURE III-7

VIEWSHED # 3

SCALE: 1 IN. = 120 FT.

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EXISTING PHOTO #5

EXISTING PHOTO #6

EXISTING PHOTO #7

OTHER VIEWS:

- THE EXISTING PHOTO #5, TOP LEFT IS A VIEW OF THE EXISTING PRE-CONSTRUCTION CONDITIONS FROM YANLEE MAID LANE TO THE NORTHWEST, THIS IS LOOKING TOWARDS THAT DEVELOPMENTS SECONDARY ACCESS.
- THE EXISTING PHOTO #6, TOP RIGHT IS A VIEW OF THE EXISTING PRE-CONSTRUCTION CONDITIONS FROM YANLEE MAID LANE TO THE SOUTHEAST, THIS IS LOOKING TOWARDS THAT DEVELOPMENTS PRIMARY ACCESS.
- THE EXISTING PHOTO #7, BOTTOM LEFT IS A VIEW OF THE EXISTING PRE-CONSTRUCTION CONDITIONS FROM CRAIGVILLE PARK TO THE NORTHEAST.

E.I.S. FIGURE III-8

SITE VIEWS

SCALE: NOT TO SCALE

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### 3.2.4 Mitigation Measures

The proposed measures that will be implemented to mitigate potential impacts from the development are as follows:

- Utilization of Traditional Neighborhood Design principles in developing an aesthetically pleasing pedestrian oriented community.
- Utilize Town of Goshen Zoning Code Appendix D, *Building Forms Guidelines*, to "show how preserving community character can apply to new buildings in a hamlet or village setting". Utilization of the Town's guidelines will result in aesthetically pleasing structures consistent with local character for detached dwellings, row houses, mixed-use buildings and commercial buildings. The guidelines will be applied in developing the proposed structures, streetscapes, courtyards and overall architectural vocabulary.
- Utilize Town of Goshen Zoning Code Appendix D, *Hamlet Design Guidelines* which states, "The preferred location of new growth is in the Hamlets. New development should extend the existing close-knit pattern of small lots, mixed uses, interconnected streets and walkable neighborhoods". The Proposed Action project is consistent with this concept extending the Village of Goshen, which adjoins the Proposed Site.
- The impacts will be limited to the maximum extent practicable by strictly conforming to the limits of clearing; the plans will show the locations and the limits of clearing and grading.
- Work included with each phase or subphase will be completed in the shortest possible timeframe, limiting the duration of the impact. Revegetation will be completed with each subphase so as to lengthen the regrowth time prior to full build-out.
- Minimize disturbance of mature vegetation along Craigville Road/County Route 66, Coleman Road, and the areas of development, within the RU portion of the Proposed Site.
- Preserve existing vegetation and drainage patterns to the maximum extent practicable up to the limits of clearing.

- Provide for buffer zones that maximize topography and vegetation thereby creating more imaginative and sustainable design.
- Preservation of undeveloped areas as open space to protect existing vegetation, hedges and meadows.
- Supplement native vegetation with both deciduous and evergreen plant materials so as to enhance year-round screening. This is particularly important along the Proposed Site boundaries.
- Enhance and maintain buffer zones along roadways, including special consideration of the Scenic Road Overly District along Craigville Road / County Route 66.
- Utilize architectural styles, colors and construction materials that enhance and complement the overall natural setting and visual character of the Proposed Site.

The following unavoidable adverse environmental impacts are unable to be avoided upon visual character of the Proposed Site due to the Proposed Action:

- Conversion of approximately 34± acres of existing undeveloped lands for the development of a traditional neighborhood and residential neighborhood.

See DEIS Chapter VII, *"Unavoidable Adverse Impacts"* for a complete listing.

## 3.3 VEGETATION AND WILDLIFE

### 3.3.1 Existing Conditions

The services, experience and expertise of Ecological Solutions, LLC ("Project Ecologist") was retained to complete a Natural Resources Survey. The Project Sponsor had the Proposed Site inventoried and has determined that the existing ecological conditions that are present are noted in the table on the following page:

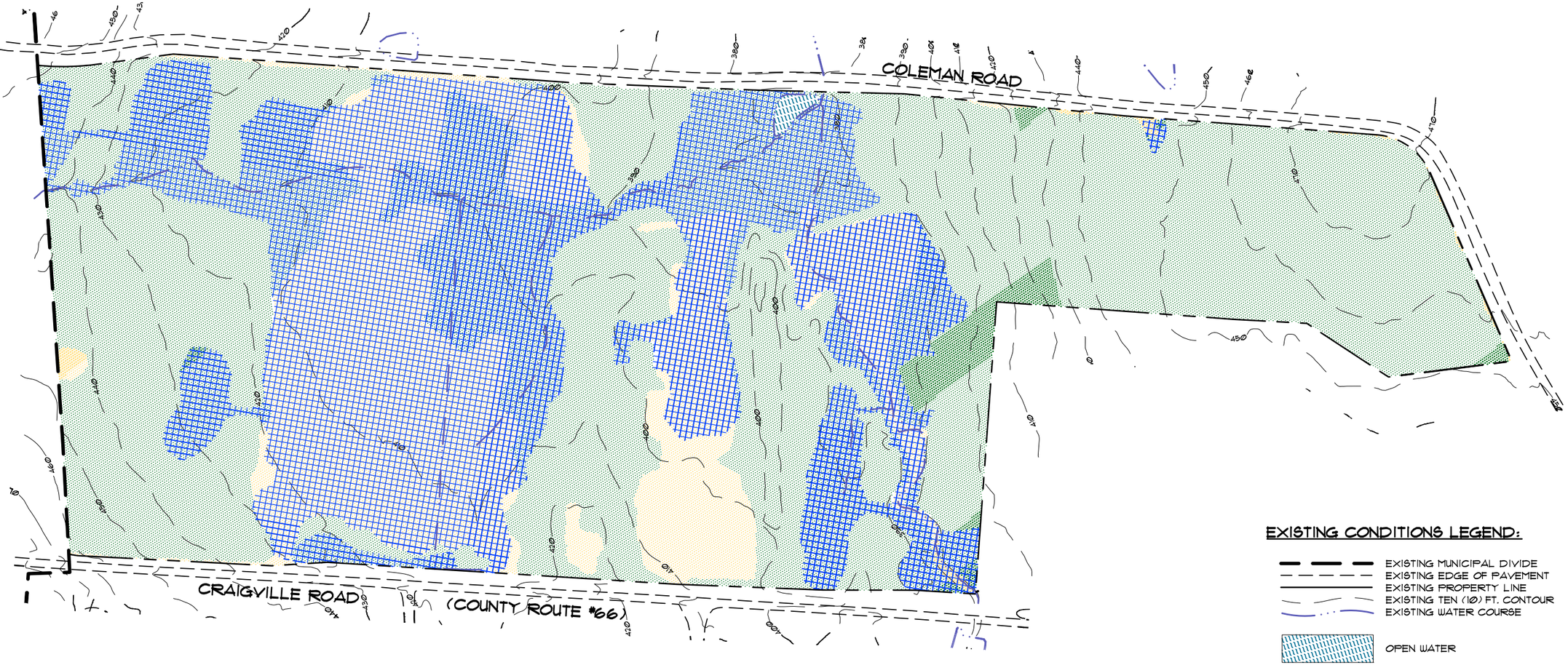
| **Table 4**<br>**Existing Ecological Conditions** | | |
|---|---|---|
| **Coverage** | **Acreage** | **Percent Coverage** |
| Open Water | 0.17 ± acres | 0.18% |
| Wetland Meadow | 19.90 ± acres | 20.86% |
| Scrub / Shrub | 4.26 ± acres | 4.46 % |
| Wetland Forested | 20.51 ± acres | 21.50 % |
| Upland Forested | 50.57 ± acres | 53.00% |

See DEIS Figure III-9, *"Existing Ecological Conditions"*

Within these existing cover types, habitats for a variety of wildlife exist that were either observed or expected to reside there based upon location, environmental characteristics and studies of similar sites in and around the area. A Bureau of the United States Department of the Interior, Fish and Wildlife Service ("USDIFWS") was researched determining that Indiana Bat (Myotis sodalis) and Bog Turtle (Clemmys muhlenbergii) are Federally and/or State listed as endangered and/or threatened species that are potentially in the vicinity of the Proposed Site. Currently their data bases do not have any documented species within the Project Site.

See DEIS Appendix B "*Orange County Federally Listed Endangered and Threatened Species*".

Indiana Bats are deemed to utilize six (6) counties in the area for winter hibernacula with some continuing to utilize the area for summer roosts, since movements have been tracked as far as 330 miles between hibernacula and summer roosts. The Indiana Bat typically is associated with cave habitats for hibernacula and trees, dead, dying or alive, with exfoliating or defoliating bark, containing cracks, crevices and/or holes to utilize for summer roosts.




## EXISTING CONDITIONS LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- OPEN WATER
- WETLAND: MEADOW
- SCRUB/SHRUB
- WETLAND: FORESTED
- UPLAND: HARDWOOD FOREST

## ACREAGE OF EXISTING CONDITIONS:

| | |
|---|---|
| OPEN WATER | 0.17± ACRES |
| WETLAND: MEADOW | 19.90± ACRES |
| SCRUB/SHRUB | 4.26± ACRES |
| WETLAND: FORESTED | 20.51± ACRES |
| UPLAND: HARDWOOD FOREST | 50.57± ACRES |
| TOTAL: | 95.41± ACRES |

N

300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

E.I.S. FIGURE III-9

EXISTING
ECOLOGICAL CONDITIONS

SCALE: 1 IN. = 300 FT.

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Bog Turtles have known habitats within ten (10) miles of the Proposed Site. Bog Turtles prefer open canopy wetlands with soft saturated soils fed by seeps and springs of cold groundwater that has been cycled through calcium-rich bedrock or

soils. In New York, they have been identified and associated with a deep mucky substrate combined with very shallow water depths, a few inches at the most. They prefer vegetative cover, including, but not limited to, cinquefoil, willows, sedges, rushes, bulrushes and red maples.

The NYSDEC and Natural Heritage Program have been contacted. The NYSDEC submitted a letter to the Project Sponsor which may be found in Appendix B identifying the potential presence of the Indiana Bat (Myotis sodalis). Due to building requirements and updated databases, additional documentation will be submitted to the USDIFWS and NYSDEC as needed. The Town and its Planning Board shall also receive said documentation for consideration during the SEQRA compliance process.

See DEIS Appendix IV, *"Natural Resources Survey"*.

### 3.3.2 Future Without the Proposed Project

The future of the Proposed Site's ecological conditions without the Proposed Action would remain insignificant. The natural process would continue through successional growth while existing habitats would remain dependent upon life cycles and evolution of species. The only impacts would be from future development of parcels around the Proposed Site, uprooting existing habitats.

### 3.3.3 Potential Impacts

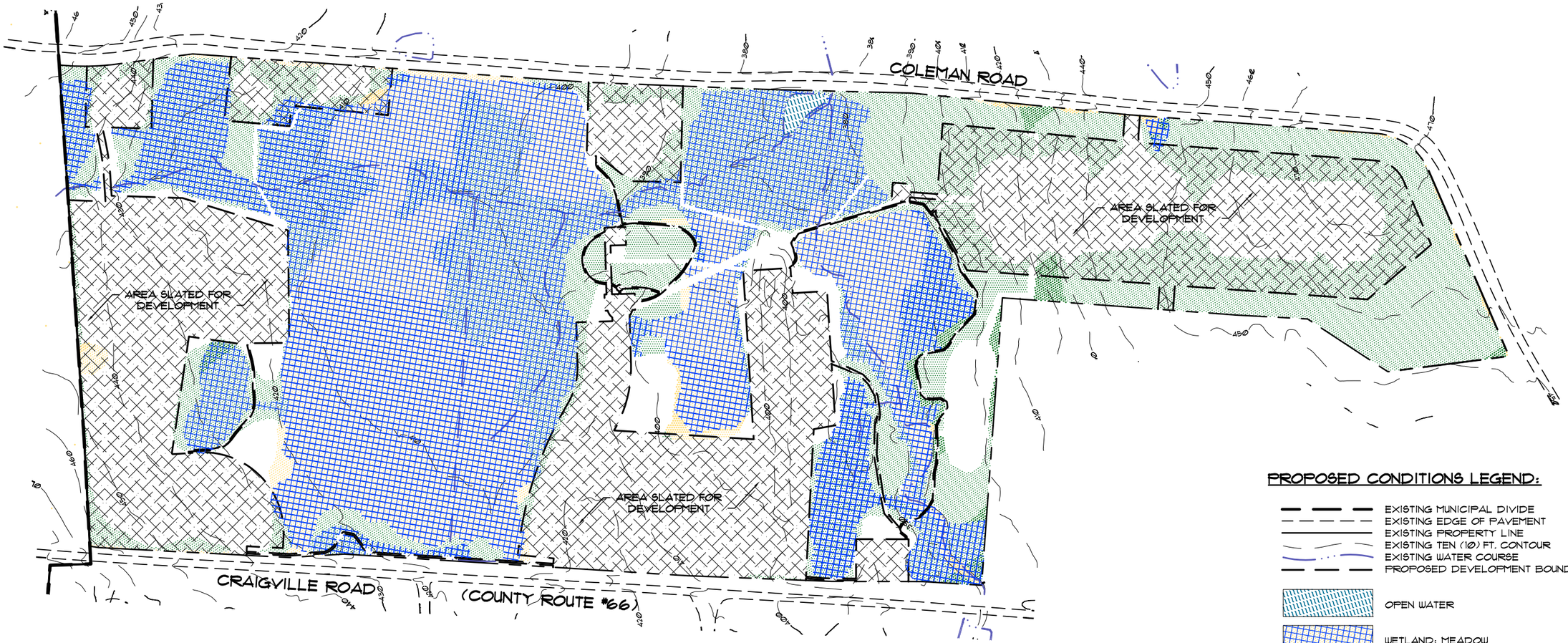
Upon understanding the relationship between the existing ecological conditions and the Proposed Action, it is determined that at full build-out the proposed ecological conditions will be as indicated on the table on the following page:

**Table 5**
**Proposed Ecological Conditions**

| Cover Type | Acreage | Percent Coverage | Percent Change |
|---|---|---|---|
| Open water | 0.17 ± acres | 0.18% | 0.00 % |
| Wetland Meadow | 19.65 ± acres | 20.59% | 0.27 % |
| Scrub / Shrub | 0.99 ± acres | 1.04% | 3.42 % |
| Wetland Forested | 20.20 ± acres | 21.17% | 0.33 % |
| Upland Forested | 20.94 ± acres | 21.95% | 31.05 % |
| Development | 33.46 ± acres | 35.07% | 35.07 % |

See Figure III-10, *"Proposed Ecological Conditions"*.

Implementation of the Proposed Action will cause the alteration of existing vegetation and wildlife habitat. The design and layout has reduced direct impacts to wetlands, to a limited emergency access drive, and temporary infrastructure and utility crossings. Approximately 34± acres of natural cover types will be removed. Of the 34± acres, approximately 19± acres will be replaced with landscaping and lawn areas, in time providing usable habitats. The removal of existing vegetation and implementation of the Proposed Action will result in forest and habitat fragmentation. Forest fragmentation results from clearing and opening up the closed canopy ultimately introducing and allowing edge oriented species to penetrate areas that were not easily accessed. Habitat fragmentation separates and isolates habitats and wildlife populations by placing impenetrable barriers. Although these things will occur, the unfragmented areas to remain within the preserved open space will aid to offset the fragmentation. The Project Ecologist has determined the only impact associated with wildlife is displacement. Some species have adapted to human development, others will relocate to areas of the Proposed Site that will remain undeveloped.




## PROPOSED CONDITIONS LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT BOUNDRY
- OPEN WATER
- WETLAND: MEADOW
- SCRUB/SHRUB
- WETLAND: FORESTED
- UPLAND: HARDWOOD FOREST
- DEVELOPMENT

## ACREAGE OF PROPOSED CONDITIONS:

| | EXISTING | PROPOSED | DIFFERENCE |
|---|---|---|---|
| OPEN WATER | 0.17± ACRES | 0.17± ACRES | -0.00± ACRES |
| WETLAND: MEADOW | 19.90± ACRES | 19.65± ACRES | -0.25± ACRES |
| SCRUB/SHRUB | 4.26± ACRES | 0.99± ACRES | -3.27± ACRES |
| WETLAND: FORESTED | 20.51± ACRES | 20.20± ACRES | -0.31± ACRES |
| UPLAND: HARDWOOD FOREST | 50.57± ACRES | 20.94± ACRES | -29.63± ACRES |
| DEVELOPMENT | 0.00± ACRES | 33.46± ACRES | +33.46± ACRES |
| TOTAL: | 95.41± ACRES | 95.41± ACRES | |

N

500 0 250 500

GRAPHIC SCALE:
1 IN. = 500 FT.

E.I.S. FIGURE III-10

PROPOSED
ECOLOGICAL CONDITIONS

SCALE: 1 IN. =300 FT.

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### 3.3.4 Mitigation Measures

In attempts to mitigate potential impacts from the Proposed Action, the following practices will be used:

- The site disturbance will be limited to the maximum extent practicable, the plans show the locations and the limits of disturbance. The amount of area of the Site that will be disturbed at any one time will be limited to five (5) acres or less.
- Work for each phase and subphase will be completed in the shortest possible time frame, limiting the duration of the impact.
- Clearing of vegetative cover will be done between October and March to limit the effects on Indiana Bat during times of summer roosts.
- Implementation of a landscape plan will supplement the remaining natural vegetative cover.
- The greatest care of environmentally sensitive areas during construction activities, through strict adherence to the SWPPP.

The following are unavoidable adverse environmental impacts that are unable to be avoided upon vegetation and wildlife of the Proposed Site due to the Proposed Action:

- Conversion of approximately 34± acres of the Proposed Site from existing natural vegetation, vacant rural land to develop roadways, infrastructure and residential and commercial structures.
- Displacement of wildlife habitats within areas proposed for development.

## 3.4 WETLANDS AND SURFACE HYDROLOGY

### 3.4.1 Existing Conditions

The service, experience and expertise of Robert G. Torgersen, LA, CPESC ("Project Wetland Delineator") were retained to inventory wetland areas. The existing wetlands on-site were delineated, determining approximately 40.14± acres designated as ACOE Federal Wetlands in accordance with the methods established by the *Army Corps of Engineers Delineation Manual*. Within this acreage existing watercourses that were evident are included. These wetland

areas are considered to provide food and habitat for wildlife; flood detention and groundwater recharge benefits, with a substantial contribution to the areas visual character.

See Figure III-11, *"Wetlands Map"*.

The Proposed Site primarily uses the Otterkill Drainage Basin, NYSDEC Water Index H-89-20, which is a Class "C" Stream. The unnamed stream that traverses the Proposed Site is a tributary to the Otterkill and its drainage basin. These watercourses ultimately flow into the Hudson River via the Cromline and Moodna Creeks.

The low lying lands include areas of wetlands along the unnamed stream and considered part of the 100-year floodplain, prone to flooding on the occasion of a 100-year storm event. This is in accordance to information supplied by the Federal Emergency Management Agency's ("FEMA") Flood Boundary Map.

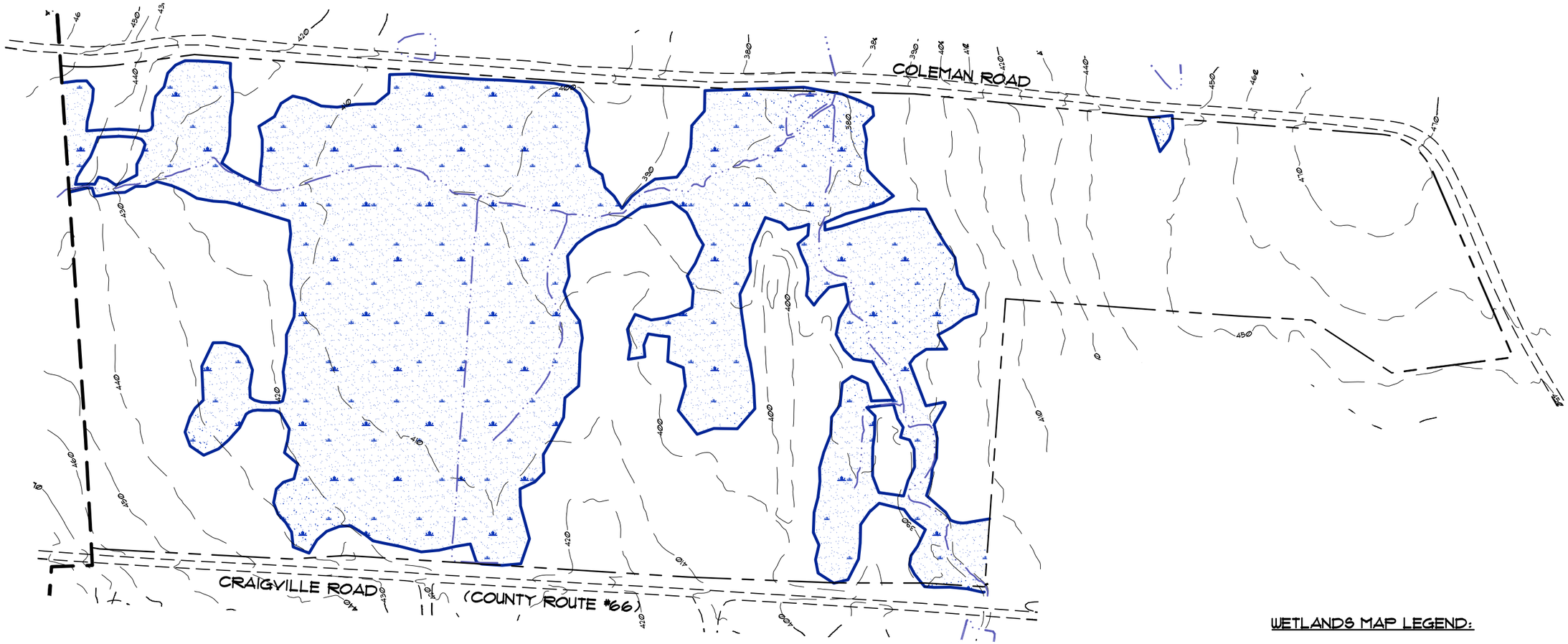
See DEIS Figure III-12, *"Floodplains"*.

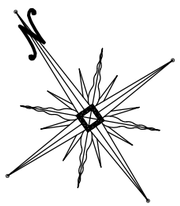
### 3.4.2 Future Without the Proposed Project

Without the Proposed Action the future of the wetlands and surface hydrology would remain unchanged. The wetland areas would continue to filter and recharge ground water through its natural processes. The Otterkill Tributaries would still function and feed through to the Hudson River providing drainage routes for the areas excess water. Finally, the areas prone to flooding would continue their effectiveness during the times it is needed.

### 3.4.3 Potential Impacts

The anticipated layout for the Proposed Action will have insignificant impacts and avoids to the maximum extent practicable; streams, wetlands and flood prone areas. The encroachment upon these areas will be minimized to emergency access, infrastructure and utility crossings associated with the development.




300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

## ACREAGE OF EXISTING WETLANDS:

| | |
|---|---|
| N.Y.S. DEC JURISDICTION | 0.00± ACRES |
| A.C.O.E. JURISDICTION | 40.14± ACRES |
| TOTAL: | 40.14± ACRES |

## WETLANDS MAP LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- SUGGESTED WETLAND BUFFER
- EXISTING ONSITE WETLANDS
- PROPOSED DEVELOPMENT AREA

E.I.S. FIGURE III-11

# WETLANDS MAP

SCALE: 1 IN. = 300 FT.

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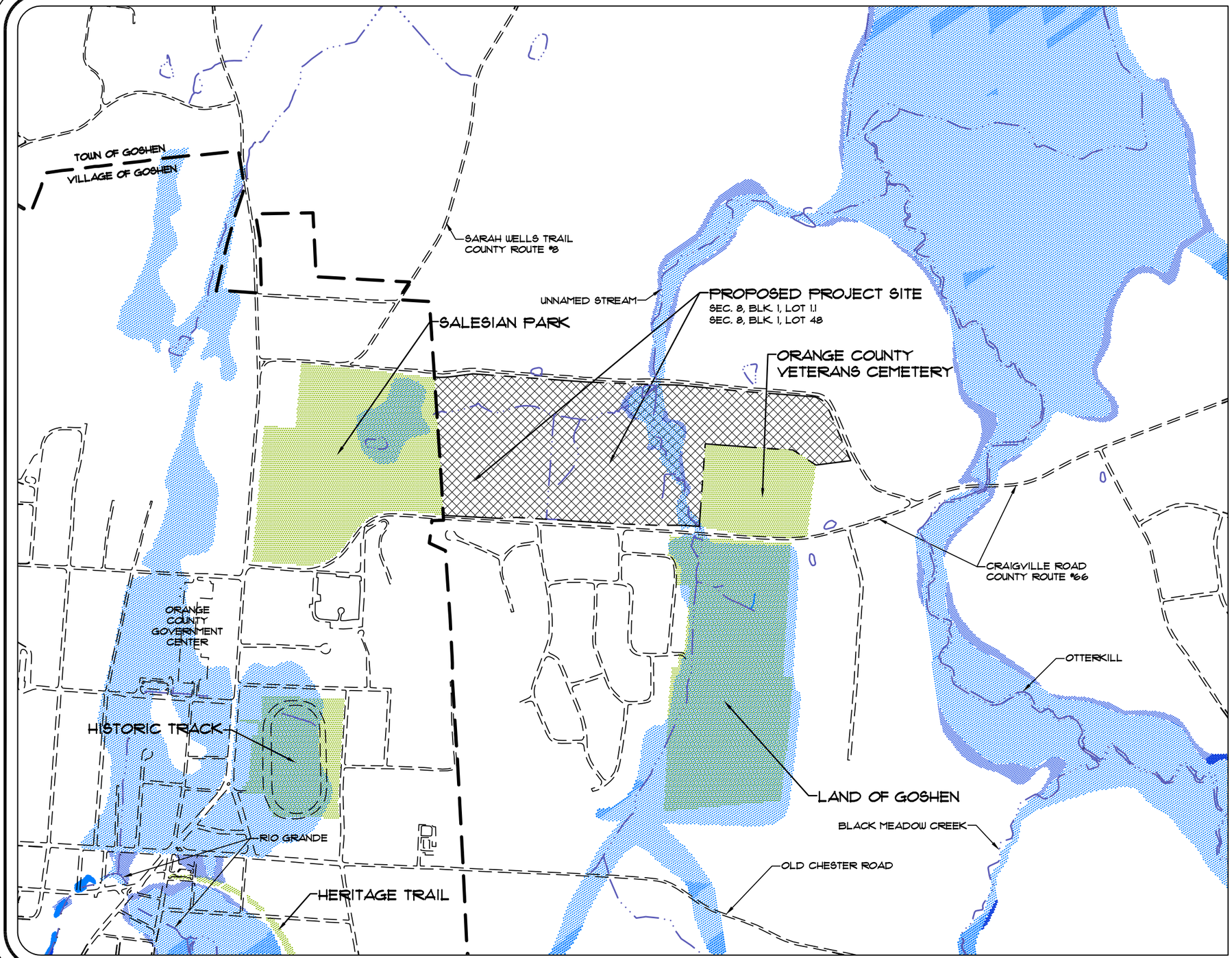


1000 0 500 1000

GRAPHIC SCALE:
1 IN. = 1000 FT.

## ELEVATION REFERENCE MARKS:

| REF. MARK | ELEV. (FT.NGVD) 1 | LOCATION |
|---|---|---|
| RM13 | 383.61 | BOX CUT ON HEADWALL ON SOUTHWEST SIDE OF COLEMAN ROAD AT OTTER KILL TRIBUTARY 12. |
| RM14 | 377.06 | PK NAIL SET IN SOUTH EDGE OF PAVEMENT AT CENTER OF CRAIGVILLE ROAD BRIDGE OVER THE OTTER KILL, 1200' WEST OF KNOELL ROAD. |
| RM16 | 387.80 | PK NAIL SET IN NORTH EDGE OF PAVEMENT ON EAST SIDE OF OLD CHESTER ROAD BRIDGE OVER BLACK MEADOW CREEK, 250' SOUTHWEST OF INTERSECTION OF KNOELL ROAD AND BROAD LEA ROAD. |
| RM17 | 473.49 | NORTHEAST CORNER OF R.O.W. MONUMENT ON WEST SIDE OF N.Y. ROUTE 17M, 110' WEST OF CENTER LINE OF ARCADIA ROAD. |

1 NATIONAL GEODETIC VERTICAL DATUM OF 1929

INFORMATION FROM FEMA FLOOD MAP, COMMUNITY-PANEL NUMBER 360614 0010 B

## FLOODPLAIN MAP LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING WATER COURSE
- EXISTING PARK / RECREATIONAL
- PROPOSED PROJECT SITE
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN

E.I.S. FIGURE III-12

# FLOODPLAINS

SCALE: 1 IN. = 1000 FT.

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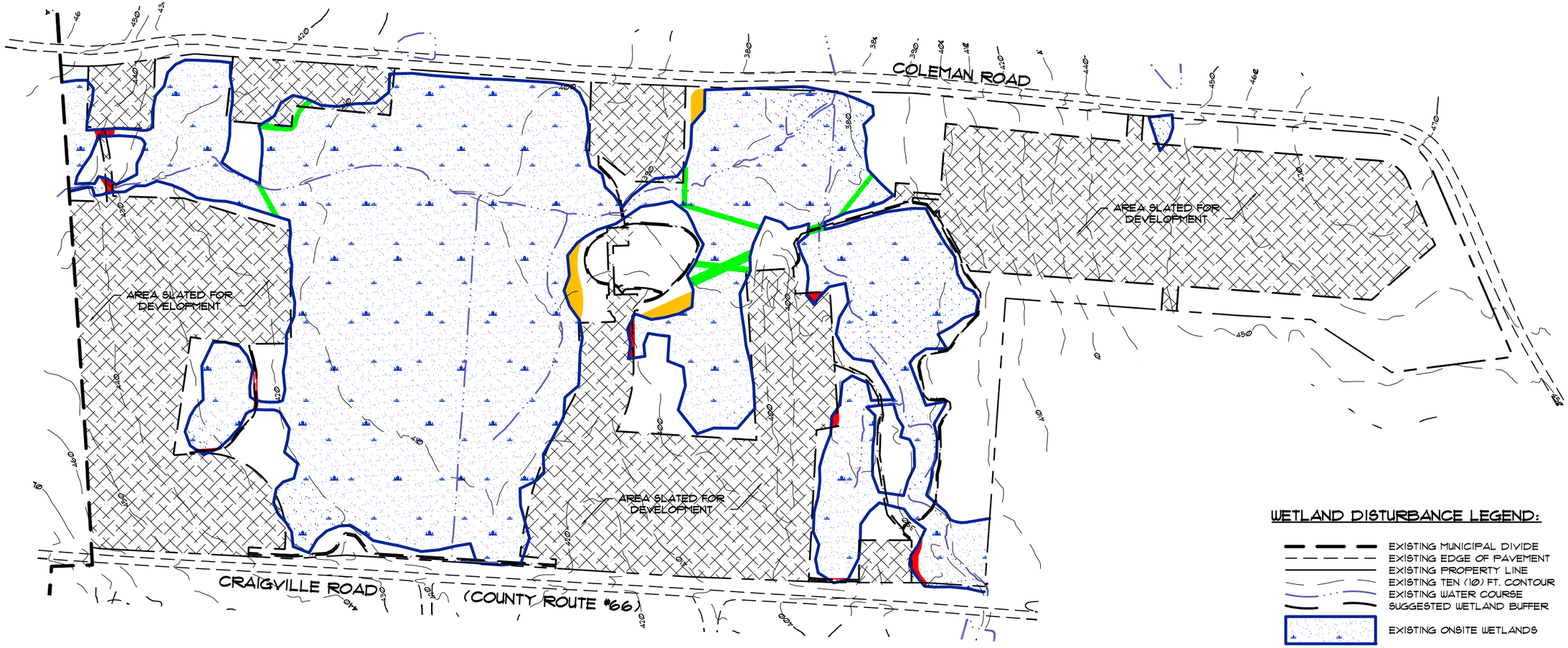
There will be an irreversible loss of approximately 20,037.6± sq. ft. or 0.46± acres of Federally regulated wetlands, this will be associated with the emergency access as well as minimal grading associated with the Proposed Action. Minimal encroachment into the 100-year floodplain is evident, approximately 2,219.41± sq. ft. or 0.05± acres will be irreversibly lost to grading associated with the Proposed Action.

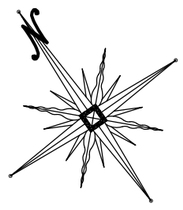
See Figure III-13, *"Wetland Disturbance"*.

The stormwater management facilities will be constructed in conformity to the NYSDEC *Stormwater Design Manual*. The use of various stormwater management structures will be used to regulate stormwater quantity and quality. The structures would eventually discharge over upland areas into the ACOE wetlands where it will aid in groundwater recharge and continue its journey through the Otterkill Drainage Basin. Ultimately these areas will release the collected stormwater at a rate at or below existing conditions and a quality at or above existing conditions.

The on-site wells will be utilized for the central water system. Based on testing completed, the anticipated pumping capacity from the bedrock aquifers had no impact to the ACOE wetlands or watercourses.

The Proposed Action intends to connect to existing wastewater facilities along Craigville Road at the Village line, where it would continue into the Village of Goshen WWTP. If this does not occur, the development will construct an on-site WWTP in accordance with the standards by the OCDOH and NYSDEC *Standards for Wastewater Treatment Works*. Discharge from the treatment plant would utilize the unnamed stream, which would deposit the water into the Otterkill Drainage Basin as well as aid in the groundwater recharge. The discharge would be subject to a SPDES Permit and release at a rate at or below existing conditions and a quality at or above existing conditions.



300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

## ACREAGE OF DISTURBED WETLANDS:

| | |
|---|---|
| N.Y.S. DEC JURISDICTION | 0.00± SQ.FT. OR 0.00± ACRES |
| A.C.O.E. JURISDICTION | |
| TEMPORARY | 13,894.00± SQ.FT. OR 0.31± ACRES |
| PERMANENT | 6484.00± SQ.FT. OR .15± ACRES |
| TOTAL: | 20,378± SQ.FT. OR 0.46± ACRES |
| WETLAND MITIGATION | 12,901.00:± SQ.FT. OR 0.30± ACRES |

## WETLAND DISTURBANCE LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- SUGGESTED WETLAND BUFFER
- EXISTING ONSITE WETLANDS
- PROPOSED DEVELOPMENT AREA
- TEMPORARY WETLAND DISTURBANCE
- PERMANENT WETLAND DISTURBANCE
- WETLAND MITIGATION AREAS

E.I.S. FIGURE III-13

# WETLAND DISTURBANCE

SCALE: 1 IN. = 300 FT.

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GOSHEN NY, 10924
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### 3.4.4 Mitigation Measures

In attempts to mitigate potential impacts from the Proposed Action the following practices will be used:

- The impacts will be limited to the maximum extent practicable, the plans will show the locations and the limits.
- Work associated with each phase and subphase will be completed in the shortest possible time frame, limiting the duration of the impact.
- Development will be carried out in accordance with applicable NYSDEC Stream protection, Federal Wetland/Nationwide Permit, and FEMA Floodplain Management standards and regulations.
- Installation of Erosion Control Devices on the uphill side of wetlands and water courses around the perimeter of proposed disturbances.
- Implementation of long term Stormwater Management measures with strict adherence to NYSDEC Stormwater Design Manual.

The following are unavoidable adverse environmental impacts that are unable to be avoided upon wetlands and surface hydrogeology of the Proposed Site due to the Proposed Action:

- Disturbance of approximately 0.46± acres of ACOE Federally regulated wetlands on either a temporary or permanent basis.
- Disturbance of approximately 0.05± acres established within the FEMA 100 year Flood Plain.

See DEIS Chapter VII, *"Unavoidable Adverse Impacts"* for a complete listing.

## 3.5 GEOLOGY, TOPOGRAPHY AND SOILS

### 3.5.1 Existing Conditions

The Proposed Site is located within the Wallkill Valley Region of the Appalachian Mountains and the Ridge Physiographic Province. The Wallkill Valley Region is bound on the northwest by the Shawangunk Mountains and on the east by the Marlborough Mountain Range. This region is underlain by

Ordovician age grayish black shale's, siltstones, and argillites of the Martinsburg Formation. This formation consists of the following components:

- Penn Argyl Member – dark gray to grayish-black calcareous shale
- Ramseyburg Member – greywacke and sandstone
- Bushkill Member – dark gray calcareous shale and siltstone

The existing topographical conditions of the Proposed Site range in elevation of approximately 460± feet at the northwestern property line and approximately 470± feet at the eastern corner of the property, down to approximately 300± feet around the existing pond along Coleman Road. This makes up an elevation difference of approximately 60-70± feet from the outlying boundaries to the center of the Proposed Site. The individual slopes have been categorized:

**Table 6**
**Slope Analysis Acreage**

| Slope | Acreage | Percent Coverage |
|---|---|---|
| 0-10% slopes | 80.32± acres | 84.18% |
| 10-15% slopes | 8.56± acres | 8.97% |
| 15-20% slopes | 2.86± acres | 3.00% |
| 20%+ slopes | 3.68± acres | 3.86% |

The soils that exist on-site fit into one (1) of six (6) categories:

**Table 7**
**Existing Soils Acreage**

| Soils Type | Acreage | Percent Coverage |
|---|---|---|
| Alden Series | 7.08± acres | 7.42% |
| Bath-Nassau Series | 4.71± acres | 4.94% |
| Erie Series | 35.49± acres | 37.20% |
| Madalin Series | 17.81± acres | 18.67% |
| Mardin Series | 25.58± acres | 26.81% |
| Rock Crop-Nassau Series | 4.74± acres | 4.97% |

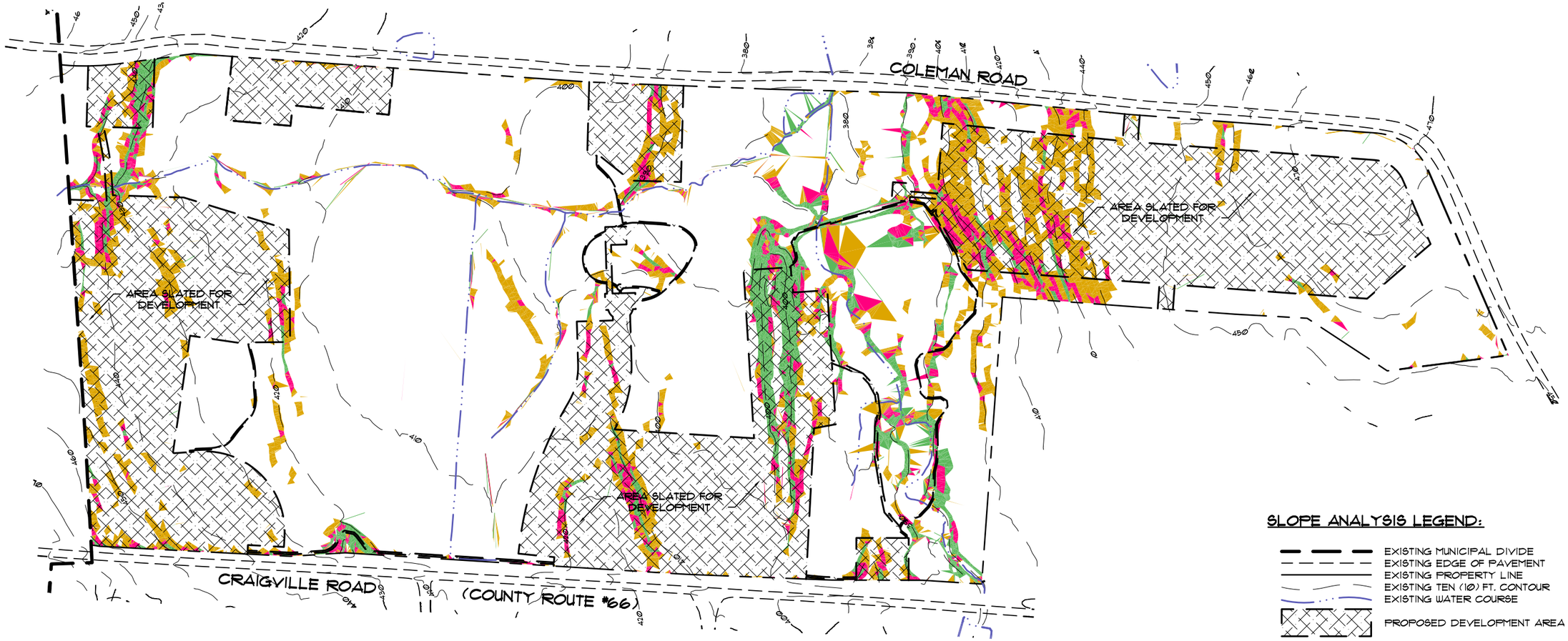
See DEIS Figure III-14, *"Slope Analysis"* and III-15, *"Soils Map"*.

These categories are based upon information supplied within *The Soil Survey of Orange County, New York* compiled by the United States Department of Agriculture, Soil Conservation Service. The information supplied within the Soil Survey will be supplemented through actual boring conducted prior to construction. The methods are to be laid out within the specifications for the contractor and implemented to determine the structure of the soil. This information will be utilized to determine the structure and sizing requirements for footing and foundations.

Alden Silt Loam – This soil consists of deep, very poorly drained, nearly level that was formed via glacial till deposits derived from shale, sandstone and limited amounts of limestone. These areas are recognizable within low areas and depressions of upland areas. Slopes that are within the Alden Silt Loam (AB) averaged between 0 to 3 percent, with a concentration mostly less than 2 percent. The soil type is consistent with acreage of 5 to 10 acres within any given area.

This soil is consistent with an approximate depth to groundwater of 0 – 0.5+ feet and approximately >60 inches to bedrock. The suitability for sanitary facilities is severe due to slow percolation and tendency for wetness. In regards to building suitability again a classification of severe is applied. Because of wetness, the soil is less likely to erode since it is already wet and slopes are nearly level.

Bath – Nassau Shaly Silt Loam – This soil consists of deep, well drained and shallow excessively drained that was formed via glacial till deposits derived from shale and slate. These areas are recognizable within hillside and ridges of uplands. Bath-Nassau Shaly Silt Loam (BnB) is consistent with slopes of 3 to 8 percent, with areas usually of a long oval shape ranging from 5 to 30 acres. Bath-Nassau Shaly Silt Loam (BnC) is consistent with slopes of 0 to 15 percent, with areas usually of an oblong shape ranging from 10 to 20 acres.




## SLOPE ANALYSIS LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT AREA

- 0 - 10 %
- 10 - 15 %
- 15 - 20 %
- > 20 %

## ACREAGE OF EXISTING SLOPES:

| | |
|---|---|
| 0 - 10 % | 80.32± ACRES |
| 10 - 15 % | 8.56± ACRES |
| 15 - 20% | 2.86± ACRES |
| 20 % + | 3.68± ACRES |
| TOTAL: | 95.41± ACRES |

## ACREAGE OF DISTURBED SLOPES:

| | |
|---|---|
| 0 - 10 % | 27.21± ACRES |
| 10 - 15 % | 5.12± ACRES |
| 15 - 20% | 1.29± ACRES |
| 20 % + | 1.86± ACRES |
| TOTAL: | 35.48± ACRES |

300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

E.I.S. FIGURE III-14

# SLOPE ANALYSIS

SCALE: 1 IN. = 300 FT.

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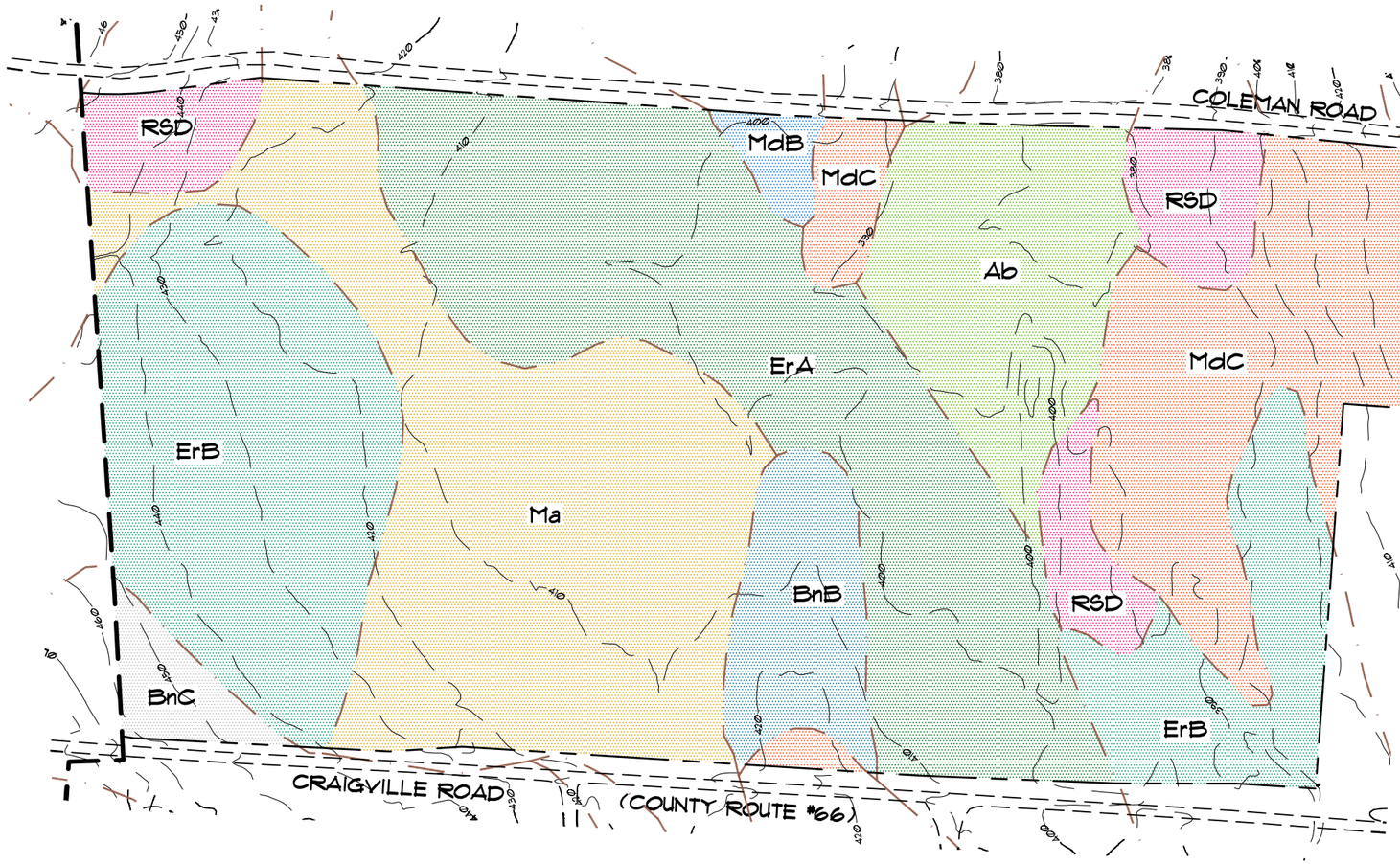


## SOILS MAP LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING SOIL BOUNDRY
- AB: ALDEN SILT LOAM
- BnB: BATH-NASSAU SILT LOAM
- BnC: BATH-NASSAU SHALY SILT LOAM
- ErA: ERIE GRAVELLY SILT LOAM 0-3%
- ErB: ERIE GRAVELLY SILT LOAM 3-8%
- MA: MADALIN SILT LOAM
- MdB: MARDIN GRAVELLY DILT LOAM 3-8%
- MdC: MARDIN GRAVELLY SILT LOAM 8-15%
- RSD: ROCK OUTCROP-NASSAU COMPLEX

GRAPHIC SCALE:
1 IN. = 300 FT.

300 0 150 300

## ACREAGE OF EXISTING SOILS:

| | |
|---|---|
| ALDEN SERIES | 7.08± ACRES |
| BATH-NASSUA SERIES | 4.71± ACRES |
| ERIE SERIES | 35.49± ACRES |
| MADALIN SERIES | 17.81± ACRES |
| MARDIN SERIES | 25.58± ACRES |
| ROCK OUTCROP-NASSUA SERIES | 4.74± ACRES |
| TOTAL: | 95.41± ACRES |

E.I.S. FIGURE III-15

# SOILS MAP

SCALE: 1 IN. = 300 FT.

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This soil is consistent with an approximate depth to groundwater of 2 – 4± feet and approximately 48 – 60 inches to bedrock. The suitability for sanitary facilities is severe due to slow percolation and depth to bedrock. In regards to building suitability classification of moderate to severe is applied. This is contributed to slopes, depth to bedrock and occasional wetness. This soil is susceptible to erosion because of slopes and bedrock.

Erie Gravelly Silt Loam – This soil consists of deep, somewhat poorly drained, nearly level, and gently sloping soil with a fragipan that was formed in glacial till deposits derived from shale, slate and sandstone. These areas are recognizable within foot slopes, lower hillsides, broad hilltops, and along shallow drainage ways of upland areas. Erie Gravely Silt Loam (ErA) is consistent with slopes of 0 to 3 percent, with areas usually of a round, oval shape ranging from 5 to 10 acres. Erie Gravely Silt Loam (ErB) is consistent with slopes of 3 to 8 percent with areas usually of an oval shape ranging from 5 to 20 acres.

This soil is consistent with an approximate depth to groundwater of 0.5 – 1.5± feet and approximately >60 inches to bedrock. The suitability for sanitary facilities is severe due to slow percolation and potential wetness. In regards to building suitability a classification of severe is applied. This is contributed to wetness and potential frost action. The soil is less likely to erode since it is already wet and slopes nearly level.

Madalin Silt Loam – This soil consists of deep, poorly drained and very poorly drained nearly level that was formed via glacial lake deposits of silt and clay. These areas are recognizable within flat and depressions of lowland lake plains, along with small basins of uplands. Slopes that are within the Madalin Silt Loam (MA) average between 0 to 3 percent. This soil type is consistent with a round concave shape and acreage of 5 to 15 acres within any given area.

This soil is consistent with an approximate depth to groundwater of 0 – 0.5+ feet and approximately >60 inches to bedrock. The suitability for sanitary facilities is severe due to slow percolation and tendency for wetness. In regards to building suitability a classification of severe is applied because of the wetness. This soil is likely to erode since it is already wet and slopes are nearly level.

Mardin Gravelly Silt Loam – This soil consists of deep, moderately well drained soils with a dense fragipan within the subsoil that was formed via glacial till deposits derived from sandstone, shale and slate. These areas are recognizable within broad divides, valley sides, hillsides, hilltops, and ridges of upland areas. Mardin Gravely Silt Loam (MdB) is consistent with slopes of 3 to 8 percent, with areas of an oval shape ranging from 10 to 15 acres. Mardin Gravelly Silt Loam (MdC) is consistent with slopes of 8 to 15 percent, with areas of a long and narrow shape ranging from 10 to 50 acres.

This soil is consistent with an approximate depth to groundwater of 1.5 – 2.0+ feet and approximately >60 inches to bedrock. The suitability for sanitary facilities is severe due to slow percolation, some slopes and potential for wetness. In regards to building suitability a classification of moderate to severe is applied. This is because of the slopes and potential frost action. The soil is susceptible to erosion because of the steeper slopes.

Rock Outcrop – Nassau Complex – This soil consists of exposed bedrock and shallow somewhat excessively drained Nassau that was formed via a thin mantle of glacial till deposits over shale or slate bedrock. These areas are recognizable within hillsides, ridge sides and valley sides of uplands. Slopes that are within the Rock Outcrop Nassau Complex (RsD) consist of steep, irregular topography, averaging 15 to 35 percent, with a concentration between 15 to 25 percent. This soil type is consistent with a long and narrow shape and acreage of 20 to 50 acres within any given area.

This soil is consistent with an approximate depth to groundwater of >6 feet and approximately 10 – 20 inches to bedrock. The suitability for sanitary facilities is severe due to depth to bedrock. In regards to building suitability a classification of severe is applied. This is because of the depth of bedrock. This soil is susceptible to erosion because of slopes and bedrock.

### 3.5.2 Future Without the Proposed Project

The existing geology, topography and soil conditions would remain in an unaltered state without the Proposed Action. The only change in these conditions would be through any natural processes to occur in the future.

### 3.5.3 Potential Impacts

Introducing development to the Proposed Site will inevitably cause intrusion and changes to the existing features. Clearing and grading practices associated with the Proposed Action, including but not limited to installation of roadways, stormwater management, and ultimately the various structures, will cause disturbance and alteration to the geology, topography and soils leaving areas exposed to the elements. With this exposure there is possibility of erosion and siltation affecting groundwater and wetland resources. The overall effect will be approximately 34± acres or 35% of the Proposed Site, yet the maximum amount exposed at any one time will be well under five (5) acres. This will be subject to phasing in accordance with regulations established by the NYSDEC. The exposed areas are to be revegetated on either a temporary or permanent basis, dependent upon the various phase of work being completed. Furthermore, the construction phases will be accompanied by erosion control measures in conjunction with a SWPPP.

Also associated with the grading activities are cut and fill procedures. These activities have the potential of moving and mixing of different soil types along with introduction of outside materials for implementation of various construction activities. The amount of cut and fill are indicated in the table on the following page:

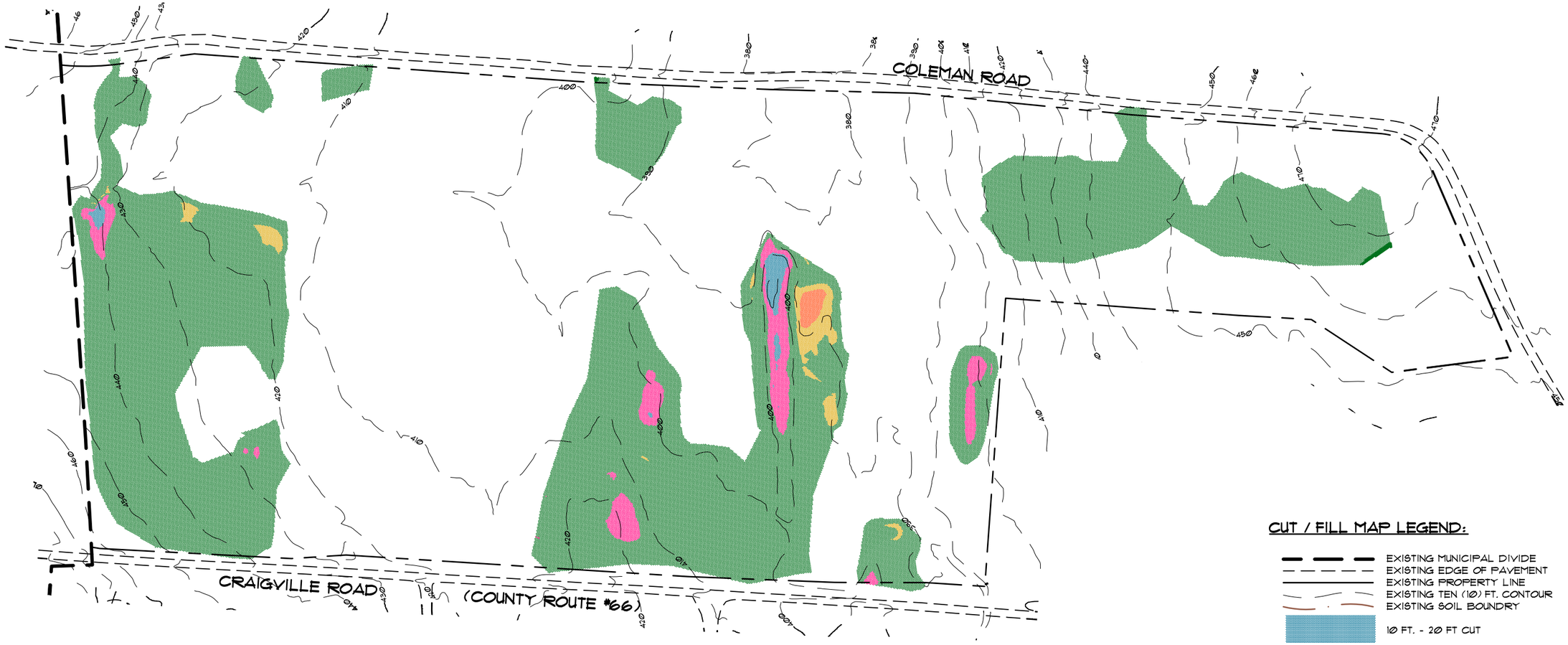
| **Table 8**<br>**Cut & Fill Acreage** | | |
|---|---|---|
| **Amount of Cut** | **Acreage** | **Percent Disturbed** |
| 10 ft. – 20 ft. cut | 0.24± acres | 0.25% |
| 5 ft. – 10 ft. cut | 1.19± acres | 1.25% |
| 5 ft. cut – 5 ft. fill | 28.85± acres | 30.24% |
| 5 ft. – 10 ft. fill | 0.52± acres | 0.55% |
| 10 ft. – 20 ft. fill | 0.13± acres | 0.14% |

See Figure III-16, *"Cut/Fill Map"*.

The majority of the disturbances are limited to slopes under 25% for the majority of the site's infrastructure. In accordance with §83-13, *Street Layout and Design* of the Town Subdivision Law, the streets have been designed in ways that will in most cases limit the disturbance to the natural topography, utilizing roadways parallel to the existing topography and areas of shallower slopes to cross grade. Additionally, the multi-family condominiums are designed to utilize areas of steep slopes for a desired experience. The structure will take up grade producing garage under parking. The Zoning Code §97-41, *Rural Siting Principals* calls for the minimal crossing of steep slopes with roadways and driveways. The roadways and driveways shall be designed to specification provided by the Town and maintain a maximum grade of 10% throughout the Proposed Action.

A few aspects of the Proposed Action will encounter minimal alterations upon slopes greater than 25%. In these areas, in compliance with §97-46, *Steep Slopes* of the Zoning Code, the following will be observed:

- Adequate erosion control and drainage measures to be in place.
- Minimized clearing of natural vegetation.
- No safety hazards will be created.
- Proper review of all plans by the Planning Board and its Consultants.




## ACREAGE OF CUT AND FILL:

| | |
|---|---|
| 10 FT. - 20 FT CUT | 10,314.08 SQ.FT. OR 0.24± ACRES |
| 5 FT. - 10 FT. CUT | 51,794.79 SQ.FT. OR 1.19± ACRES |
| 5 FT. CUT - 5 FT. FILL | 1,256,613.17 SQ.FT. OR 28.85± ACRES |
| 5 FT. -10 FT. FILL | 22,435.86SQ.FT. OR 0.52± ACRES |
| 10 FT. - 20 FT. FILL | 5,506.23 SQ.FT. OR 0.13± ACRES |
| TOTAL: | 7,365.00 SQ.FT. OR .17± ACRES CUT |

N

300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

## CUT / FILL MAP LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING SOIL BOUNDRY
- 10 FT. - 20 FT CUT
- 5 FT. - 10 FT CUT
- 5 FT. CUT - 5 FT. FILL
- 5 FT. - 10 FT. FILL
- 10 FT. - 20 FT. FILL

E.I.S. FIGURE III-16

# CUT / FILL MAP

SCALE: 1 IN. = 300 FT.

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Again as previously mentioned this is to be limited to the maximum extent practicable and the variety of building techniques implemented will ensure this.

Although blasting is not anticipated, should the unforeseen need arise, the protocols by the Town of Goshen, Chapter 58A and the State of New York Code of Rules and Regulations, 12 NYCRR Part 39, are to be strictly adhered to. The majority of the Proposed Site contains a depth to bedrock of well over five (5) feet according to individual soil classifications. Areas of steep slopes have been avoided to the greatest extent possible. These two conditions are the basis for no need to blast; yet, the need may arise should construction happen upon shallow areas of bedrock and/or large rock formations. To protect the Proposed Site adjoiners, the blasting contractor shall meet but not be limited to the following protocols:

- Contractor shall be a licensed blaster in the State of New York and will provide the town with a current Certificate of Insurance naming the municipality as an individually insured party.
- Conduct pre-blast survey with seismic readings along property lines to determine maximum charge size.
- Ensure blast areas are to be covered by steel mats.
- Notify all adjoiners, town Police and Building Inspector's office prior to blasting.
- Potentially post a Performance Bond for compensations, should damage outside the Proposed Site happen.

As previously mentioned, these guidelines are to be incorporated at a minimum along with any further protocols provided by the Town, County and/or State.

### 3.5.4 Mitigation Measures

In attempts to mitigate potential impacts from the Proposed Action, the following practices will be used:

- The impacts will be limited to the maximum extent practicable, the plans will show the locations and the limits.

- Work associated with each phase and sub-phase will be completed in the shortest possible time frame, limiting the duration of the impact.
- Installation or Erosion Control Devices around the perimeter of proposed disturbances to prevent sediment from exposed topography and soils from entering wetlands and watercourses.
- Strict adherence to the SWPPP.
- Stockpile and re-utilize onsite topsoil with appropriate erosion control and re-vegetation measures so as to limit the amount of material potentially removed from the Proposed Site.
- Follow Blasting Protocols of the Town, County and/or State should the need arise.

The following unavoidable adverse environmental impacts that are unable to be avoided upon geology, topography and soils of the Proposed Site due to the Proposed Action:

- Intrusion to underlying bedrock for purposes of well installation.
- Potential blasting and alteration of geological features.
- Disturbance to approximately 1.29± acres of slopes categorized between 15 and 20% and approximately 1.86± acres of slopes categorized at 20%+.
- Disturbance and alteration of existing soils on approximately 34± acres.

See DEIS Chapter VII, *"Unavoidable Adverse Impacts"* for a complete listing.

## 3.6 GROUND AND SURFACE WATER RESOURCES

### 3.6.1 Existing Conditions

The services, expertise and experience of Leggette, Brashears & Graham, Inc. ("Project Hydrologist") were retained to complete testing for ground and surface water resources. The Proposed Site does not contain any significant sand and/or gravel aquifers. The overburden that was inventoried during onsite drilling was consistent with silty, claying material interbedded with sand and gravel. This mixture is underlain with sedimentary bedrock and is categorized as the Martinsburg Formation. The fractures within the bedrock are few and mostly

closed, exhibiting low permeability based on its porosity. Secondary permeability is low to moderate with the presence of interconnected fractures. Water within the bedrock aquifers is found within fractures, joints, bedding, contacts and other secondary openings.

See DEIS Chapter III, Subsection 5, *"Geology, Topography and Soils"* for a more in depth discussion.

Groundwater balance is the comparison of available recharge within the Proposed Action compared to the estimated water demand of the Proposed Action. Recharge is generally directly related to precipitation, yet is hard to measure. Orange County receives on average 43" of precipitation per year, with half being lost to evaporation and transportation processes. The remainder of which is available to become surface water and groundwater runoff, which in turn recharges the bedrock aquifer. Based upon various published studies its determined recharge of approximate 96± acre site would be upwards of 61,007 gallons per day (gpd).

Drought conditions would make groundwater stores limited, potentially causing groundwater to be drawn periodically from outside the Proposed Site. During drought conditions the average one-year-in-30 drought record for Orange County is 29.5 inches. This is approximately 69 percent of the average annual precipitation, potentially reducing groundwater recharge to approximately 42,102 gpd for the approximate 96± acre Proposed Site.

Immediately adjacent to the Proposed Site are a number of private homeowner wells. There are also a few municipal wells supplying water to various developments. Hambletonian Park, to the southwest, has two (2) wells in service, and Stonehenge, to the west, has one (1) well in service. In addition to the wells already in service, four projects before the Board have a number of wells drilled and tested. Those being The Heritage to the south and Hambletonian Estates to the northwest; both of which have conducted well testing establishing yields

adequate for each of the project's proposed densities. The Proposed Action could potentially have an impact on adjoining private wells and the Hambletonian Park Water System. In use and adequate for the demand, with some water restrictions implemented during periods of drought, the existing water system for Hambletonian Park has its problems.

To date, four wells have been drilled on the Proposed Site. Wells 1, 2 and 3 in June 2002 by David H. Tompkins & Sons, Inc., and Well 4 by Ken Drilling, Inc. in September 1998, as part of a groundwater investigation program by the Village of Goshen, the well depth and preliminary yield are as follows:

**Table 9**
**Well Information**

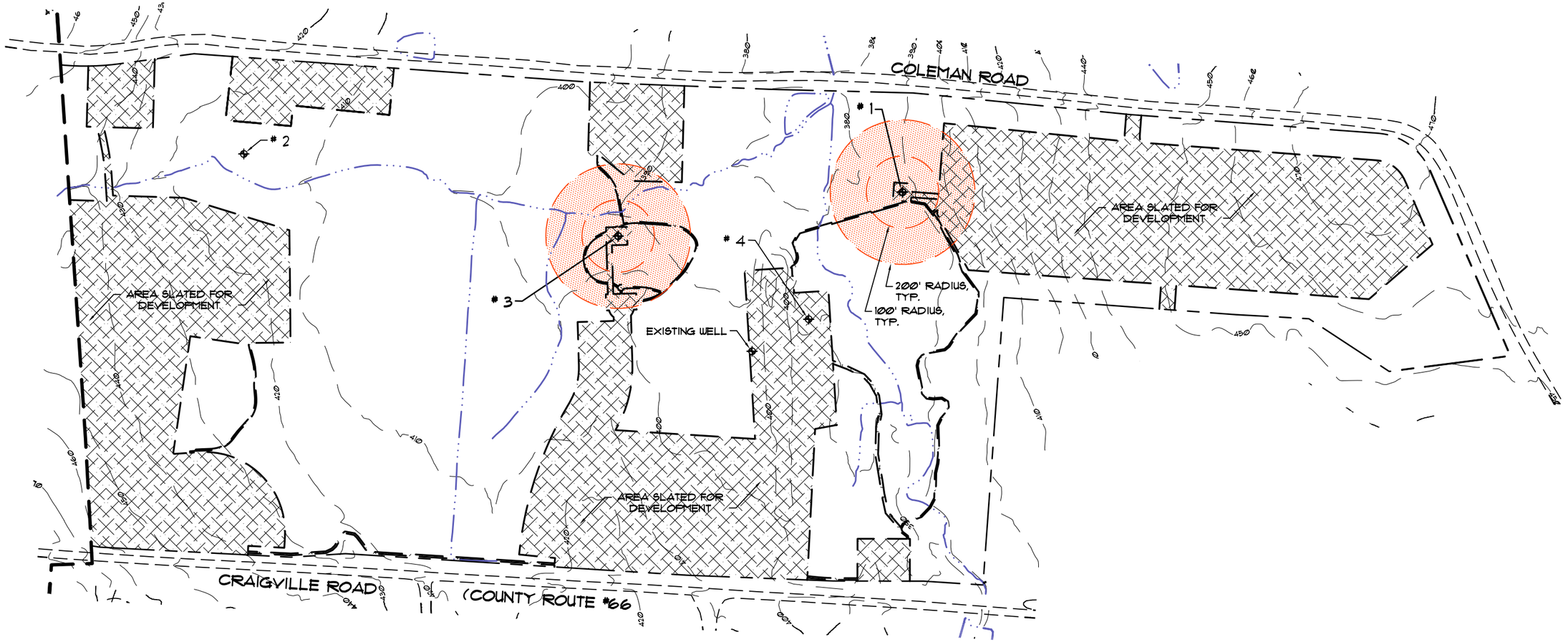
| Well No. | Depth | Preliminary Yield |
|---|---|---|
| 1 | 300 ft. | 300 gpm |
| 2 | 425 ft. | 8 gpm |
| 3 | 500 ft. | 150 gpm |
| 4 | 600 ft. | 75 gpm |

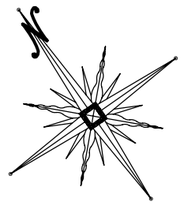
*(GPM) = Gallons Per Minute*

See DEIS Figure III-17, *"Well Locations Map"*.

### 3.6.2 Future Without the Proposed Project

Without the Proposed Action the future of ground and surface water resources would remain unchanged. The water would still flow in the same manner as it does today and continue its natural processes to recharge the areas aquifers. The only change to this resource would be the future draw on the aquifer from factors outside the Proposed Site boundaries, along with any natural processes that could affect quantity and quality.



300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

## WATER LOCATIONS NOTES:

1. THE EXISTING WELL ALONG WITH WELL # 2 & # 4 ARE TO ABANDONDED AND NOT TO BE USED FOR THE PROPOSED DEVELOPMENT

## WELL LOCATIONS LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- WELL LOCATION

E.I.S. FIGURE III-17

# WELL LOCATIONS

SCALE: 1 IN. = 1300 FT.

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### 3.6.3 Potential Impacts

The Proposed Action will introduce 229 new residential structures and 30,000± sq. ft. of commercial space at full build-out, causing an increased amount of groundwater withdrawn from the aquifer within the vicinity of the Proposed Site. The increased withdrawal has the potential to decrease regional water levels and capacity of nearby domestic supply wells. An inventory of public and private water supply wells within 2,500 feet of the Proposed Action's well locations has determined only a low density of private wells is evident. It has been determined by the Project Hydrologist that wells outside 2,500 feet should and would not be significantly impacted due to separation distances and the determined underground flow of available groundwater. Estimated demands for the Proposed Action is upwards of 65,800 gpd at a rate of 100 gpd per-bedroom and 0.1 gpd per sq. ft. of commercial space:

- *68 bedrooms X 100 gpd = 61,800 gpd*
- *30,000 sq. ft. x 0.1 gpd = 3,000 gpd*

Wells #1 and #3 are to be utilized by the Proposed Action and subject to substantial well testing. As per Town of Goshen Zoning Code Appendix C, *Water Testing Protocols,* at short duration step-drawdown pumping test was completed between October 21 and 24, 2002 on Well #1 and October 7 and 10, 2006 on Well #3. This was accomplished so as to collect data on aquifer parameters, well log co-efficient and well efficiency. Based upon collected information, Well 1 was determined to be the most productive well. Therefore, because NYSDOH requires supply to meet twice the average estimated daily demand with the most productive well out of service. The pump test results are summarized in the table on the following page:

| **Table 10**<br>**72-Hour Pump Test Results** | | | |
|---|---|---|---|
| **Well No.** | **Pump Rate** | **Drawdown** | **90% Recovery Time** |
| 1 | 250 gpm | 134.2 ft. | 48 - 60 hours |
| 3 | 45 gpm | 276.95 ft. | 14 hours |

Based upon the pump test data, Well #1 would produce 360,000 gpd at maximum capacity and Well 3 would produce 122,400 gpd at maximum capacity. The estimated water demand for the Proposed Action is 65,800 gpd at full build-out, approximately 7.3 times less than the potential capacity.

During the 72-hour pump tests, a monitoring program was simultaneously running including adjacent domestic wells, the closest Hambletonian Park Water District well, wetland areas and stream courses. These wells were monitored utilizing dedicated pressure transducers and manual measurements collected with an electrical tape (M-scope) and ACOE wetland areas utilized Piezometers. The monitoring was conducted so as to understand the affect on water levels and/or yields during pumping rates. Additionally, monitoring was able to determine if hydraulic connections exist between the aquifer and the wetlands during the pumping conditions. The final piece of monitoring was a portable weather station collecting data on precipitation, barometric pressure and temperature.

See DEIS Appendix II, *"Well Testing Program"* for a more in depth discussion.

Groundwater recharge post development may potentially decrease due to development of the Proposed Action. The introduction of approximately 14.81± acres of impervious surface for public roadways will direct the available precipitation away from the areas it was to fall and into areas for stormwater management. Once within these areas it will be retained and filtered for quantity and quality, once discharged it would inevitably be available for recharge to the Proposed Site's underlying aquifer. Although the Preferred Plan would utilize the

existing Village of Goshen WWTP, ultimately removing groundwater from the Proposed Site's watershed, the potential for water taken from the aquifer for domestic water could be utilized and dispensed to a centrally located WWTP, should the Village fail to allow connection.

During and after construction activities, the Proposed Action has the ability to introduce trace concentrations of chemicals into the area's water supply. These chemicals consist of nitrogen, phosphate and chloride from domestic sewage, chloride from road salt applications and potential hydrocarbons and metallic ions from roadways and automobiles. Although these chemicals have a potential of effecting groundwater resources, the previously mentioned management practices will ensure that quality of exiting water resources will be at or above existing conditions within the vicinity of the Proposed Site.

Irrigation of the Proposed Action could potentially cause an increase draw of groundwater from the aquifer. The Project Sponsor has not intended to provide any installed, permanent irrigation for the re-vegetation of disturbed areas. The proposed planting will be of native varieties that are content with the climate and conditions associated with the Proposed Action. Any irrigation would be to establish the plantings for a period of time after installation, which will most likely be from an outside source and not from the underlying aquifer. Once the plantings are established, irrigation would not be needed; proper measures are to be discussed with the Planning Board and in place prior to final approval, i.e., performance bonding of the proposed plantings. Irrigation by individual homeowners after occupancy would be from private supply and regulated by seasonal restrictions of the municipality, similar to those already established within other water districts.

### 3.6.4 Mitigation Measures

In attempts to mitigate potential impacts from the Proposed Action, the following practices will be used:

- Installation of erosion control devices around the perimeter of disturbances to prevent sediment from exposed topography and soils from entering the wetlands and watercourses.
- Implementation of the SWPPP in accordance with NYSDEC standards, ensuring quality of water returned to the ground.
- Modifications to the system could include connecting existing residential units to the proposed water system.
- Conduct well monitoring during construction build-out along with a period of time post-construction, should it be deemed necessary.
- Any individual's well complaint received by the Town Building Department of Proposed Action water operator would be immediately referred to the developer/agent for resolution and the following procedures would be followed:
    - Prior to final subdivision approval, a bond would be established by the Project Sponsor, in an amount to be set by the Planning Board, to ensure that such homeowner complaints are property investigated and corrected.
    - The developer would retain a hydrogeologist to investigate the complaint.
    - This investigation would include a review of available water level data from the Proposed Action operating wells and off-site wells monitored, together with data obtained during investigation of the complainant's well.
    - The Project Sponsor would submit a description of the complaint, recommendations and hydrogeologist data to the Planning Board for review.
    - If the individual well was not being affected by the Proposed Action's water supply wells as determined by the Planning Board upon recommendation by their consulting hydrogeologist, the homeowner would be referred to a

competent well or pump contractor for remediation at the homeowner's cost.

- If the individual well was being affected by the Proposed Action's water supply wells, the following possible remedies would be pursued and paid for by the developer:
    - lowering the homeowner's pump
    - deepening the well
    - redeveloping the well
    - drilling a new well, or
    - connecting the resident to the Proposed Action's public water supply system; and, if this alternative is chosen by the developer, the homeowner would be given one (1) year of free water service, and would thereafter pay for metered water use. The connection would essentially eliminate the homeowner's costs related to the maintenance of the private wells and pumps on the property in exchange for metered service.
- The homeowner would be notified of the Planning Board's findings.
- Further, a bond would be established by the Project Sponsor, in an amount to be set by the Planning Board, to ensure that such homeowner complaints are properly investigated and corrected.

The following are unavoidable adverse environmental impacts that are unable to be avoided upon groundwater and surface water resources of the proposed site due to the Proposed Action.

- Creation of approximately 14.81± acres or 15.43% of the Proposed Site as impervious surface, limiting the area of stormwater infiltration.
- Approximately 65,800 gpd drawn from the underlying aquifer.

## 3.7 STORMWATER MANAGEMENT

### 3.7.1 Existing Conditions

The services, expertise and experience of Lanc & Tully Engineering and Surveying, PC ("Project Engineer") were retained to design and analyze stormwater management for the Proposed Site. Stormwater runoff and its potential to reduce water quality and increased quantity are studied through the inventory of existing conditions and the potential conditions post development. The subsequent data is compiled into a Stormwater Pollution Prevention Plan ("SWPPP"), the purpose of which is to evaluate associated impacts of development on the land and propose mitigation measures to limit the potential impacts.

The analysis that is presented in the DEIS and SWPPP was created and developed by the use of Haestad Methods computer program Pond Pack. The program utilizes the Soil Conservation Service Technical Release 55 ("SCS TR-55"), *Urban Hydrology for Small Watersheds Methodology* for calculating Curve Number ("CN"), Time of Concentration ("TC"), runoff values and hydrographs for development of drainage and hydraulic calculations. For purposes of this report, utilizing the standards set forth by the NYSDEC, specific storm events were studied. The storm events are as follows:

- 1- year (channel protection)
- 10-year (overbank flood)
- 100-year (extreme storm)

Finally, the SWPPP is specific to the Proposed Site based upon current and proposed cover types, soil types, runoff coefficients, flow paths and rain events.

See Appendix F, *"Stormwater Pollution Prevention Plan"* for a more in depth discussion.

The existing stormwater that is deposited on-site starts from two high points and flows towards a central location. The first starting point begins at an elevation of roughly 470± feet along the northwest property line and flows in an eastern direction towards the existing wetlands and pond centrally located along the

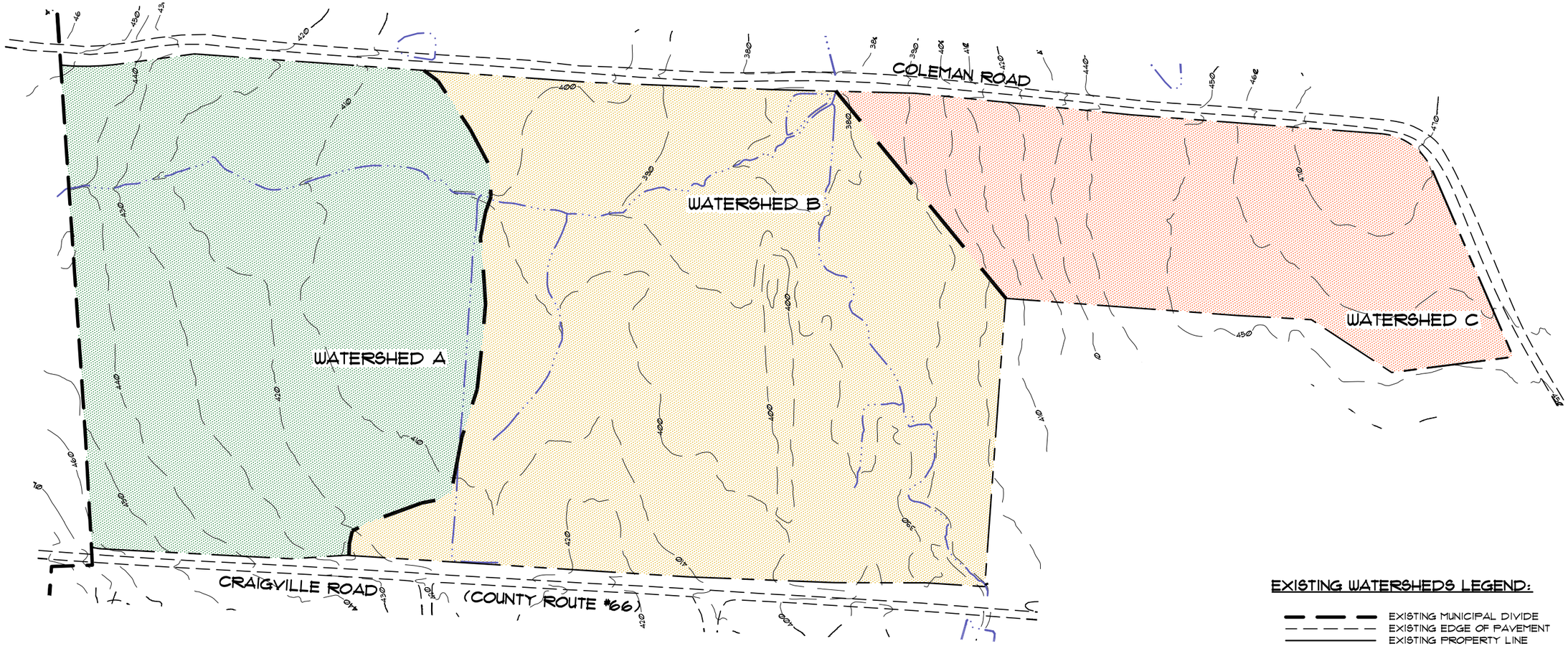
northeast property line and Coleman Road. The second starting point is at an elevation of roughly 460± feet at the eastern corner of the parcel. Stormwater from this location generally flows in a northwestern direction, ending in the wetlands and pond centrally located along the northeast property line and Coleman Road. From that point the stormwater enters a culvert under Coleman Road where it joins a stream network leading into the Otterkill and Moodna Creek, ultimately working its way to the Hudson River. Portions of the stormwater are retained on-site within the wetlands where it assists groundwater recharge. The culvert under Coleman Road is considered the "study point" for the stormwater discharge.

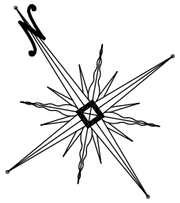
The drainage area and associated watersheds were established using a combination of information obtained from a topographic survey, Orange County Water Authority 2-foot Topographic Data and the U.S.G.S. Quadrangle Map for Goshen. The Proposed Site in its pre-development status has been determined to contain three watersheds:

- Watershed A is approximately 33± acres on the west side of the Proposed Site. It is a mixture of woodlands and scrub/shrub area, both of which are in and out of Federal wetlands. The watershed ultimately drains north to east.
- Watershed B is composed of 43± acres of woodland at the center of the Proposed Site. This watershed ultimately drains to the north with a major stream contribution from the area of Land of Goshen Park.
- Watershed C is approximately 21± acres of woodland on the eastern portion of the Proposed Site. This watershed drains south to west.

See Figure III-18, *"Existing Watersheds"*.

The on-site soils were extracted from the Orange County Soil Survey as documented by the Soil Conservation Service. The soils contained within the three determined watersheds are consistent with Hydrologic Group C and D soils. Hydrologic Group C soils are comprised of Erie, Mardin and Bath Nassau

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GRAPHIC SCALE:
1 IN. = 300 FT.

## ACREAGE OF EXISTING WATERSHEDS:

| | |
|---|---|
| WATERSHED A | 33.05± ACRES |
| WATERSHED B | 43.12± ACRES |
| WATERSHED C | 19.24± ACRES |
| TOTAL: | 95.41± ACRES |

## EXISTING WATERSHEDS LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- EXISTING WATERSHED DIVIDE
- WATERSHED A
- WATERSHED B
- WATERSHED C

E.I.S. FIGURE III-18

# EXISTING WATERSHEDS

SCALE: 1 IN. = 300 FT.

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complex and are usually characteristic of slow infiltration, imbedding downward movement of water. Hydrologic Group D soils are comprised of Madalin and Rock Outcrop-Nassau complex and are usually characteristic of slow infiltration due to clay soils and permanent high water table.

In evaluating the existing runoff volumes within the Proposed Site limits, the contributing soil types and various vegetation was determined by each watershed. Based upon the previous information, a cumulative CN was established to associate the average yearly rainfall to the anticipated runoff volume of the watersheds. The next step determined the peak flow rates by utilizing travel paths that were the most hydraulically distant to the study point. Through the use of the NYSDEC Stormwater Management Guidelines and the TR-55 methodologies, a collective TC was determined. This produced the average time it takes for each watershed to drain to the study point.

With the collective information, hydrographs were established for each watershed determining the pre-development conditions. Peak runoff and discharge volume where calculated for the 1, 10, 25 and 100 year design storm. The drainage characteristics associated with the Proposed Site under pre-development conditions is summarized in the following table:

**Table 11**
**Existing Drainage Characteristics**

| On Site | Area (Ac) | CN | TC (Hrs.) | Peak Runoff (cfs) 1 year | Peak Runoff (cfs) 10 year | Peak Runoff (cfs) 25 year | Peak Runoff (cfs) 100 year |
|---|---|---|---|---|---|---|---|
| A | 33 | 75 | .60 | 16.69 | 56.78 | 73.70 | 96.17 |
| B | 43 | 75 | .96 | 16.76 | 57.82 | 75.27 | 98.51 |
| C | 20.6 | 73 | .59 | 9.04 | 33.23 | 43.77 | 57.88 |
| Outfall | --- | --- | --- | 40.42 | 140.72 | 183.52 | 240.54 |

As a part of the stormwater analysis, an understanding of what happens downstream was studied. Three separate analyses were modeled. The first was a large-scale watershed that included the Proposed Site under pre-development conditions. The second analysis consisted of the same area post-development and no on-site stormwater management. The final analysis utilized the large-scale watershed including the Proposed Site, but included on-site stormwater management. The following table summarizes the findings:

**Table 12**
**Large Scale Drainage Characteristics**

| | Pre-Development (cfs) | Detained Post-Development | | Undetained Post-Development | |
|---|---|---|---|---|---|
| | | (cfs) | % Increase | (cfs) | % Increase |
| Overbank Protection (10-Year Storm) | 655.14 | 649.75 | -0.8% | 643.58 | -1.8% |
| Extreme Flood Protection (100-Year Storm) | 1100.96 | 1091.46 | -0.8% | 1079.94 | -1.9% |

Based upon these findings, it is determined the best scenario is not to detain flows on site since no benefit is achieved through such detention.

### 3.7.2 Future Without the Proposed Project

The existing stormwater would follow the same path that currently exists without the Proposed Action. The stormwater would continue entering the wetlands for filtration and groundwater recharge through its natural processes. The Otterkill and Moodna Creek would still function and feed through to the Hudson River providing drainage routes for the areas excess water.

### 3.7.3 Potential Impacts

The Proposed Action implements the removal of existing vegetation and replaces it with structures and pavement, thus increasing the amount of impervious surface and decreasing the amount of precipitation that ultimately would infiltrate the

existing soils. Typically this means the amount of stormwater runoff is increased. The Proposed Action will also affect the quality of the stormwater during times of construction and during occupancy, ultimately resulting in potential degradation of groundwater. The amount of sediment and pollutants that will potentially be introduced to the stormwater flows will be increased.

See DEIS Chapter III, Subsection 6, for a more in depth discussion on *"Groundwater and Surface Water Resources"*.

The aforementioned existing conditions, including proposed conditions associated with the Proposed Action, were analyzed creating post-development conditions to establish potential requirements for detaining and treating 1-year channel protection flows and meeting water quality goals. All the processes utilized in understanding the existing conditions where combined with the proposed cover types to understand the flows for the post-development conditions. The discharge point and proposed watersheds are consistent with the pre-development conditions. The proposed watersheds are as follows:

- Watershed A1 is approximately 2.2± acres and is located in the southwest corner of pre-development Area A, including drainage from part of the access road and the 55' x 100' lots. Water quality and 1-year flows are channeled into a pocket pond (Pond A1). After treatment drainage from this area follows pre-development drainage patterns to the arch culvert under Coleman Road.
- Watershed A2 is approximately 1.8± acres and is the western portion of pre-development Area A. This area includes townhouses, the 55' x 100' lots and a parking area. Drainage will be directed to a bio-retention facility for treatment via storm drains and back yard swales.
- Watershed A3 is approximately 4.4± acres and is the northeastern portion of pre-development Area A. This area includes a large portion of the access road, townhouses, the 55' x 100' lots, multi-family units and a park area. Water quality and 1-year storm drainage will be directed to an underground water quality facility located under the park area. After

treatment drainage from this area will follow pre-development drainage patterns to the arch culvert under Coleman Road.

- Area A4 includes the remaining area of pre-development Area A. The total area of 25.8± acres includes three (3) estate lots and a large wetland area. Drainage follows pre-development patterns to the arch culvert under Coleman Road.
- Watershed B1 is approximately 3.3± acres and is the eastern portion of post-development Area B, comprised of a portion of the access road, townhouses and rear units on 45' x 110' lots. Water Quality and 1-year storm flows are channeled to a pocket pond (Pond B1). After treatment drainage follows pre-development patterns north to the arch culvert under Coleman Road.
- Watershed B2 is approximately 5.2± acres and is comprised of a portion of the access road, parking lots, rear units on 45' x 110' lots, mixed use apartments, multi-family units, and commercial buildings. The water quality and 1-year storm from this development is channeled to an underground water quality facility located under the parking lot at the southwest corner of pre-development Area B. Following treatment the drainage will follow pre-existing development patterns to the outfall.
- Watershed B3 is approximately 1± acre and is the northern portion of pre-development Area B, including the last 2 multi-family units and a parking lot. This area will be directed to a bio-retention facility for water quality treatment. Following treatment the drainage will flow north to the outfall.
- Watershed B4 is approximately 33.5± acres and includes the remaining area of pre-development area B, including two (2) estate lots, and a large wetland and stream area. A commercial property off of Craigville Road is also included in B4. This area consists of bio-retention facility and drains north to the arch culvert.
- Watershed C1 is approximately 8.1± acres and includes the drainage from the estate lots that will be diverted into a pond to the south (Pond C1). After treatment, this drainage follows pre-existing patterns to the outfall.

- Watershed C2 is approximately 12.3± acres and includes the remaining area of pre-development Area C. The drainage from this area follows pre-development patterns to the outfall.

See Figure III-19, *"Proposed Watersheds"*.

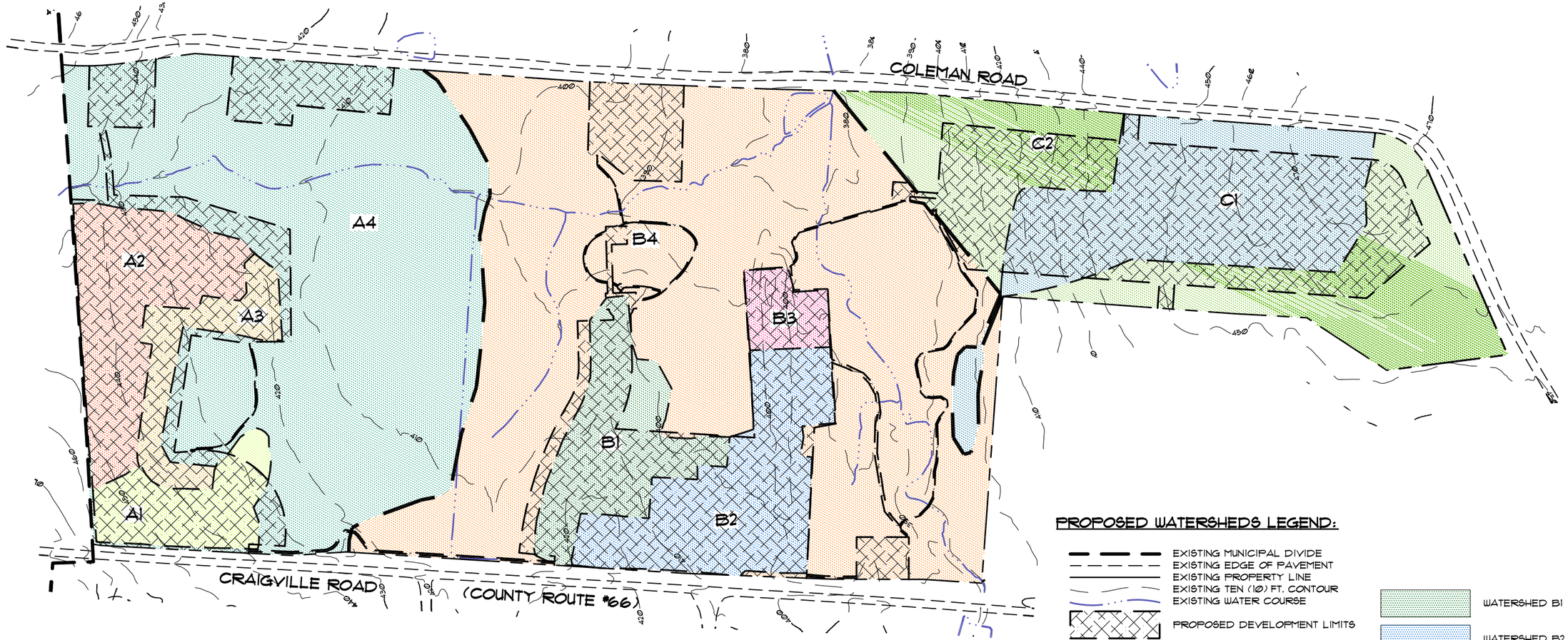
The following table summarizes the drainage characteristics associated with the Proposed Site under post-development conditions:

**Table 13**
**Proposed Drainage Characteristics**

| Watershed Area | Area (Ac.) | CN | Tc (hrs.) | Peak Runoff (cfs) 1 year |
|---|---|---|---|---|
| Area A1 | 2.2 | 88 | .12 | 3.75 |
| Area A2 | 4.4 | 92 | .16 | 8.37 |
| Area A3 | 1.8 | 94 | .08 | 3.97 |
| Area A4 | 25.8 | 77 | .61 | 14.01 |
| Area B1 | 3.3 | 94 | .35 | 5.43 |
| Area B2 | 5.2 | 92 | .08 | 10.76 |
| Area B3 | 1.0 | 95 | .08 | 2.26 |
| Area B4 | 33.5 | 76 | .72 | 16.44 |
| Area C1 | 8.1 | 79 | .29 | 7.05 |
| Area C2 | 12.3 | 73 | .28 | 7.44 |
| Outfall* | ---- | --- | ---- | 40.19 |

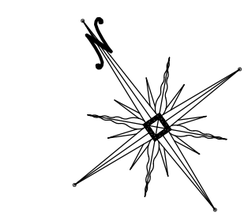
*Peak runoff values are shown for the Proposed Site only and they are not in the context of the watershed. The peak runoff considers detention in onsite facilities.

West Nile Virus is a mosquito borne disease that can cause encephalitis, a brain inflammation. Infected mosquito's eventually pass the virus to birds, animals, and humans. Mosquito's larvae utilize any aspect of standing water creating breeding grounds. This is particularly important with development and stormwater infrastructure. Stormwater catch basins are usually designed to quickly direct stormwater areas to be treated. Some will retain small amounts,




## ACREAGE OF PROPOSED WATERSHEDS:

| | |
|---|---|
| WATERSHED A1 | 2.24± ACRES |
| WATERSHED A2 | 4.40± ACRES |
| WATERSHED A3 | 1.90± ACRES |
| WATERSHED A4 | 24.51± ACRES |
| WATERSHED B1 | 3.80± ACRES |
| WATERSHED B2 | 5.01± ACRES |
| WATERSHED B3 | 1.02± ACRES |
| WATERSHED B4 | 32.81± ACRES |
| WATERSHED C1 | 8.53± ACRES |
| WATERSHED C2 | 11.19± ACRES |
| TOTAL: | 95.41± ACRES |



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GRAPHIC SCALE:
1 IN. = 300 FT.

## PROPOSED WATERSHEDS LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- PROPOSED WATERSHED DIVIDE
- WATERSHED A1
- WATERSHED A2
- WATERSHED A3
- WATERSHED A4
- WATERSHED B1
- WATERSHED B2
- WATERSHED B3
- WATERSHED B4
- WATERSHED C1
- WATERSHED C2

E.I.S. FIGURE III-19

# PROPOSED WATERSHEDS

SCALE: 1 IN. = 300 FT.

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either by design and/or collected debris; this will be addressed through long term maintenance. Stormwater detention basins are usually designed to drain within, at most a couple of days. This will limit production for mosquitoes since larvae development is approximately four (4) days. Some stormwater systems and wetlands provide for standing water to remain as part of its design. The standing water potentially could provide adequate habitat for mosquito breeding, yet it is significantly reduced due to the presence of natural predators. Stormwater retention ponds are designed to NYSDEC Standards and Appendix H of the DEC *Stormwater Management Design Manual* states, "Zone 2 includes all areas that are inundated below the normal pool to a depth of one foot, and is the primary areas where emergent plants will grow in a stormwater wetland. Zone 2 also coincides with the aquatic bench found in stormwater ponds. This zone offers ideal conditions for the growth of many emergent wetland species. These areas may be located at the edge of the pond or on low mounts of earth located below the surface of the water within the pond. When planted, Zone 2 can be an important habitat for many aquatic and non-aquatic animals, creating a diverse food chain. This food chain includes predators, allowing a natural regulation of mosquito populations, thereby reducing the need for insecticidal applications." The proposed stormwater management facilities have been designed in accordance with the DEC requirements and planting of the facilities will be made in accordance with accepted guidelines. There is not expected to be any significant growth in the populations of mosquitoes in the vicinity of the Proposed Site as a result of the Proposed Action.

#### 3.7.3.1 Water Quality

The treatment of stormwater runoff for the potential increase of sediment and pollutants, a number of facilities will be used. The facilities consist of three (3) stormwater ponds, three (3) bio-retention areas, and two (2) underground off-line water quality structures. These facilities were chosen as the best management practices in accordance with the specifications of the NYSDEC within the *Stormwater Management Design Manual* for the Proposed Action. These

facilities are designed and to be installed in coordination with NYSDEC Stormwater specifications, found within the aforementioned manual.

The design for water quality has been prepared to not only provide water quality, but also to provide downstream channel protection. Water quality has been provided by the provision of twenty-four (24) hours of extended detention for the 1-year design storm. The one (1) year design storm will be released from the facilities at a rate such that the runoff will be discharged over twenty-four (24) hour period after the design storm occurs, ultimately adhering to a quality at or above existing conditions and at or below the quantity of existing conditions.

Based upon the design calculations, extended detention is not needed for the ten (10) and 100 year design storm. The proposed facilities will insure that the tributary areas receive adequate treatment to provide the required levels of water quality for discharge off site. The areas of impervious surfaces will receive treatment and be filtered by a variety of methods between the impervious surfaces and the discharge point of the Proposed Site.

Construction activities create a potential for erosion and the transport of sediment from the Proposed Site. The sediment could negatively affect downstream water quality and the wildlife that depends upon it. As part of the Proposed Action, a SWPPP that complies with the latest requirements of the NYSDEC has been prepared. In accordance with the permit requirements, measures of control for stormwater quality and quantity have been designed and are fully presented in the SWPPP. Prior to construction, the Notice of Intent for coverage under the permit will be made to the NYSDEC.

The Proposed Action will generate approximately 65,800 gallons per day of wastewater that will be disposed of through either a new onsite WWTP or through connection to the Village of Goshen WWTP. If the disposal is made through the connection to the Village of Goshen sanitary collection system, there will be o

discharge expected to either the surface water resources or groundwater resources in the immediate vicinity of the Proposed Site.

Should the onsite WWTP be utilized, it is anticipated that discharge of treated wastewater would be conveyed to the existing stream that traverses the Proposed Site. The discharge of the WWTP would need to meet the standards set by the NYSDEC and would include monitoring and the preparation of reports as part of compliance with NYSDEC requirements for a SPDES Permit. Under this scenario, there would be no discharge of wastewater that would adversely affect groundwater resources in the area of the Proposed Site. Ultimately, should this option be implemented, the Project Sponsor will have a Waste Assimilation Capacity ("WAC") analysis completed.

The Proposed Action includes the conversion of portions of the Proposed Site from natural conditions to roads, buildings and landscape areas. The excavation required for the conversion creates the potential for erosion and the transport of silt during rainfall events. Without mitigation, the erosion and silt could potential discolor the watercourses and affect wildlife that depend upon quality of downstream waters. In accordance with NYSDEC Guidelines, a SWPPP has been prepared to provide for erosion and sedimentation control measures. The measures proposed include three stormwater ponds with forebays, three bioretention areas, two off-line water quality measures, siltation fence and other erosion control measures. In addition, best management practices for construction and long-term site facility maintenance are indicated on the plans that call for weekly site inspections during construction and annual inspections of permanent stormwater facilities to ensure proper function and maintenance. The implementation of the measures, identified along with proper maintenance will prevent the impacts to the existing bodies of water.

**3.7.3.2 Erosion and Sediment Control**

A SWPPP will be developed and submitted to the NYSDEC for approval. Included in the SWPPP is the full erosion and sediment control measures that will be incorporated into the project construction. These practices will be in accordance with those set forth in the NYSDEC publication entitled *Stormwater Management Design Manual*.

The following erosion control measures will be incorporated, but not limited to, to minimize erosion potential:

- Filter fabric silt fence: Silt fence shall be used to control erosion from sheet flow on slopes not to exceed two horizontal to one vertical. Concentrated flows shall not be directed toward silt fence and spacing shall vary from 50' to 200' depending on slope steepness.
- Permanent and temporary seeding mixtures: permanent and temporary seeding, mulch, fertilizer, soil amendments, and slope stabilization will be used on seeded areas. Land that is stripped of vegetation will be left bare for the shortest time possible. Any area that will remain cleared, but not under construction for 14 days or longer, will be seeded with a temporary mixture. Topsoil shall be stockpiled, stabilized with temporary seeding, and saved for reuse on the Proposed Site.
- Slope Stabilization: All slopes shall be stabilized to minimize erosion. Slopes shall be stabilized with temporary seeding mixtures and straw mulch. Slopes in excess of four horizontal to one vertical shall be stabilized with jute netting and hydro-seed or blown dry mulch. Existing vegetation, which is not to be removed, will also act as filter strips to protect down-slope area. Runoff will be diverted from newly graded areas to prevent erosion until a permanent ground cover has been established.
- Dust Control: Measures for dust control during construction shall be implemented as needed (daily water sprays will be used during dry conditions and Calcium Chloride will be used only if necessary). In addition to water sprays, temporary plantings will aid in minimizing dust.

- Temporary Diversion Swales: Temporary diversion swales shall be constructed to either divert clean storm water runoff from newly graded areas or direct sediment laden runoff to a sediment-trapping device.
- Channel Stabilization: Drainage channels and temporary diversion swales shall be stabilized with seed, jute netting or riprap, as specified, to minimize deterioration of the channel bed.
- Sediment Traps: Sediment traps shall be constructed in the location, and be of size and type specified to collect sediment from sediment laden storm water runoff. Sediment traps shall be constructed downstream of disturbed areas and be in place prior to disturbance within the contributory area.
- Stabilized Construction Entrance: Town roads will be protected by installation of crushed stone blanket for cleaning construction vehicle wheels. Blankets shall be placed at any intersection of a construction road with a paved or publicly owned road. Stabilized construction entrances shall be installed in the location and be of size and type specified.
- Tree Protection: Trees to be preserved within areas of construction shall be protected. In all other areas, construction workers will be directed to avoid the storing of equipment or soil under trees in order to prevent soil compaction.

The erosion control sequence is to begin prior to any site disturbance; the developer should thoroughly review and familiarize the approved erosion control plan. The installation of erosion control measures should begin with the most downstream device, then working upstream. When installing erosion control measures, the sequence should generally be as follows:

- Prior to commencing construction activities, the limits of clearing and grading shall be clearly marked. Perimeter silt fence and stabilized construction entrances shall be put in place.
- Upon completion of clearing and grubbing activities, topsoil shall be stripped from all areas to be disturbed and stockpiled. Stockpiled topsoil

shall be stabilized by temporary seeding and surrounded with a perimeter silt fence.

- Temporary erosion control devices shall be installed prior to commencing earth moving activities. This includes the installation of sediment traps, diversion swales, and check dams beginning at the most downstream portions of the Proposed Site and then working upstream.
- Immediately after completion of rough grading, remaining temporary erosion control shall be installed as specified, including additional silt fence, diversion swales, and check dams. Any areas not requiring further earthwork shall be fine graded topsoiled and stabilized as early as possible.

The maintenance of erosion control devices will be the responsibility of the developer. A critical part of an effective erosion control plan is a conscientious maintenance program. All erosion control devices will be cleared and restored throughout construction to maintain their effectiveness. The Job Superintendent will monitor the condition of all devices and clean or replace them, as conditions require. All erosion control devices shall be installed and maintained in accordance with the approved plans and manufacture's recommendations. The specific maintenance shall include but not limited to:

- Maintaining seeded areas including reseeding weak areas, regarding wash outs and fertilizing.
- Maintaining mulched areas including replacement of disturbed mulched areas.
- All devices shall be inspected after each rain and repaired as needed.
- Sediment shall be removed from behind silt fence when bulges start to occur and fencing reset to original condition.
- Outlets in sediment basins shall be free of silt and debris by hand raking and cleaning after each rainstorm.

- Construction equipment shall not unnecessarily cross drainage swales. Crossing of drainage channels shall be by means of bridges, culverts or other approved methods.
- Culverts shall be maintained free of silt or debris.
- Tree protection fencing to be inspected daily during grading and finish grading operations.
- Daily water sprays will be used as needed. Water sprays will be used to prevent pollution from dust until construction is completed and soil is established.

No erosion control structures shall be removed until all work upstream has been completed, stabilized and approved by the Consulting Engineer and Town Representatives. The removal of erosion control devices should generally be as follows:

- After construction, the temporary erosion control structures are to be removed in reverse order with the most upstream structure removed first and thence proceeding downstream.
- All hay bales shall be removed and properly disposed of off-site.
- All tree protection fencing shall be removed after adjacent areas have been graded, topsoiled, seeded, and vegetation has been established.
- All temporary construction culverts shall be removed and areas graded, topsoiled and seeded.
- Any washouts shall be re-topsoiled and seeded.

Details of the erosion and sediment control plan will be incorporated as part of the SWPPP and final site plan. However the above general mitigation measures mentioned above should be implemented for any plan that is brought before the Town of Goshen Planning Board for approval.

See DEIS Appendix IV, "*Stormwater Pollution Prevention Plan*" for a more in depth discussion.

### 3.7.4 Mitigation Measures

In attempts to mitigate potential impacts from the Proposed Action, the following practices will be used:

- The impacts will be limited to the maximum extent practicable, the plans will show the locations and the limits.
- Work associated with each phase and sub phase will be completed in the shortest possible time frame limiting the duration of the impact.
- Installation of erosion control devices, based upon an erosion and sediment control plan, around the perimeter of proposed disturbances to prevent sediment from exposed topography and soils from entering wetlands and watercourses.
- Implementation of the SWPPP in accordance with NYSDEC Standards.

The following unavoidable adverse environmental impacts are unable to be avoided upon stormwater management of the Proposed Site due to the Proposed Action:

- Conversion of approximately 14.81± acres or 15.43% of the Proposed Site form vacant rural land to impervious surface.

## 3.8 INFRASTRUCTURE AND UTILITIES

### 3.8.1 Existing Conditions

There is currently no existing infrastructure and/or utilities servicing the Proposed Site; however, there is direct access to Craigville Road/County Route 66 and Coleman Road. These two roads will serve as access into the Proposed Action, and contain utility lines for electric service, telephone, cable and gas service, otherwise a variety of companies offer supplemental services within the local marketplace. The Village of Goshen has central sewer service with potential connection for wastewater. This connection may be implemented through the existing infrastructure currently established for the adjacent Hambletonian Park subdivision. Hambletonian Park has an established Town Water District, with potential benefits for the Proposed Action and existing residents.

### 3.8.2 Future Without the Proposed Project

The existing infrastructure and utilities on-site as well as off-site would remain the same without the Proposed Action. The potential for connection or upgrades would depend upon future development around the Proposed Site.

### 3.8.3 Potential Impacts

The Proposed Action is to cause a substantial increase in intensity of land use. The basic utilities needed for this increase are readily available along Craigville and Coleman Road. With some needed upgrades, Orange and Rockland Utilities are ready and willing to provide electric and gas service to the Proposed Action. Another option to gas would be the utilization of fuel oil, which is readily available from a variety of vendors in the local marketplace. Time Warner Cable and Frontier Communications are also ready and willing to provide cable, phone and internet services to the future residents. Other options for these services are also readily available from a variety of vendors within the local marketplace.

The Proposed Action will be serviced by central water system. Based upon the current layout, the estimated demand for water is 65,800 gpd. This can be broken down into the commercial and residential aspects as indicated in the table on the following page:

| **Table 14**<br>**Estimated Water Demands** | |
|---|---|
| **Aspect** | **Total** |
| 30,000 sq ft Commercial Space @ 0.13 gpd/sq ft | 4,000 gpd |
| 16 Estate Lots w/4 bedrooms @ 100 gpd / bedroom | 6,400 gpd |
| 41 Units on 55' x 100' lots w/4 bedroom @ 100 gpd / bedroom | 16,400 gpd |
| 12 Units on 45' x 110' lots w/4 bedrooms @ 100 gpd / bedroom | 4,800 gpd |
| 22 Townhomes w/3 bedrooms @ 100 gpd / bedroom | 6,600 gpd |
| 22 Townhomes w/2 bedrooms @ 100 gpd / bedroom | 4,400 gpd |
| 108 Multifamily Condos w/2 bedrooms @ 100 gpd/ bedroom | 21,600 gpd |
| 8 Mixed-use Flats w/2 bedrooms @ 100 gpd / bedroom | 1,600 gpd |
| **Total** | **65,800 gpd** |

In anticipation of the expected demands the Proposed Action will need to produce twice the average flow with the most productive well out of service. The average flow for the Proposed Action is 45.69 gpm. The water system has identified 2 of the 4 wells, #1 and #3 as being wells to be ultimately devoted to the Proposed Action. Well #1 produces upwards of 250 gpm and well #3 was in the range of 92 gpm. In reaching twice the average flow of above 91.38 gpm a water system can be designed taking into account the following requirements.

- The system must provide adequate pressure to all points of distribution.
- The system must consider proper chlorination and required detention volumes for proper disinfection.
- A full days' storage of water must be considered to meet the State requirements for a public water supply.
- The system must provide for fire flows at adequate volumes and pressure throughout the Proposed Action.

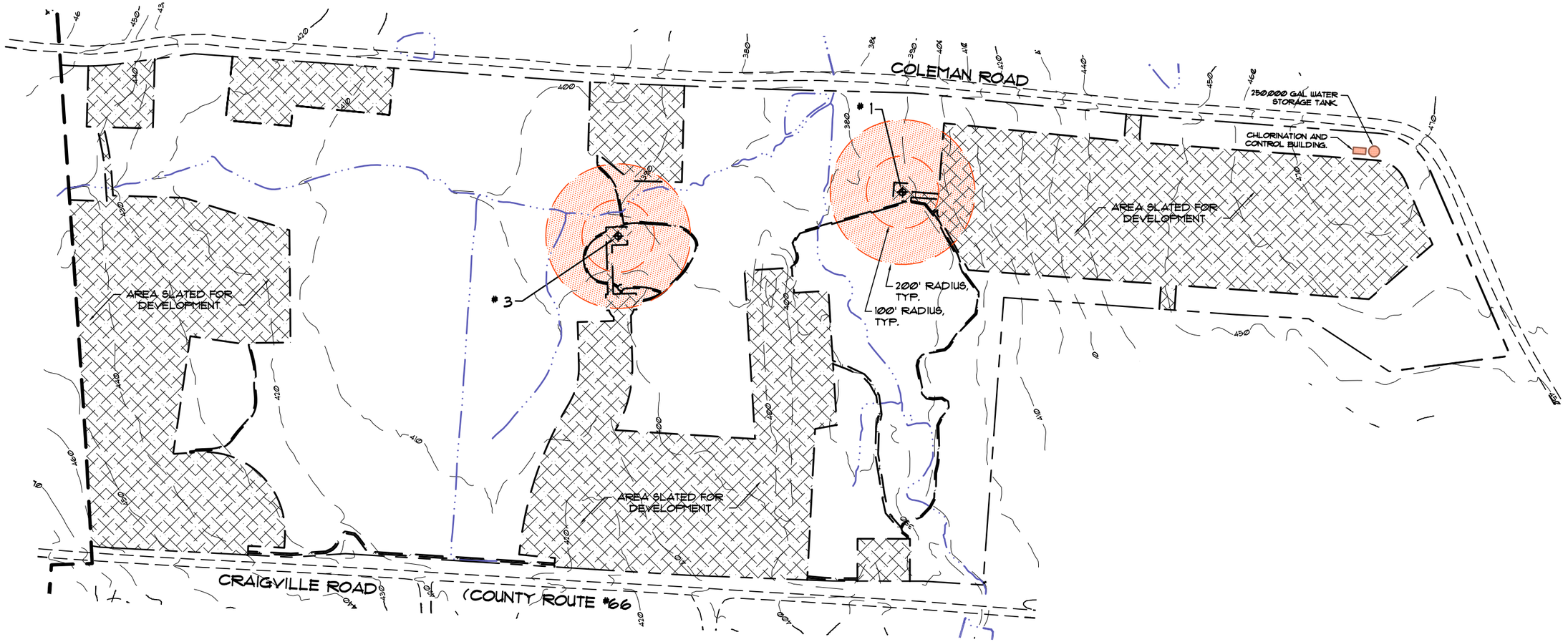
See DEIS Chapter IV, Subsection 6, "*Groundwater Resources"* for a more in depth discussion.

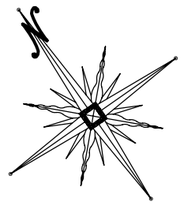
Install a water storage tank at the highpoint within the Proposed Site, at the upper most portion of the estate section in the area of proposed Lot #9. In order to provide the pressures needed to deliver water throughout the Proposed Action, the water tank would need to be a stand pipe about ninety-five feet (95') high with a thirty (30) foot diameter. This configuration would ensure that a static pressure of thirty-five (35) psi operating pressure and a twenty (20) psi pressure under fire flow conditions is provided for all units within the service area. The tank would provide a storage volume of approximately 465,000 gallons, the majority of which being below the level where minimum allowable operating pressure is achieved. The pump required to maintain the level in the tank would need to five (5) hp and be capable of providing ninety-two (92) gpm against a head of ninety-five (95) feet. Due to the height and size of the tank, producing a potential visual impact on nearby homes in the estate section as well as neighboring properties. Operating and maintenance costs associated with the proposed water supply and distribution system include wages, utilities and gas, repairs and maintenance, and other soft costs such as office supplies, accounting, and legal services. The maintenance and operating costs are estimated as follows:

- Electrical Consumption $5,000 per year
- Operator Cost: $40,000 per year
- Chemical Costs: $10,000 per year
- Miscellaneous: $10,000 per year
- Maintenance & Repairs $10,000 per year
- **Estimated Total** **$75,000 per year**

See DEIS Figure III-20A *"Water Option #1"*.

The second option studied consists of a hydropneumatic system installed, which will require a storage tank and a pressure tank. A pressure tank system would be installed at a single location within the Proposed Site, to which each well would pump. The storage tank would need to be sized to provide adequate supply to ensure proper fire flow volumes and proper detention times for disinfection. This



300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

## WATER OPTION # 1 NOTES:

1. THIS OPTION PROVIDED A 250,000 GALLON WATER TANK TO BE INSTALLED AT THE SITE'S HIGH POINT ALONG THE EASTERN PROPERTY LINE AND COLEMAN ROAD.

2. THE TANK WILL NEED TO BE 80' TALL, WITH A BASE ELEVATION OF 476' AND A TOP ELEVATION OF 556'. tHIS WILL ENABLE AND SATISFY THE REQUIRED PRESSURE AND FLOWS NEEDS STRICTLY THROUGH A GRAVITY FED SYSTEM.

## WATER OPTION # 1 LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- WELL LOCATION

E.I.S. FIGURE III-20 A

# WATER OPTION # 1

SCALE: 1 IN. = 300 FT.

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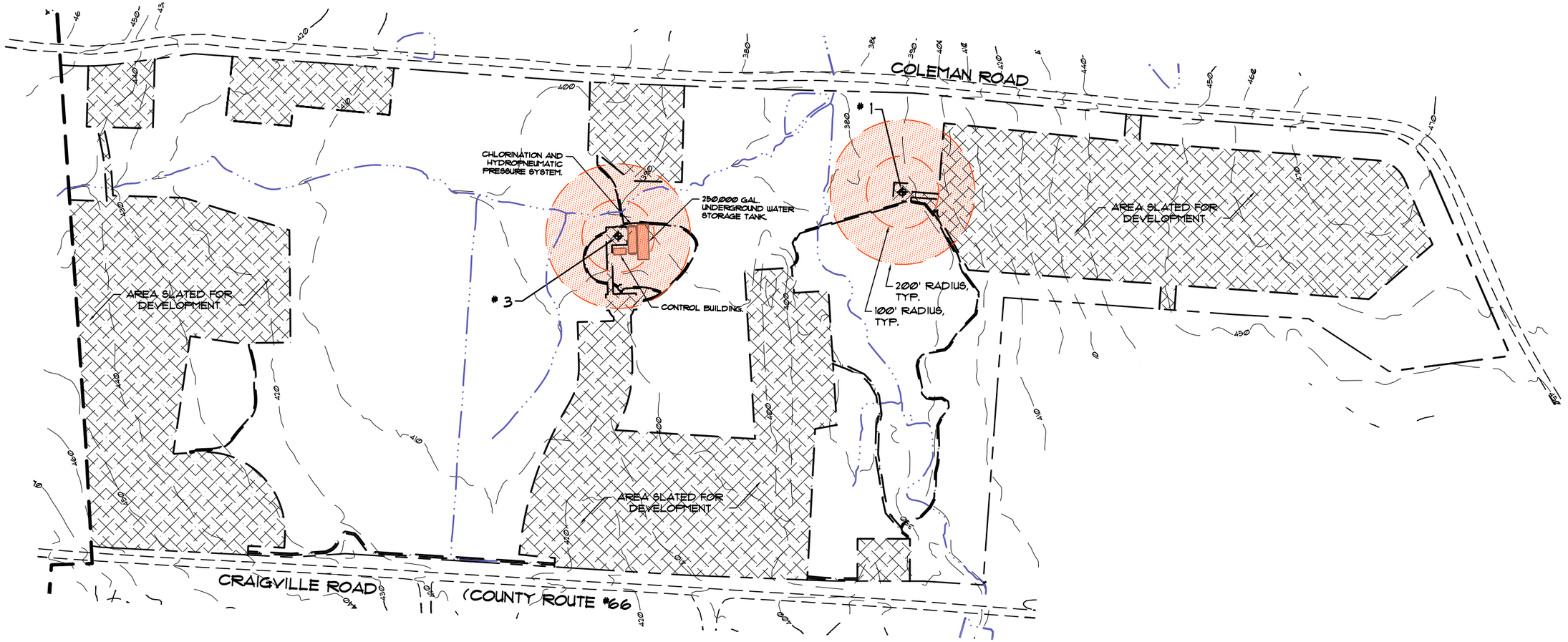
option will be costly to build and maintain but less intrusive. The operation and maintenance costs are estimated as follows:

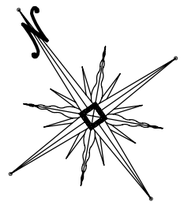
- Electrical Consumption $10,000 per year
- Operator Cost: $40,000 per year
- Chemical Costs: $10,000 per year
- Miscellaneous: $10,000 per year
- Maintenance & Repairs $20,000 per year
- **Estimated Total** **$90,000 per year**

See DEIS Figure III-20B *"Water Option #2"*.

The final option, which will be preferred, would locate a 250,000 gallon storage tank on the hill alongside the existing water tank that supplies Hambletonian Park. This option offers several benefits due to its location and distance from the well sources. The elevation will provide a minimum static pressure of fifty-three (53) psi and a maximum static pressure of ninety (90) psi. The tank will be located next to an existing tank, which will minimize visual impacts. Currently there exist two (2) old unused storage tanks, both of which are in a state of disrepair and are unsightly. Removing the old tanks and replacing them with new tank matching the existing 250,000 gallon tank will serve as an improvement to this location. Adequate volumes and pressures can be provided to insure that fire flows can be provided throughout the Proposed Action. Additionally due to the length of pipe needed to deliver the water from the wells to tank, adequate detention time can be provided within the raw water piping for proper disinfection.

This option will allow for a system that would be more desirable for the Town of Goshen Department of Public Works when considering the dedication of the system to the Town of Goshen. The system can provide water to the Proposed Action and supplement water to Hambletonian Park if need be. Due to potential impacts on neighboring wells from the pumping of the wells associated with the Proposed Action, the dedication of the water system to the Town of Goshen will



300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

## WATER OPTION # 2 NOTES:

1. THIS OPTION PROVIDED A 250,000 GALLON UNDERGROUND WATER TANK TO BE INSTALLED NEAR WELL # 3.

2. THIS OPTION ALSO REQUIRED A HYDROPNEUMATIC PRESSURE BOOST SYSTEM TO OBTAIN THE REQUIRED PRESSURE AND FLOW.

3. THE SYSTEM WILL REQUIRED A SERIES OF PUMPS AND SOPHISTICATED CONTROLS FOR THE ACTIVATION OF FIRE SUPPRESSION APPARATUSES, FURTHERMORE REQUIRE A GREATER DEGREE OF OPERATIONAL MAINTENANCE AS WELL AS HIGHER ENERGY USAGE.

## WATER OPTION # 2 LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- WELL LOCATION

E.I.S. FIGURE III-20 B

# WATER OPTION # 2

SCALE: 1 IN. = 300 FT.

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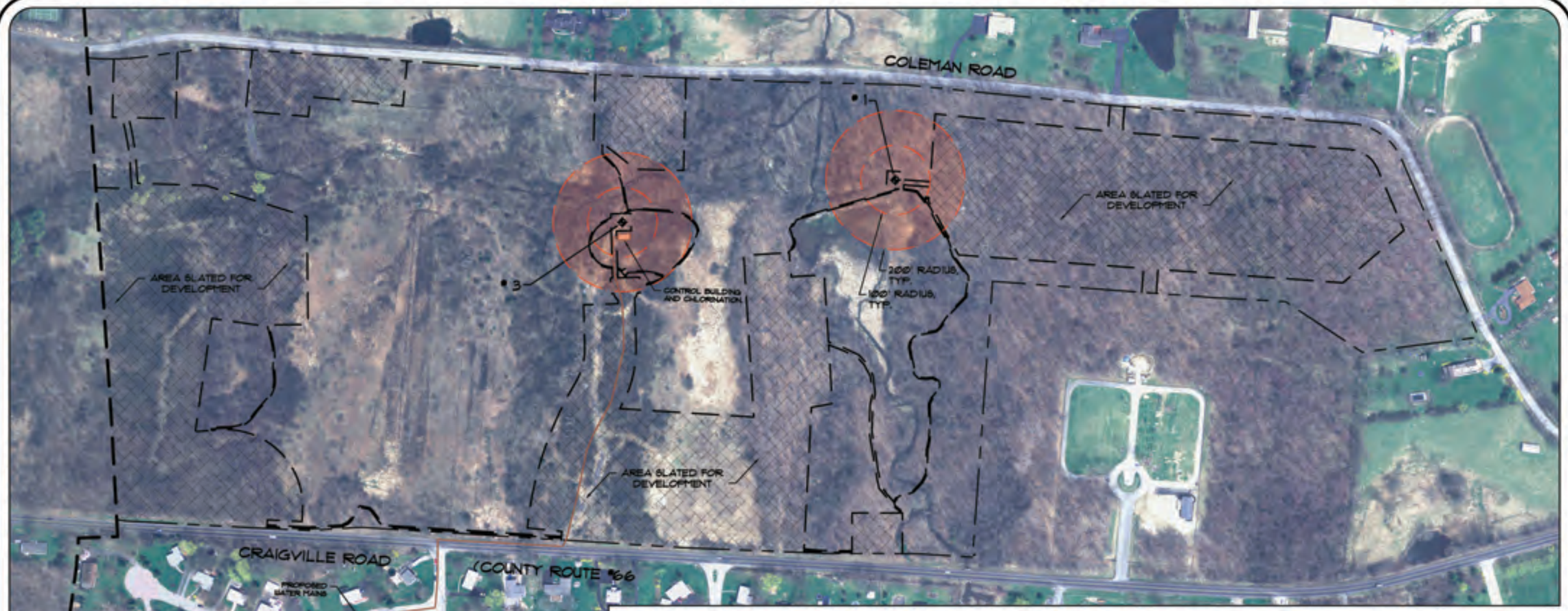
allow for water to be provided to the affected homes to mitigate any negative impact. Each well will be equipped with alarms and warning lights as required by the regulatory agencies having jurisdiction. Additionally, a remote monitoring system will be provided and installed to allow for remote monitoring of each pump system. A chlorination and generation building will be required at the Well #3 site. The well controls and telemetry systems will also be housed at this location. Operation and maintenance costs may vary depending upon who owns and operates the facilities. Should the ownership and maintenance responsibility of the facilities be accepted by the Town of Goshen, there may be some savings associated with a single operator maintaining a combined system which would make maintenance, paperwork, chemical and equipment purchases, etc., more efficient. As summarized below, the estimates assume that an operator would maintain the new facilities without being responsible for the maintenance of the existing water supply and storage facilities located in Hambletonian Park:

- Electrical Consumption $7,500 per year
- Operator Cost: $40,000 per year
- Chemical Costs: $10,000 per year
- Miscellaneous: $10,000 per year
- Maintenance & Repairs $15,000 per year
- **Estimated Total** **$82,500 per year**

See Figure III-20C *"Water Option #3*

The preferred method of providing water to the Proposed Action would ultimately expand the existing water district encompassing Hambletonian Park. The various aspects would be designated and implemented according to Town specifications and offered for dedication for maintenance and upkeep. Additionally, this option would benefit the water district and the existing residents through supplementing water supply during drought conditions as well as potential decrease in cost to each individual homeowner, due to the increase amount of occupants the cost would be associated with.




## WATER OPTION # 3 NOTES:

1. THIS OPTION PROVIDED A 250,000 GALLON WATER TANK TO BE INSTALLED ON THE HILL ALONGSIDE THE EXISTING WATER TANK THA SERVICES HAMBELTONIAN PARK.

2. THE TANK WILL REPLACE TWO EXISTING UNUSED DILAPIDATED TANKS AND REPLACE THEM WITH A NEW WATER TANK MATCHING THE ONE THAT IS TO REMAIN.

## WATER OPTION # 3 LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10') FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- WELL LOCATION

300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

E.I.S. FIGURE III-20 C

WATER OPTION # 3

SCALE: 1 IN. = 300 FT.

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Should one of the other options ultimately be utilized, the various aspects would be designed and implemented according to Town specifications and offered for dedication for maintenance and upkeep. A separate water district would have to be created, removing any potential benefit. Should the Town decline the offer of dedication the systems would be maintained through a private utility company formed as a transportation corporation.

Along with the central water system the development will have a central sewer system. The proposed layout is to be broken into two service areas. The first, Pump Station #1 (PS #1) will handle approximately 37,800 gpd from the following:

**Table 15**
**Pump Station #1 Sewage Demands**

| Aspect | Total |
|---|---|
| 30,000 sq ft Commercial Space @ 0.13 gpd/sq ft | 4,000 gpd |
| 13 Estate Lots w/4 bedrooms @ 100 gpd / bedroom | 5,200 gpd |
| 12 Units on 55' x 100' lots w/4 bedroom @ 100 gpd / bedroom | 4,800 gpd |
| 12 Units on 45' x 110' lots w/4 bedrooms @ 100 gpd / bedroom | 4,000 gpd |
| 6 Townhomes w/3 bedrooms @ 100 gpd / bedroom | 1,800 gpd |
| 6 Townhomes w/2 bedrooms @ 100 gpd / bedroom | 1,200 gpd |
| 72 Multifamily Condominiums w/2 bedrooms @ 100 gpd / bedroom | 14,400 gpd |
| 8 Mixed-use Flats w/2 bedrooms @ 100 gpd / bedroom | 1,600 gpd |
| **Total anticipated demands of Pump Station #1** | **37,800 gpd** |

The second service area, needed for conveyance of effluent to the Village of Goshen, Sewer Option #2, Pump Station #2 will handle approximately 28,000 gpd as indicated in the table on the following page:

**Table 16**
**Pump Station #2 Sewage Demands**

| Aspect | Total |
|---|---|
| 3 Estate Lots w/4 bedrooms @ 100 gpd / bedroom | 1,200 gpd |
| 24 Units on 55' x 100' lots w/4 bedroom @ 100 gpd / bedroom | 11,600 gpd |
| 6 Townhomes w/3 bedrooms @ 100 gpd / bedroom | 1,800 gpd |
| 16 Townhomes w/2 bedrooms @ 100 gpd / bedroom | 3,200 gpd |
| 36 Multifamily Condos w/2 bedrooms @ 100 gpd / bedroom | 7,200 gpd |
| **Total anticipated demands of Pump Station #2** | **28,000 gpd** |

Based on 1988 NYSDEC Design Standards, each system is to be designed for 4 times the average flow, or what would be considered "Peak" flow. This will translate into a flow requirement of PS #1 of 105 gpm and PS #2 a flow of seventy-eight (78) gpm. Based on information obtained from a local pump supplier it appears that PS #1 will require a fourteen (14) horse power ("hp") ABS grinder pump and PS #2 will require a nine (9) hp grinder pump. The flows and potential head pressures were reviewed to insure that the pumps would provide the desired flow under all pumping conditions. With the flows defined for each of the two service areas, options for waste treatment and disposal must be considered.

Two options have been studied to meet the above-mentioned requirements. Option #1 consists of an onsite WWTP. Ownership of this facility would need to be considered but without an agreement with the Town the facility would be owned and operated through a private utility company formed as a transportation corporation. Given available area constraints, a more consolidated or compact type of facility would need to be considered. Several types of systems are commercially available; however, compact plants will normally involve some type of biological system often involving active sludge that will impose an increased license requirement on the facility operator. The stream running

through the property is a tributary to the Otterkill and carries a "C" Classification. The effluent standards applied will have to meet or exceed Class "C" standards. This is not an overly restrictive limit but consideration will need to be given to impoundments (ponds, lakes) downstream and impacts on wetlands. In accordance with correspondence received from NYSDEC, the following effluent limits are utilized based upon the necessary standard for outfall to a Class "C" water course:

- BOD5 = 5 mg/1
- TSS = 10 mg/1
- D.O. = >=7 mg/1
- NH3 = 1.5 mg/1 (June-Oct.)
- NH3 = 2.2 mg/1 (Nov.-May)
- pH = 6.5 – 8.5
- Settleable Solids = 0.1 ml/1
- Phosphorus = 0.5 mg/1 (Total) Per TOGS 1.3.6 and downstream ponded waters

Additionally, disinfection may be required after consultation with the NYSDEC and OCDOH. The proposed discharge will also be required to meet the Regulations for Criteria Governing Thermal Discharges (Part 704) of NYSDEC. These regulations include limits on the changes in the temperature of receiving waters as a result of the discharge of the WWTP. It is anticipated that the limits will be in accordance with those for trout waters which prohibits discharge at a temperature over seventy (70) degrees Fahrenheit at any time, and that the discharge will not raise or lower the temperature of the receiving stream by more than 2 degrees from June through September and by more than 5 degrees from October through May. If needed, the discharge may be mixed with raw water to raise/lower the temperature of the discharge in order to meet these requirements. Privately operated facilities will be carefully reviewed by the NYSDEC and operational assurances and contracts will need to be established with the Town, NYSDEC, HOA and the contracted operator. Inevitably, a WAC Analysis would be completed prior to final approval, should the on-site WWTP option be utilized.

The implementation of an on-site WWTP would inevitably cause more of an impact from the Proposed Action then the alternative, discussed below. The onsite option would place the WWTP on the southwest side of Coleman Road, approximately 150 feet east of the unnamed stream. The area would need to be cleared and graded along with installation of an access road and wetland crossings, causing increased disturbance to the Proposed Site. Aesthetically the WWTP would cause a visual impact in regards to a physical structure being present and potentially lighting associated with the structures. Odors are another concern, the collection and processing of effluent along with introduction of chemical and treatment processes have the potential of emitting unpleasant odors within the vicinity of the WWTP. Utilization of an on-site WWTP could also cause impacts, based upon biodegradables and thermal loading, to the intended receiving watercourse. Ultimately, the effluent would be treated according to NYSDEC Standards, making outfall quality at or above existing conditions and subject to a SPDES permit, making the outfall quantity at or below existing conditions.

A single on-site pump station (PS #1) will be needed to convey wastewater from the low point of the project site to the location of the proposed sewage treatment plan. The elevation of PS #1 is estimated to be 388 feet with the base of the station to be at 380 feet. The elevation of the proposed sewage treatment plan is estimated to be at an elevation of about 390, resulting in a static difference of ten feet (10'). An emergency generator would be required at the pump station to ensure operation in the event of a power outage.

Construction costs of the on-site sewage treatment plant are estimated to be approximately $800,000 and approximately $200,000 for the pump station. Operation and maintenance costs of the sewage treatment plant and pump station are estimated to be about $80,000 annually. Privately operated facilities will be carefully reviewed by the NYSDEC and operational assurances and contracts will

need to be established with the Town, NYSDEC, HOA and the contracted operator. Operation and maintenance of the facilities are summarized as follows:

- Electrical Consumption $15,000 per year
- Operator Cost $40,000 per year
- Chemical Costs $15,000 per year
- Miscellaneous $10,000 per year
- Maintenance & Repairs $10,000 per year
- **Estimated Total** **$90,000 per year**

The second option, which is preferred, will require that the effluent be pumped to the closest accessible manhole within the Village of Goshen sewage collection system. The village manhole under consideration is located on Craigville Road/County Route 66 being some 1,680 feet from the closest entrance to the Proposed Action. The evaluation of the manhole is estimated to be 501' with the invert estimated to 496'. The elevation of PS #1 is to be 388' with the base of the station to be at 380' resulting in a static difference of 116'. The elevation at PS #2 is estimated to be 413.25' with the base of the station to be set at 405.25' resulting in a static difference of 90.75'

The sewage would be conveyed to the Village via a four (4") force main from each pump station to a common six inch (6") force main. The two smaller force mains would tie together into the larger six inch (6") force main located at the entrance to service area for PS #2. This six inch (6") force main will then run approximately 1,600 feet to the nearest manhole located on Craigville Road/County Route 66 in the Village of Goshen. The pump systems would be owned and operated by the Town of Goshen, and would be designed to the Town specifications for the purposes of dedication. The pumps will need to overcome static pressure as well line friction resulting from both stations operating simultaneously. Each station will be equipped with alarms and warning lights as required by the regulatory agencies having jurisdiction. Additionally, a remote monitoring system will need to be installed which is to be provided to Town of

Goshen Department of Public Works (DPW) to allow for remote monitoring of each pump system. Emergency generators would be provided at each pump station to insure operation in the event of a power outage.

The preferred method of providing sewer for the Proposed Action would be through connection to the Village of Goshen WWTP. The various aspects would be designed and implemented according to Town and Village specifications. The systems aspects located within the Town would be offered for dedication for maintenance and upkeep, subject to creation of a sewer district. Should the Village deny the Project Sponsor connection to their existing WWTP, the Proposed Action would build an on-site WWTP designed and implemented according to Town Specifications and offered for dedication for maintenance and upkeep. The Town has the right not to accept the offer of dedication; therefore, a private utility company formed as a transportation corporation would need to be established for maintenance and upkeep.

Construction costs of the pump stations are estimated to be $200,000 each and the 1,600 lineal feet of force main needed alongside Craigville Road is estimated at $55,000. Ultimately this option would require the approval of the Village of Goshen allowing connection of the project into the Village's existing sewer collection system. As correspondence has been received from the attorney for the Village of Goshen indicating that the Village is not interested in entertaining any applications for users beyond the Village territorial limits at this time, this option is not currently feasible. Operation and maintenance of the pump station facilities is summarized as follows:

- Electrical Consumption $7,000 per year
- Operator Cost $15,000 per year
- Miscellaneous $5,000 per year
- Maintenance & Repairs $3,500 per year
- **Estimated Total** **$30,500 per year**

The stormwater management systems for the collection and treatment of rainfall from impervious surfaces utilize a variety of management practices and structures. These are to be designed and implemented to regulations set forth by the NYSDEC and Town of Goshen. The SWPPP put together for the Proposed Action is to outline and define the methods used for the design, installation and maintenance of the structures. The various aspects associated with stormwater are to be offered for dedication to the Town and considered for the formation of a stormwater district to ensure maintenance and upkeep. Should the Town fail to accept the dedication, the facilities would be subject to maintenance and upkeep by an HOA and/or transportation corporation.

See DEIS Chapter III, Subsection 7, *"Stormwater Management"* for a more in depth discussion.

Roadways associated with the Proposed Action are to be constructed to Town specifications and offered for dedication to the Town for maintenance and upkeep, except for the rear alleys, parking lots and individual driveways. As previously mentioned for the other infrastructure related to the Proposed Action, should the Town deny the offer; the roadways would be subject to an HOA and/or transportation corporation. Independently of what ultimately happens to the roadways, the rear alleys, parking lots and individual driveways will be maintained and kept by either a HOA, transportation corporation, or individual occupants, respectively.

See DEIS Chapter II, Subsection 2, *"Project Description"* for a more in depth discussion.

The table on the following page summarizes the potential governing entity ultimately responsible for the various infrastructure and utilities:

**Table 17**
**Management Plan for Infrastructure**

| | Managing Entity | | | | |
|---|---|---|---|---|---|
| Infrastructure and/or Utility | Village of Goshen | Town of Goshen | HOA | Transportation Corporation | Utility Company |
| Electric Service | | | | | X |
| Gas/Fuel Oil Service | | | | √ | X |
| Cable and Telephone | | | | | X |
| Water System | | X | | √ | |
| Sewer System | √ | X | | √ | |
| Stormwater System | | X | | √ | |
| Roadways | | X | | √ | |

X = Preferred Ownership and Maintenance

√ = Alternative Ownership and Maintenance

### 3.8.4 Mitigation Measures

In attempts to mitigate potential impacts from the Proposed Action, the following practices will be used:

- The impacts will be limited to the maximum extent practicable, the plans will show the locations and the limits.
- Connections to existing infrastructure and utilities will be analyzed and implemented wherever feasible, limiting impacts and providing beneficial support.
- Dedication of infrastructure, water, sewer and stormwater, to the Town of Goshen and the formation of districts wherever possible as to ensure proper maintenance and future repair is done correctly to ensure proper functioning of all aspects.
- Dedication of public roads to the Town of Goshen.
- The utilization of on-site WWTP will consists of a closed system eliminating the potential for odors, the structure will be architecturally consistent with the overall development, lighting will be in accordance

with Town specifications, and the area will be supplemented with a variety of deciduous and evergreen vegetation to provide screening.

- Treatment of effluent and stormwater in accordance to NYSDEC standards.

The following are unavoidable adverse environmental impacts that are unable to be avoided upon infrastructure and utilities of the Proposed Site due to the Proposed Action:

- Consumption of petrochemical energy resources during both the period of construction activity and continuing through occupancy of the Proposed Action.
- Discharge of treated effluent upwards of 65,800 gpd in accordance with NYSDEC Standards.

See DEIS Chapter VII, *"Unavoidable Adverse Impacts"* for a complete listing.

## 3.9 TRAFFIC & TRANSPORTATION

The Goshen Town-Wide Traffic Study prepared by Stantec incorporates the John Collins Engineers, PC, basic traffic data that was provided to Stantec. While the Town study evaluates a somewhat longer time horizon, based upon a review of the summary and conclusions of that study, certain recommendations such as signalization, turn lanes, etc. were identified for the area intersections. These are generally consistent with the findings of the traffic study utilized for the DEIS preparation. Based on our review, the traffic study prepared for the Proposed Action uses a common database and has been coordinated with the Town-Wide traffic analysis.

### 3.9.1 Existing Conditions

The services, experience and expertise of John Collins Engineering, PC ("Project Traffic Engineer") was retained to complete a traffic study for the Proposed Action, Heritage Estates and Hambletonian Developments. Traffic counts for each intersection where taken during the weekday AM and PM peak hours and

during the Saturday peak hours. The Project Sponsor was directed to complete the counts while school was in session and during baseball or soccer season, when traffic to Land of Goshen Park is at its heaviest the dates are as follows:

- Wednesday, April 13, 2005
- Thursday, April 14, 2005
- Saturday, April 30, 2005
- Saturday, May 14, 2005
- Saturday, June 11, 2005
- Tuesday, June 14, 2005
- Wednesday, June 15, 2005

From these counts existing volumes were established and projected to a future design year based on historic information. This information combined with the projected traffic volumes from the Proposed Action and other developments, based upon information from the Institute of Transportation Engineers ("ITE"), estimated build traffic volumes were established. The combined information established levels of service and operating conditions for the Proposed Action with recommendations for improvements suggested where necessary.

See Appendix V *"Traffic Study"* for a more in depth discussion.

The counts were conducted at a number of intersections throughout the Town and Village of Goshen. The following locations are the subject of the Traffic Impact Analysis:

- Craigville Road and NYS Route 207
- Craigville Road and Yankee Maid Lane
- Craigville Road and Oakwood Drive
- Craigville Road and Coleman Road
- Craigville Road and Brookside Drive
- Coleman Road and Sarah Wells Trail
- Sarah Wells Trail and NYS Route 207
- Duck Farm Road and NYS Route 17M
- NYS Route 17M at South Street Exit

- NYS Route 17 Westbound ramp and NYS Route 17M Westbound Turn
- South Street and Old Chester Road
- Old Chester Road and Bridle Lane

The following are descriptions of the roadways that are in direct correlation with the Proposed Action:

- Craigville Road (County Route 66) is a two lane (plus shoulders) collector road which runs in a generally southeast and northwest direction. It originates at an intersection with NYS Route 94 in the Town of Blooming Grove. It continues through the Town of Goshen intersecting with roadways such as Knoell Road, Coleman Road, Oakwood Drive and Yankee Maid Lane. It has double yellow centerline and white shoulder striping. It has a posted speed limit of 55 mph which is reduced to 45 mph near Coleman Road and it changes to 30 mph in the Village. The roadway terminates at an offset signalized intersection with Scotchtown Avenue at NYS Route 207.
- Coleman Road is a two lane unstriped roadway which originates at a "stop" sign controlled "T" intersection with Craigville Road, traverses in a northwesterly direction and terminating at a channelized "stop" and "yield" controlled intersection with Sarah Wells Trail. This roadway has a posted speed limit of 35 mph and has a posted weight limit of 5 tons.
- Oakwood Drive is a two lane unstriped roadway which originates at a "stop" sign controlled "T" intersection with Craigville Road. It continues in a southerly direction intersecting with Meadowbrook Lane and other local roadways. The roadway generally consists of one lane in each direction with a posted speed limit of 20 mph.
- Yankee Maid Lane is a two lane curbed roadway, which originates at a "stop" sign controlled "T" intersection with Craigville Road. It continues in a southerly direction intersecting with Upper Magic Circle Drive and other local roadways. The roadway generally consists of one lane in each direction with a posted speed limit of 20 mph.

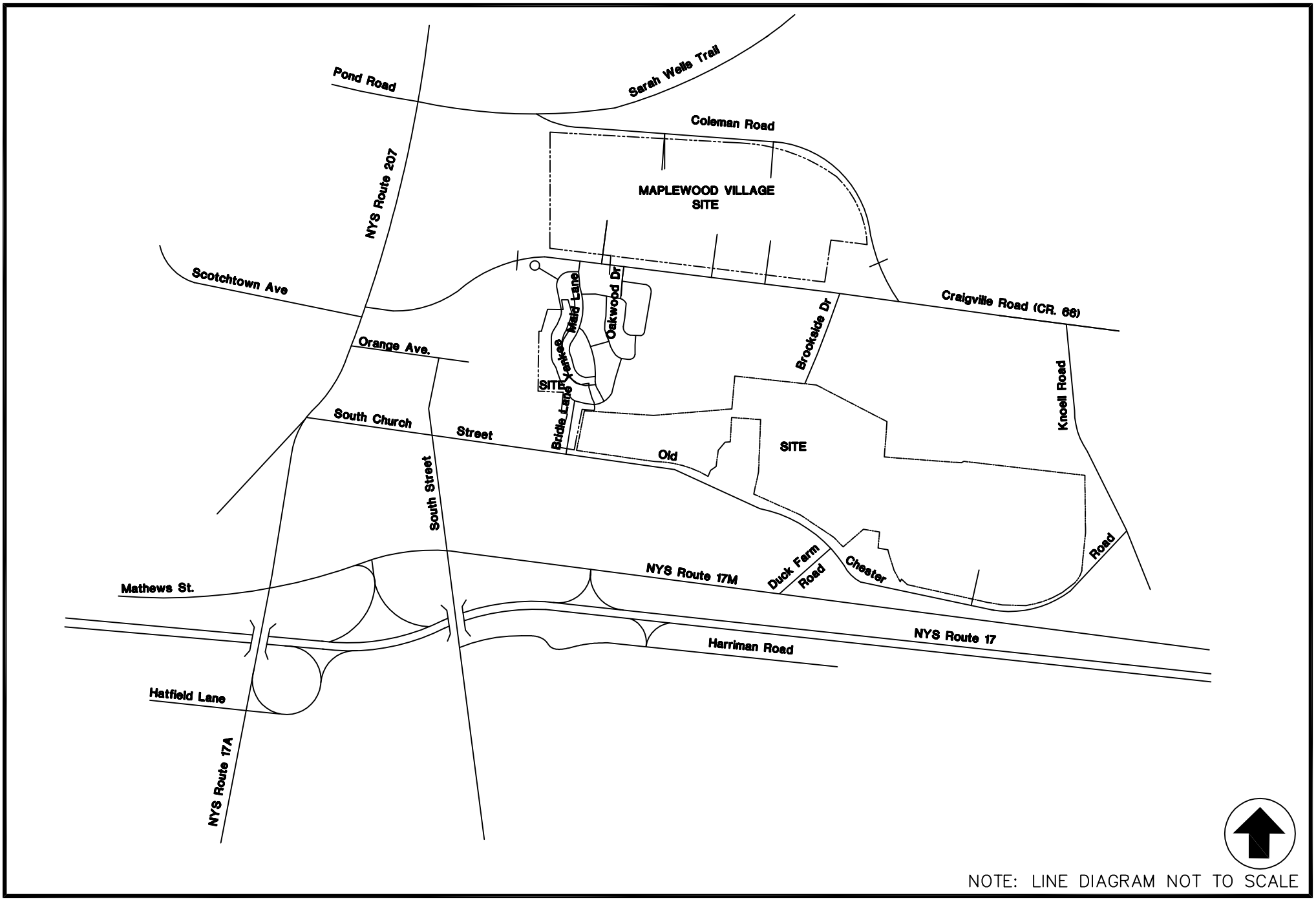
- NYS Route 207, which is a State collector roadway, originates at an intersection with NYS Route 17M and NYS Route 17A and continues in a northeasterly direction intersecting with West Main Street and several other roadways including Craigville Road/Scotchtown Avenue and Sarah Wells Trail and continues into the Town of Hamptonburgh through the Town of New Windsor and terminates in the Town of Newburgh. In the study area, there are signalized intersections with Scotchtown Avenue/ Craigville Road as well as the intersection with West Main Street. The roadway generally consists of one lane in each direction and has separate turn lanes at intersections such as Scotchtown Avenue. Pedestrian push buttons are present at the signal on the Scotchtown Avenue side of Route 207. On-street parking exists on both sides of the roadway between the intersections of Orange Avenue and West Main Street. The roadway has a posted speed limit of 30 mph within the Village of Goshen and 40 mph to the north and then changes to 55 mph. According to NYSDOT data published in the 2005 Highway Sufficiency Ratings, the heavy vehicle percentage on NYS Route 207 within the Village at Goshen is 4%. For the purpose of the capacity analysis, a 5% heavy vehicle percentage was used.
- Old Chester Road originates at a "T" intersection with Knoell Road and traverses in a westerly direction intersecting with Duck Farm Road. The roadway is a two-lane road with generally good alignment. The speed limit along this roadway is posted at 40 mph. The roadway continues into the Village of Goshen where its designation changes to South Church Street. The speed limit changes to 30 mph in the Village. It has an "all way stop" controlled intersection with South Street and Parkway.
- Knoell Road originates at a "T" intersection with Craigville Road and continues in a southerly direction intersecting with Old Chester Road. It consists of one lane in each direction and has no posted speed limit.

- Duck Farm Road is a two-lane roadway that connects NYS Route 17M to Old Chester Road. It is a two-lane roadway that also crosses the Heritage Rail Trail.
- NYS Route 17M is a major east/west State collector roadway which general parallels NYS Route 17. In the study vicinity, it has intersections with Duck Farm Road, the ramps to and from NYS Route 17 and signalized intersections with South Street, the Route 17 Exit 124 westbound on/off ramps and NYS Route 207. The posted speed limit on the roadway varies from 55 mph away from the Village at Goshen and 40 mph closer to the Village. The roadway generally consists of one lane in each direction; however, between NYS Route 207 and the NYS Route 17 Exit 124 westbound ramps, the roadway has two lanes. According to NYSDOT data Published in the *2005 Highway Sufficiency Ratings*, the roadway has a heavy vehicle percentage of 5%, which was used in the capacity analysis found in Appendix C.
- South Street is a generally two-lane roadway that runs in a north/south direction. It provides access to Arden Hill Hospital and crosses over NYS Route 17. It intersects with NYS Route 17M at a signalized intersection and continues north past the Heritage Rail Trail and into the Village of Goshen. It intersects with South Church Street and Parkway at an "all way stop" controlled intersection.

See DEIS Figure III-21, "*Area Roadway Network*".

The existing traffic conditions were inventoried through manual counts during Weekday and Saturday peak traffic conditions. These counts where collected in 15 minute segments by intersection approach and turning movements during the following hours:

- Weekday peak a.m. – 7:00 to 9:30
- Weekday peak a.m. – 3:30 to 6:30
- Saturday peak – 10:00 a.m. to 2:00 p.m.




# GOSHEN AREA TRAFFIC STUDY
# GOSHEN, NEW YORK

## AREA ROADWAY NETWORK

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE , NEW YORK

PROJECT NO. 121 DATE: SEPTEMBER 2007 FIG. NO. III-21

The available accident data was collected for the study areas roadways from the NYS Department of Transportation for the latest three-year period. The data has been summarized by location, date, time of day and type of accident.

- NYS Route 17M has had the second most accidents of the area roadways over the latest three years. Many of these accidents occurred at intersection with South Street and the ramps to Route 17 westbound. About 50% of the accidents were "rear end" type accidents.
- NYS Route 207 has had the most accidents of the area roadways over the latest three years, most of which have occurred at intersections including South Church Street, Court Lane, Hill Street, Erie Street, Orange Avenue, Scotchtown Avenue, Craigville Road and Sarah Wells Trail. Similar to NYS Route 17M, the majority of accidents were "rear end" type accidents, many of which were caused by driver inattention or following too closely.
- The intersection of South Church Street and South Street/Parkway had a total of six (6) accidents over the latest three years. Of the six accidents, five (5) were caused by driver error; four (4) of which were "right angle" type accidents all caused by a drivers' failure to yield the right of way. One (1) of the accidents was a "rear end" type accident caused by driver inattention. The final accident was unidentified.
- The other roadways had no consistent pattern or location associated with the report accidents.

The Town of Goshen Police Department provided the latest accident report for 2007. During 2007, for the area Town roadways, a total of five (5) reportable accidents were identified as noted in their transmittal dated March 20, 2008. Upon reviewing the accident descriptions and locations, three of the five accidents involved animal action; two of which were deer involvement and one involving a stray dog. These three accidents were all along Craigville Road. The two remaining reported accidents were at the intersection of Route 17M and Duck Farm Road which were a result of vehicular tire failure and the other from debris falling from a dump truck.

Based on the number of recent accidents on these roadways and a review of the previous data we obtained from the New York State Department of Transportation, there are no locations with five or more accidents in a one year period and therefore the accident rate was not computed. There are no specific patterns at the locations studied indicating the need for road improvements.

See Table 18, *"Summary of Accident Occurrence Data"*.

The site distances for the 85th percentile speed are as follows:

**Table 19**
**Existing 85th Percentile Speeds and Sight Distances**

| Location | Direction | 85th Percentile Speed (mph) | AASHTO Sight Distance | | Existing/Proposed Sight Distance (ft) |
|---|---|---|---|---|---|
| | | | SSD (ft) | ISD (ft) | |
| Yankee Maid Lane | EB | 53 | 495 | 610 | 777 |
| | WB | 52 | 495 | 610 | 1431 |
| Oakwood Drive | EB | 53 | 495 | 610 | 430 – 700* |
| | WB | 50 | 425 | 555 | 1416 |

* Approaching vehicles are seen from a distance of over 700 ft., however, a vertical curve causes a restriction at a distance of 430 ft.

Detailed capacity analyses were conducted for each of the intersections. These analyses were performed in accordance with the procedures for signalized and unsignalized intersections described within the *2000 Highway Capacity Manual* published by the Transportation Research Board. The terminology for identification purposes of levels of service as follows:

- "A" – Best Conditions
- "F" – Worst Conditions
- "C" – Design Standard
- "D" – Acceptable During Peak Hours
- "E" – Operation Near Capacity

To understand and identify an intersections level of service, the average vehicle delay is computed for each approach to the intersection and for the overall

## TABLE 18
## Summary of Accident Occurrence Data

| NODE/LINK | LOCATION | DATE | TIME | TRAFFIC CONTROL | ACCIDENT CLASS * | # OF VEHICLES - INJURIES | LIGHT CONDITION | ROAD CONDITIONS | WEATHER | MANNER OF COLLISION | APPARENT CONTRIBUTING FACTORS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 38064-38065 | CRAIGVILLE RD | 11/11/00 | 5:00 PM | none | PDO | 1-0 | dark-road unlighted | wet | cloudy | other | animal's action |
| 30865 | CRAIGVILLE RD | 12/22/99 | 6:00 PM | unknown | PDO | 1-0 | unknown | dry | clear | other | unknown |
| 30865 | CRAIGVILLE RD | 09/28/00 | 1:00 PM | no passing zone | PDO | 1-0 | daylight | dry | clear | other | other (human) |
| 30865 | CRAIGVILLE RD | 10/23/01 | 7:45 PM | none | PDO | 1-0 | dark-road lighted | dry | clear | other | animal's action |
| 38274-38273 | | 10/02/01 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38273 | SARAH WELLS | 04/22/01 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38273 | SARAH WELLS | 10/22/01 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38273 | SARAH WELLS | 03/20/02 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38066 | KNOELL RD | 09/12/00 | 7:00 PM | none | PDO | 2-0 | daylight | dry | clear | right angle | failure to yeild right of way |
| 38066 | KNOELL RD | 04/30/01 | 4:00 PM | none | I | 2-1 | daylight | dry | clear | overtaking | passing or lane usage improperly |
| 38066 | KNOELL RD | 08/03/01 | 3:18 PM | none | PDO & I | 2-1 | daylight | dry | clear | overtaking | passing or lane usage improperly |
| 38066 | KNOELL RD | 09/31/01 | 3:00 PM | none | PDO | 1-0 | daylight | dry | clear | other | unsafe speed |
| 38066 | KNOELL RD | 11/15/01 | n/a | non-reprotable | none | 2-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38066 | KNOELL RD | 11/19/01 | n/a | non-reprotable | none | 2-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38066 | KNOELL RD | 01/14/02 | n/a | non-reprotable | none | 1-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38066-38065 | | 08/01/01 | 8:00 PM | none | PDO | 1-0 | dusk | dry | clear | other | animal's action |
| 30865 | COLEMAN RD | 12/22/99 | 6:00 PM | unknown | PDO | 1-0 | unknown | dry | clear | other | unkown |
| 30865 | COLEMAN RD | 09/28/00 | 1:00 PM | no passing zone | PDO | 1-0 | daylight | dry | clear | other | other (human) |
| 30865 | COLEMAN RD | 10/23/01 | 7:45 PM | none | PDO | 1-0 | dark-road lighted | dry | clear | other | animal's action |
| 38065-38088 | | 09/23/99 | 7:00 PM | none | PDO | 1-0 | dark-road lighted | dry | clear | other | animal's action |
| 38065-38088 | | 06/22/00 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38065-38088 | | 10/03/00 | 9:00 PM | none | PDO | 1-0 | dark-road lighted | dry | clear | other | animal's action |
| 38088 | OAKWOOD DR | 11/08/99 | 5:00 PM | no passing zone | PDO | 1-0 | dark-road unlighted | dry | clear | other | animal's action |
| 38088-38031 | | 10/06/00 | 6:00 AM | none | PDO | 1-0 | dawn | wet | fog | other | animal's action |
| 38088-38031 | | 11/10/01 | 7:07 PM | none | PDO | 1-0 | dark-road unlighted | dry | clear | other | animal's action |
| 38031-38032 | | 12/12/01 | 9:30 PM | none | PDO | 1-0 | unkown | dry | clear | other | unkown |
| 38267-38145 | | 10/25/99 | 3:00 PM | none | PDO | 2-0 | daylight | dry | clear | right angle | failure to yeild right of way |
| 38267-38145 | | 01/15/01 | 12:00 AM | none | PDO | 1-0 | dark-road unlighted | dry | cloudy | other | animal's action |
| 38138 | | 07/10/00 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38138 | | 07/23/00 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38140 | | 05/21/01 | 12:50 PM | none | PDO | 2-0 | unkown | dry | cloudy | overtaking | unkown |
| 38140 | | 07/16/01 | 6:00 PM | stop sign | PDO | 2-0 | daylight | dry | clear | right angle | glare |
| 38140 | | 04/24/02 | 5:15 PM | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 38146 | | 11/30/01 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 207 8301 1011 | ORANGE AVE | 06/23/99 | 9:00 AM | no passing zone | PDO | 2-0 | daylight | dry | clear | rear end | following too closely, other lighting defects |
| 207 8301 1011 | ORANGE AVE | 01/03/00 | 5:00 PM | no passing zone | PDO | 2-0 | dark-road lighted | wet | cloudy | sideswipe | fell asleep, passing or lane usage improperly |
| 207 8301 1011 | ORANGE AVE | 11/16/00 | 2:00 PM | no passing zone | I | 2-1 | daylight | dry | clear | rear end | driver inattention |
| 207 8301 1011 | ORANGE AVE | 09/09/01 | 3:50 PM | stop sign | I | 2-1 | daylight | dry | clear | rear end | driver inattention, following too closely |
| 207 8301 1011 | ORANGE AVE | 12/07/01 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 207 8301 1011 | ORANGE AVE | 04/06/02 | 5:45 PM | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 207 8301 1012 | | 04/22/00 | 9:00 AM | none | I | 2-2 | daylight | wet | rain | right angle | failure to yeild right of way |
| 207 8301 1013 | | 06/11/99 | 5:00 PM | none | I | 1-2 | daylight | dry | clear | other | driver inattnetion, following too closely |
| 207 8301 1013 | | 07/07/99 | 5:00 PM | traffic signal | PDO | 2-0 | daylight | dry | clear | rear end | driver inattention |
| 207 8301 1013 | | 07/13/99 | 3:00 PM | traffic signal | PDO | 2-0 | daylight | dry | clear | rear end | drivare inattention |
| 207 8301 1013 | | 11/16/99 | 5:00 PM | traffic signal | I | 2-1 | dusk | dry | clear | rear end | fatigued/drowsy |
| 207 8301 1013 | | 12/16/99 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 207 8301 1013 | | 6/13/010 | 8:00 AM | traffic signal | PDO | 3-0 | daylight | dry | cloudy | other | driver inattention |
| 207 8301 1013 | | 10/15/01 | 9:15 AM | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 207 8301 1013 | SCOTCHTOWN AVE | 09/15/99 | 2:00 PM | traffic signal | PDO | 2-0 | daylight | wet | rain | right angle | traffic control devices disrgared, pavement slippery |
| 207 8301 1013 | SCOTCHTOWN AVE | 09/17/99 | 11:00 AM | traffic signal | I | 2-1 | daylight | dry | clear | rear end | backing unsafely |
| 207 8301 1013 | SCOTCHTOWN AVE | 07/01/00 | 5:00 PM | traffic signal | PDO | 2-0 | daylight | dry | clear | rear end | backing unsafely |

* PDO = PROPERTY DAMAGE ONLY  I = INJURY  F= FATALITY

**TABLE 18**
**Summary of Accident Occurrence Data**

| NODE/LINK | LOCATION | DATE | TIME | TRAFFIC CONTROL | ACCIDENT CLASS * | # OF VEHICLES - INJURIES | LIGHT CONDITION | ROAD CONDITIONS | WEATHER | MANNER OF COLLISION | APPARENT CONTRIBUTING FACTORS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 207 8301 1013 | SCOTCHTOWN AVE | 07/18/00 | 12:00 PM | traffic signal | PDO | 2-0 | daylight | dry | clear | rear end | driver inattention |
| 207 8301 1013 | SCOTCHTOWN AVE | 09/17/00 | 11:00 AM | traffic signal | I | 2-1 | unkown | dry | clear | other | unkown |
| 207 8301 1013 | SCOTCHTOWN AVE | 05/09/01 | 3:40 PM | traffic signal | PDO & I | 2-2 | daylight | dry | clear | left turn | failure to yeild right of way |
| 207 8301 1013 | CRAIGVILLE RD | 07/29/00 | 9:00 PM | traffic signal | I | 2-2 | dark-road lighted | dry | cloudy | rear end | driver inattention, following too closely |
| 207 8301 1013 | CRAIGVILLE RD | 02/25/01 | n/a | non-reprotable | none | n/a-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 207 8301 1013 | CRAIGVILLE RD | 05/30/02 | n/a | non-reprotable | none | 2-n/a | n/a | n/a | n/a | non-reportable | non-reportable |
| 207 8301 1013 | MAPLEWOOD TER | 04/18/01 | 5:32 PM | no passing zone | I | 3-2 | daylight | dry | clear | other | following too closely |
| 207 8301 1017 | | 10/04/99 | 7:00AM | stop sign | PDO | 2-0 | daylight | wet | rain | rear end | following too closely, pavement slippery |
| 207 8301 1017 | | 12/06/99 | 12:00 AM | none | PDO | 1-0 | dark-road lighted | dry | clear | other | animal's action |
| 207 8301 1017 | | 01/23/02 | 8:50 AM | traffic signal | I | 4-1 | unknown | dry | clear | other | following too closely, unsade speed |
| 207 8301 1017 | SARAH WELLS | 11/29/99 | 5:00 PM | stop sign | I | 2-1 | dark-road lighted | wet | cloudy | right angle | traffic control devices disrgared |

* PDO = PROPERTY DAMAGE ONLY  I = INJURY  F= FATALITY

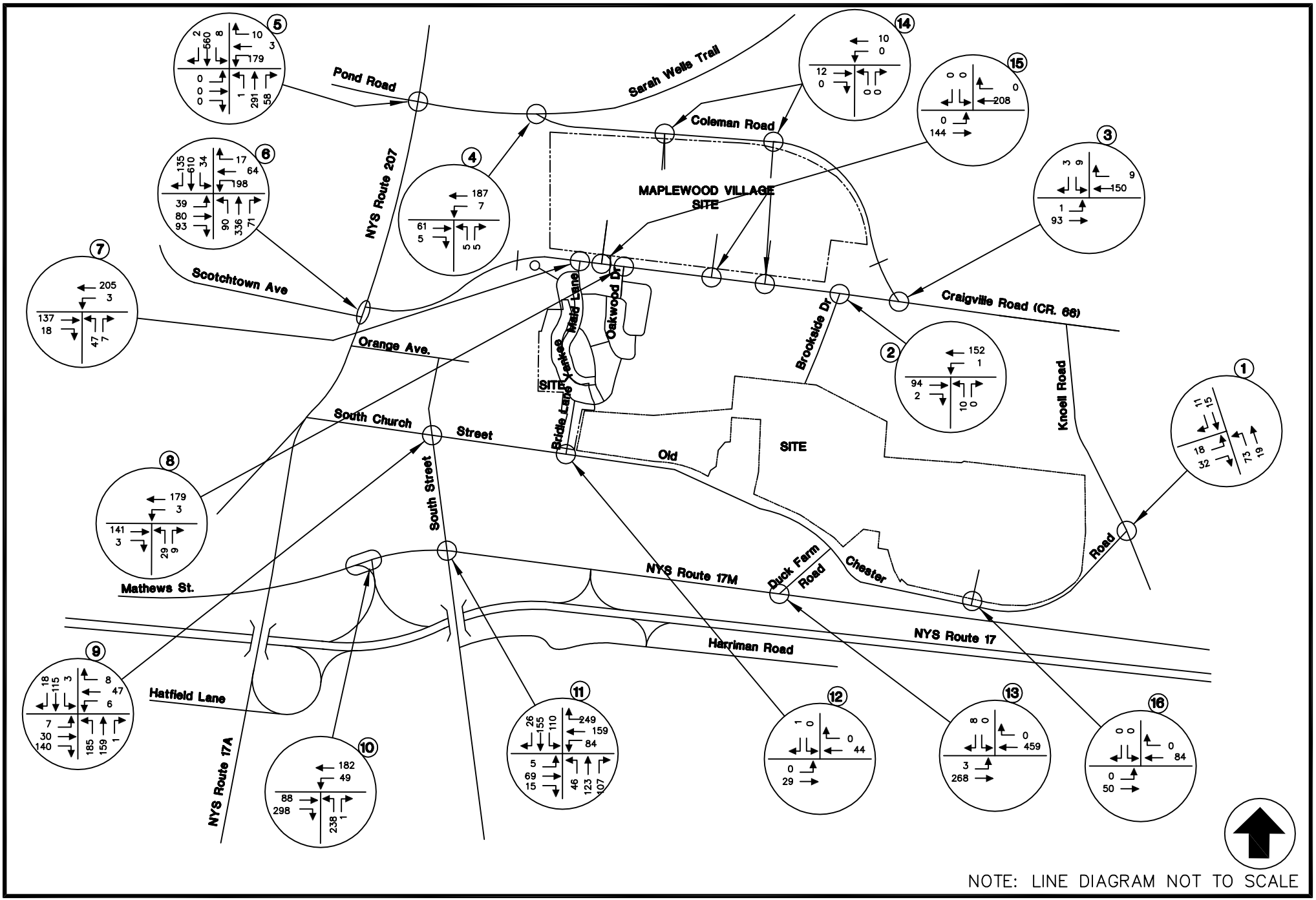
intersection. The existing conditions provide for the following levels of service during peak hours:

**Table 20**
**Existing Levels of Service**

| Intersection | Level of Service |
|---|---|
| Craigville Road and Oakwood Drive | C or better |
| Craigville Road and Yankee Maid Lane | C or better |
| Craigville Road and NYS Route 207 | E or better |
| Craigville Road and Coleman Road | C or better |
| Coleman Road and Sarah Wells Trail | C or better |
| Sarah Wells Trail and NYS Route 207 | F or better |
| Craigville Road and Brookside Drive | B or better |
| Duck Farm Road and NYS Route 17M | B or better |
| NYS Route 17M at South Street Exit | B or better |
| NYS Route 17 Westbound Ramp and NYS Route 17M Westbound Turn | C or better |
| South Street and Old Chester Road | C or better |
| Old Chester Road and Bridle Lane | A or better |

See DEIS Figures III-22A, *"Existing Weekday Peak AM Traffic Volumes"*, III-22B, *Existing Weekday PM Traffic Volumes"*, and III-22C, *"Existing Weekend Peal Traffic Volumes"* for existing traffic conditions.

The immediate vicinity of the Proposed Site has no established pedestrian facilities such as bikeways or sidewalks. Some of the rural roads in the area do allow for minimal pedestrian movement, with conflict with existing traffic. A short distance to the west is the Heritage Trail providing a total pedestrian friendly environment. At the time of inventory was accomplished for the TIS, pedestrian activity was identified. The documented activity would be classified as light in accordance with definitions established by the *Highway Capacity Manual*.

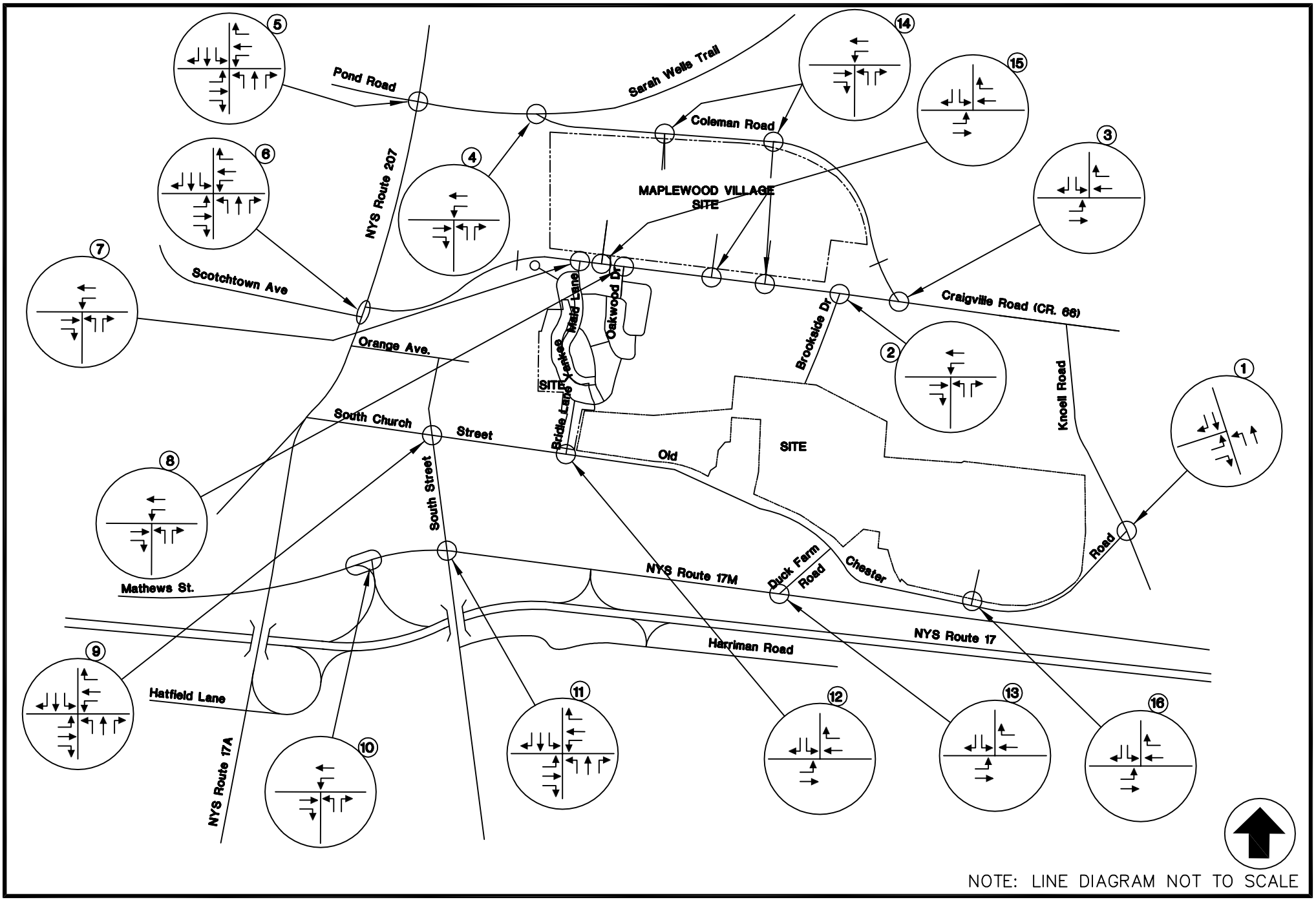



# GOSHEN AREA TRAFFIC STUDY
# GOSHEN, NEW YORK

## 2005 EXISTING TRAFFIC VOLUMES
## WEEKDAY PEAK AM HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE , NEW YORK

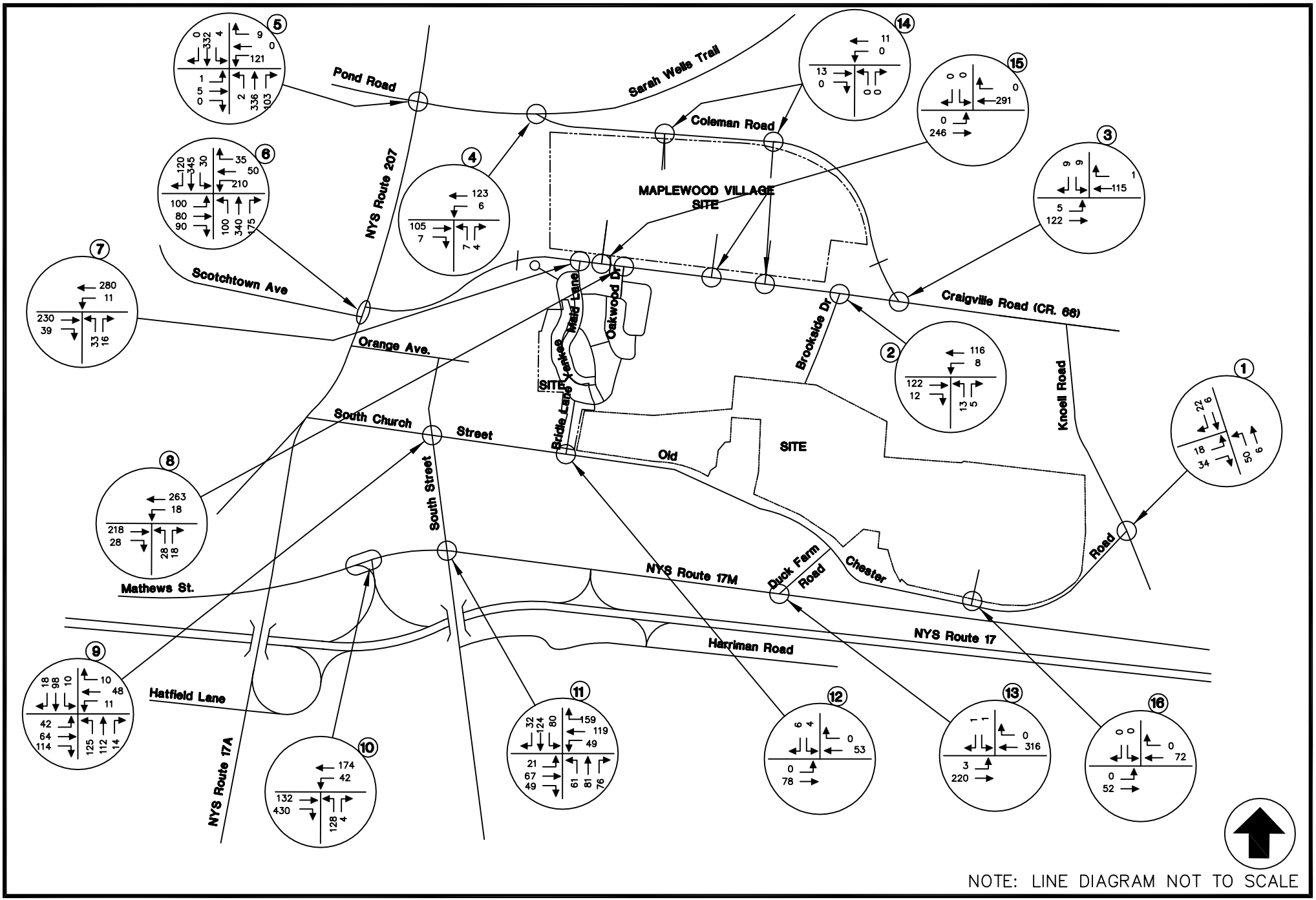
PROJECT NO. 121 DATE: SEPTEMBER 2007 FIG. NO. III-22A




# GOSHEN AREA TRAFFIC STUDY
# GOSHEN, NEW YORK

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE , NEW YORK

PROJECT NO. 121 DATE: SEPTEMBER 2007 FIG. NO.




# GOSHEN AREA TRAFFIC STUDY
# GOSHEN, NEW YORK

## 2005 EXISTING TRAFFIC VOLUMES
## WEEKEND PEAK SAT HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE , NEW YORK

PROJECT NO. 121 DATE: SEPTEMBER 2007 FIG. NO. III-22C

There is no public transportation routinely available within the vicinity of the Proposed Site. Taxis and dial-a-bus services are available to residents via a phone call. Short Line has park & ride locations in Goshen, Chester and Monroe. The Village has two stops and these exist on Main Street (NYS Route 207) and at the Park & Ride on Matthews Street. Each stop has service to New York City as well as routes to other areas of Orange County. Stops at each location occur as many as three times an hour throughout the day. Metro North Trail Service to Secaucus and Hoboken is also available via the New Jersey Transit train system on the Main and Bergen Branch Lines. From Secaucus and Hoboken, additional trains and subways are available for commuters going to New York City or Newark, New Jersey. The closest stations to the Village center are the Campbell Hall Station, the Middletown Station and the Salisbury Mills Station. Several trains from these stations start around 4:30 a.m. to 9:45 a.m. for commuters; however, after the 9:45 a.m. train there are only 4 trains to the City for the other hours of the day. Montgomery has the Orange County Airport, providing private hangar and flight operations and Newburgh contains Stewart International Airport serving a variety of domestic flights.

### 3.9.2 Future Without the Proposed Project

The existing traffic volumes were projected to a future 2015 design year. The growth factor of 1.5% per year was used to account for area growth and miscellaneous development that could potentially happen. Specifically, Harness Estates and Goshen Executive Center were considered. Harness Estates, northwest of NYS Route 207, consists of 165 residential structures constructed over two (2) phases. The Goshen Executive Center, south of NYS Route 17 on the east side of NYS Route 17A, is approved for 700,000 sq. ft. of office space, a 180-unit Planned Adult Community and approximately 7 single-family homes. Under the no build conditions, the intersections ratings can be found in the table on the following page:

**Table 21**
**No Build Levels of Service**

| Intersection | Level of Service |
|---|---|
| Craigville Road and Oakwood Drive | C or better |
| Craigville Road and Yankee Maid Lane | C or better |
| Craigville Road and NYS Route 207 | F or better |
| Craigville Road and Coleman Road | C or better |
| Coleman Road and Sarah Wells Trail | C or better |
| Sarah Wells Trail and NYS Route 207 | F or better |
| Craigville Road and Brookside Drive | B or better |
| Duck Farm Road and NYS Route 17M | B or better |
| NYS Route 17M at South Street Exit | F or better |
| NYS Route 17 Westbound Ramp and NYS Route 17M Westbound Turn | C or better |
| South Street and Old Chester Road | E or better |
| Old Chester Road and Bridle Lane | A or better |

The 1.5% background growth factor used was developed based on current and historical New York State Highway Traffic Volume Data for study area roadways. Using NYS Route 207 between Craigville Road and Sarah Wells Trail as a representative roadway, the growth over the most recent 5 year period is about 1% per year. The 1.5% growth factor thus is somewhat conservatively high and is also supported by the Goshen Town Wide Traffic Study performed by Stantec in which they use a 1.25% growth factor.

See Appendix V, "*Traffic Impact Study*" for detailed analysis.

The intersections studied are anticipated to provide similar levels of service with or without the Proposed Action. There are no planned or anticipated roadway improvements scheduled for the existing roadway network within the vicinity of

the Proposed Site. The suggested roadway improvement included under mitigation measures should be implemented with or without the Proposed Action.

### 3.9.3 Potential Impacts

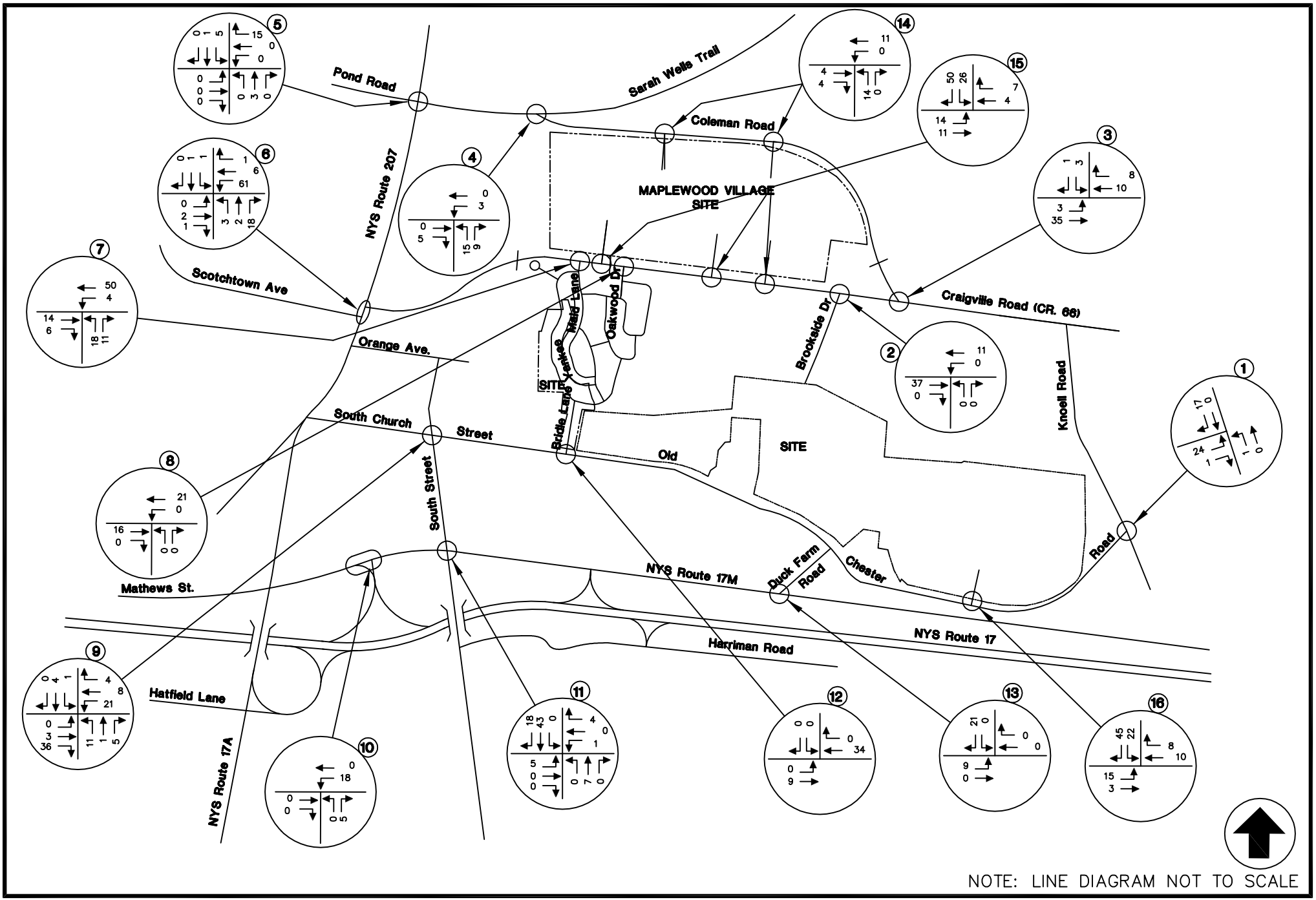
The Proposed Site generated volumes were assigned to the roadway networks utilizing individual arrival and departure distributions. The following table summarizes the hourly trip generation rates anticipated at full build-out:

**Table 22**
**Anticipated Hourly Trip Generation Rates**

| Maplewood Village at Goshen Goshen, New York | Entry | | Exit | |
|---|---|---|---|---|
| **Single Family Dwelling (69 Dwelling Units)** | **HTGR** | **Volume** | **HTGR** | **Volume** |
| Peak a.m. Highway Hour | 0.21 | 14 | 0.63 | 43 |
| Peak p.m. Highway Hour | 0.70 | 48 | 0.41 | 28 |
| Peak Saturday Highway Hour | 0.57 | 39 | 0.48 | 33 |
| **Townhomes / Multi Family (160 Dwelling Units)** | | | | |
| Peak a.m. Highway Hour | 0.08 | 13 | 0.39 | 62 |
| Peak p.m. Highway Hour | 0.37 | 59 | 0.18 | 29 |
| Peak Saturday Highway Hour | 0.30 | 48 | 0.26 | 41 |
| **Total** | | | | |
| Peak a.m. Highway Hour | -- | 27 | -- | 105 |
| Peak p.m. Highway Hour | -- | 107 | -- | 57 |
| Peak Saturday Highway Hour | -- | 87 | -- | 74 |

See DEIS Figures III-23A *"Weekday AM Traffic Volumes"*, III-23B *"Weekday PM Traffic Volumes"*, and III-23C *"Weekend Peak Traffic Volumes"* for Project Traffic Generation.

The Traffic Impact Study utilized trip generation for the Proposed Action, Hambletonian Estates and Heritage Estates. Additionally, the background growth from the no build conditions, including Harness Estates and Goshen Executive Center were incorporated in the Proposed Conditions. Based on the information available, the anticipated levels of service were established, summarized in the table on the following page:

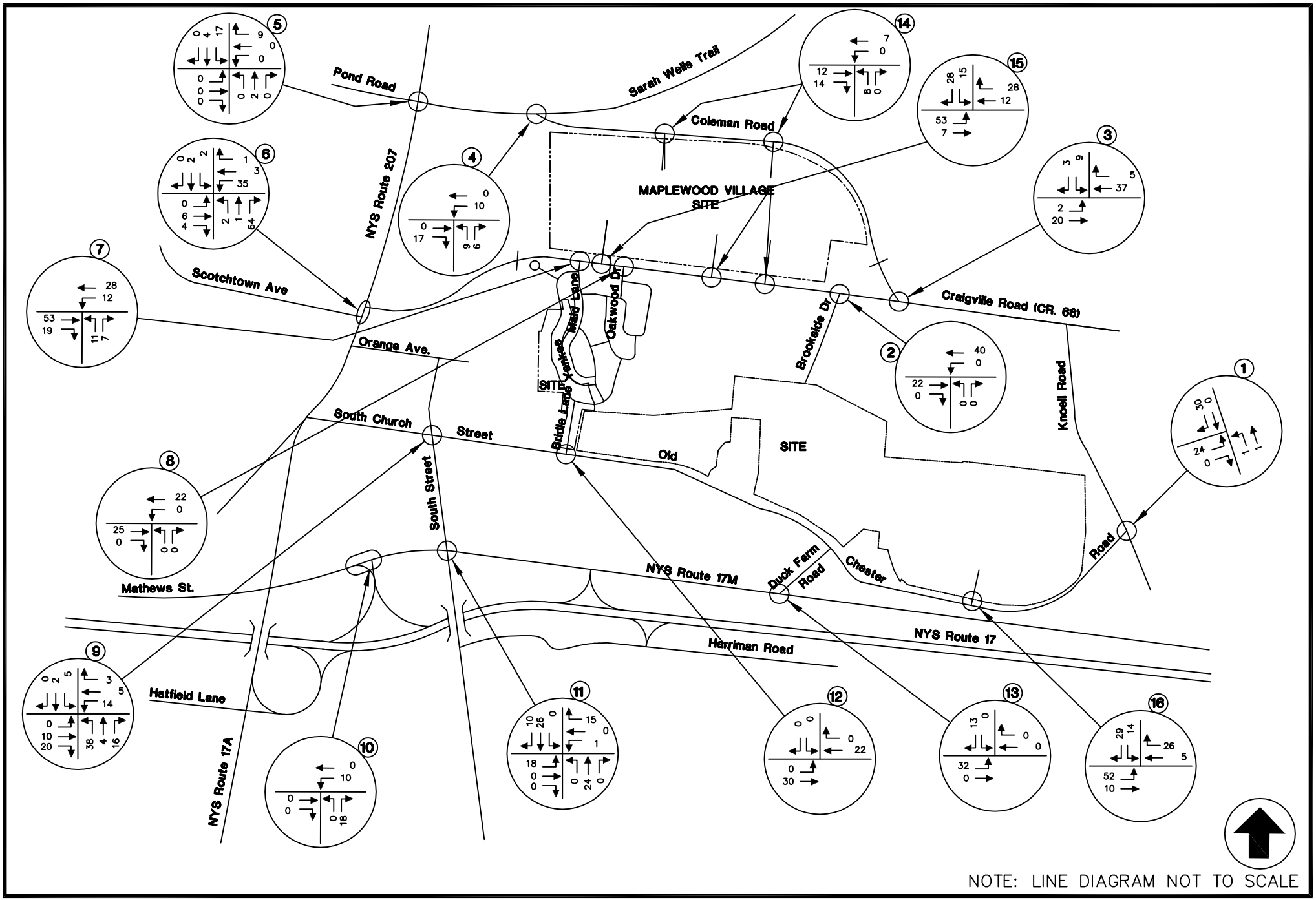



# GOSHEN AREA TRAFFIC STUDY
# GOSHEN, NEW YORK

## SITE GENERATED TRAFFIC VOLUMES
## WEEKDAY PEAK AM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE , NEW YORK

PROJECT NO. 121 DATE: SEPTEMBER 2007 FIG. NO. III-23A

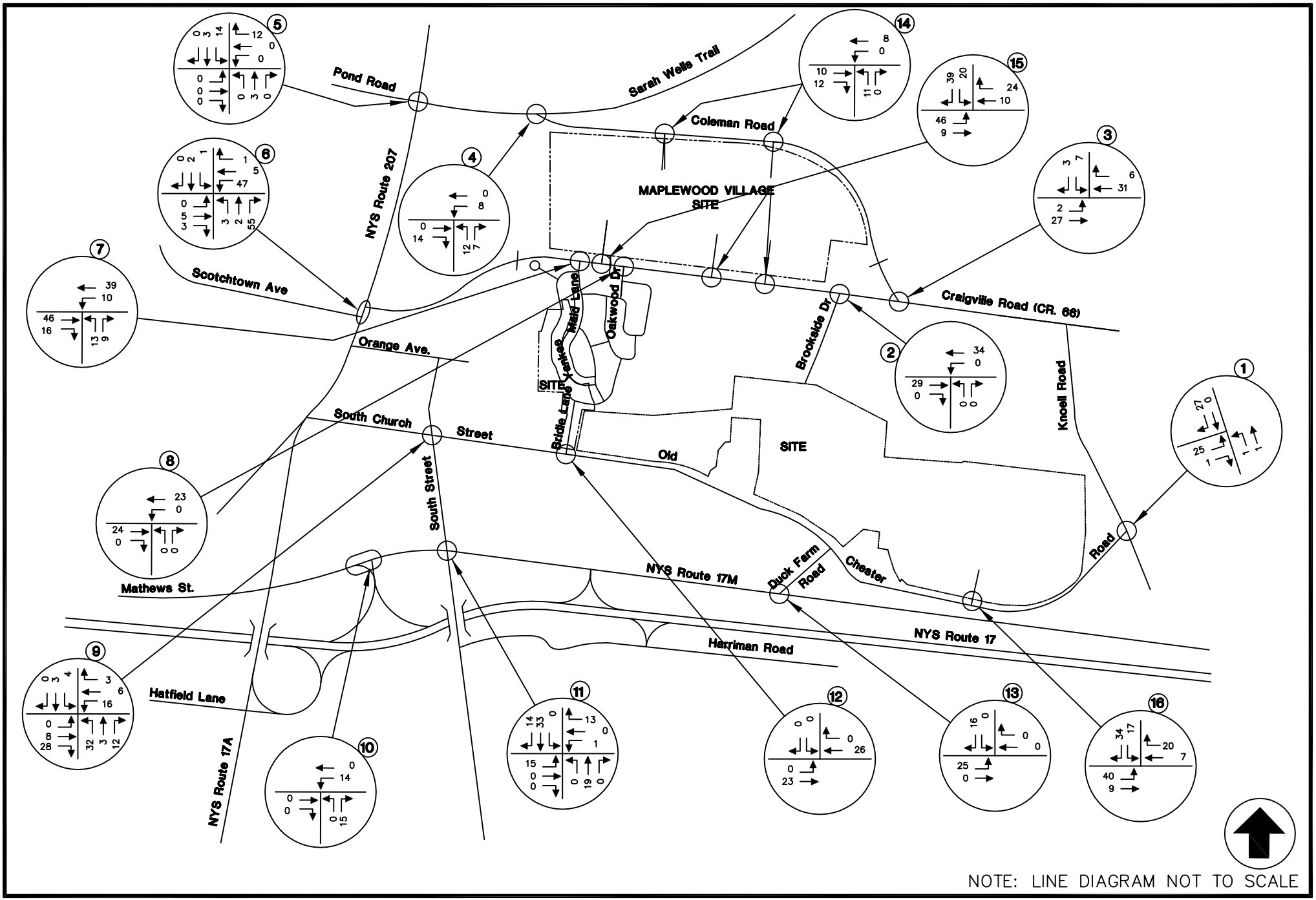



# GOSHEN AREA TRAFFIC STUDY
# GOSHEN, NEW YORK

## SITE GENERATED TRAFFIC VOLUMES
## WEEKDAY PEAK PM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE , NEW YORK

PROJECT NO. 121 DATE: SEPTEMBER 2007 FIG. NO. III-23B




# GOSHEN AREA TRAFFIC STUDY
# GOSHEN, NEW YORK

## SITE GENERATED TRAFFIC VOLUMES
## WEEKEND PEAK SAT HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE , NEW YORK

PROJECT NO. 121 DATE: SEPTEMBER 2007 FIG. NO.III-23C

| **Table 23**<br>**Proposed Levels of Service** | |
|---|---|
| **Intersection** | **Level of Service** |
| Craigville Road and Oakwood Drive | C or better |
| Craigville Road and Yankee Maid Lane | C or better |
| Craigville Road and NYS Route 207 | F or better |
| Craigville Road and Coleman Road | C or better |
| Coleman Road and Sarah Wells Trail | C or better |
| Sarah Wells Trail and NYS Route 207 | F or better |
| Craigville Road and Brookside Drive | B or better |
| Duck Farm Road and NYS Route 17M | B or better |
| NYS Route 17M at South Street Exit | F or better |
| NYS Route 17 Westbound Ramp and NYS Route 17M Westbound Turn | C or better |
| South Street and Old Chester Road | F or better |
| Old Chester Road and Bridle Lane | A or better |

See Table 2 in Appendix G, *"Goshen Area Traffic Impact Study"* for comparison of existing, no build and proposed levels of service.

The proposed sight distances are as follows:

| **Table 24**<br>**Site Distances** | | |
|---|---|---|
| **Road Intersections** | **Left** | **Right** |
| Road "A"/Craigville Road | 1,000± | 806± |
| Road "B"/Craigville Road | 388± | 1,000± |
| Road "E"/Craigville Road | 1,000± | 455± |
| Commercial Entrance/Craigville Road | 1,200± | 780± |
| Road "G"/Coleman Road | 810± | 700± |
| Lot 1 & Lot 2/Coleman Road | 1,150± | 800± |
| Emergency Access/Coleman Road | 460± | 350± |

The proposed sight distances under the 85th percentile speed are as follows:

**Table 25**
**Proposed 85th Percentile Speeds and Sight Distances**

| Location | Direction | 85th Percentile Speed (mph) | AASHTO Sight Distance | | Existing/Proposed Sight Distance (ft) |
|---|---|---|---|---|---|
| Craigville Road at Maplewood Access Roads | EB | 53 | 495 | 610 | 610* |
| | WB | 52 | 495 | 610 | 610* |
| Coleman Road at West Maplewood Access Roads | EB | 39 | 305 | 445 | 445* |
| | WB | 39 | 305 | 445 | 445* |
| Coleman Road at East Maplewood Access Roads | EB | 37 | 305 | 445 | 445* |
| | WB | 38 | 305 | 445 | 445* |

* Clearing, grading and minor alignment changes will be done to ensure each location meets the AASHTO minimum sight distance requirements based on 85th percentile speeds.

See Appendix V, "*Traffic Impact Study*" for detailed analysis.

### 3.9.4 Mitigation Measures

The estimated traffic conditions around the Proposed Site will have insignificant affects on the area with or without the implementation of the Proposed Action. The following is a list of improvements that are suggested by the Project Traffic Engineer to aid in the traffic fluidity:

- Provide a painted crosswalk between the commercial center and Oakwood drive, along with appropriate signage in conformity to the Manual of Uniform Traffic Control Devices.
- Petition the Town Board to in-turn request the County for a reduction of the speed limit to 30 mph between Coleman Road and the Village line.
- Craigville Road/Yankee Maid Lane – pruning of vegetation to enable better sight lines for entering and existing vehicles.
- Craigville Road/NYS Route 207 – upgraded traffic signal with road widening to allow for a two-lane approach.

- Craigville Road/Coleman Road – improved signage and new pavement markings including centerline striping and "stop" bar. Additionally, pruning of vegetation to maintain sight lines and visibility.
- Coleman Road/Sarah Wells Trail – improved striping and signage.
- Sarah Wells Trail/NYS Route 207 – traffic signal to be installed.

Along with these mitigation measures, connection of existing roads associated with other projects would improve levels of service for many of the intersections. This includes, but is not limited to, connecting Brookside Drive through Heritage Estates and Bridle Lane from Hambletonian Park to Old Chester Road. These connections may further distribute local traffic and reduce response times for emergency vehicles.

Implementation of the proposed improvements would be within the jurisdictions of the Town of Goshen, Village of Goshen, and County of Orange. The suggestions would have to be presented to the appropriate municipality for review and consideration. The improvements are part of an overall area traffic analysis. Should the Town seek the suggested improvements in coordination with the County, it would most likely be through fair share contributions. This would be based upon traffic generation from the various projects through the individual intersections.

The following are unavoidable adverse environmental impacts that are unable to be avoided upon traffic and transportation of the Proposed Site due to the Proposed Action.

- Incidence of heavy truck, light truck and automobile traffic bringing materials, equipment and workers to the Proposed Site.
- Loss of residual capacity at existing roadway intersection from new residents and commercial traffic.

### 3.9.5 Construction Related Traffic

Upon issuing a materials purchase order or executing a contract for construction services the request will be made that all construction traffic, including heavy trucks transporting equipment and construction materials, light trucks and other vehicles, approach the Proposed Site via routes that do not impact established residential neighborhoods. Continual reminders of this are to be implemented through the full build-out of the Proposed Action.

The Proposed Action will implement a stabilized rough grade of the proposed access roads to be utilized by all construction vehicles for ingress and egress. The heaviest of these movements will occur during the initial months of each phase and subphase of the Proposed Action as site preparation and installation of roadways, storm sewers, central water facilities, central sewage facilities and delivery of materials occur. Construction vehicles and workers are to park on-site at all times; additionally, materials and equipment are to be stored within the boundary of the Proposed Site. Construction traffic will consist primarily of construction vehicles arriving at the beginning of the construction period, trucks carrying and delivery supplies and daily trips of construction workers. The larger construction vehicles are to be conveyed to the Proposed Site during the start of each phase. These will limit trips since heavy equipment will be stored on-site until no longer needed. The Proposed Action is to be a balance project in terms of importing and/or exporting material to the Proposed Site. The anticipated trip generation for construction vehicles, deliveries and miscellaneous trucks to and from the Proposed Site is estimated to be an average of ten (10) trips per day per phase, five (5) inbound and five (5) outbound. The construction deliveries of equipment, materials and supplies are usually during the day at times of off peak transportation hours, minimizing the impact of construction traffic. Workers typically arrive and depart the Proposed Site prior to the standard peak commuting hours. The estimated trip generation for individual construction workers averages approximately forty-six (46) trips per day per phase, twenty-three (23) inbound and twenty-three (23) outbound. Additionally, the

movements to the Proposed Site are opposite of those leaving for work and/or arriving home from work.

It is determined and understood that there will be a mix of resident and construction traffic within the Proposed Site as structures within the Residential Clusters are completed and occupied while work continues on the build-out of the remaining development over a period of three (3) to four (4) years. The construction traffic at this point in the process will be generated only by the needs of the individual building lots for materials, equipment and workers. The associated infrastructure routinely involving heavier equipment and materials will have been earlier installed. Those involved in the construction will be routinely advised and all access ways shall be maintained unobstructed and in an otherwise safe convenient condition for the residents.

### 3.9.6 Regular Vehicular Access

The most significant amount of traffic shall enter the Proposed Site from two primary roads that intersect with Craigville Road. Based upon the potential traffic of the Proposed Action and the estimated 2015 No Build projection, the Project Sponsor determined no significant impact from the Proposed Action is anticipated. These affects are felt on an already failing intersection of Craigville Road and NYS Route 207, which is in need of upgrades with or without the Proposed Action.

Minimal traffic impact is expected from the Proposed Site onto Coleman Road. This traffic is related to single-family homes and should not implement a large quantity of vehicular traffic onto the roadway network.

An internal connection, to be utilized on a regular basis is not being proposed between Craigville Road and Coleman Road. Based upon detailed capacity analysis accepted levels of service are projected for each of the access connections. In turn, from a capacity standpoint, the connection is not needed.

Since Coleman Road intersects with Craigville Road, the primary results of a direct or circuitous connecting road between these two existing roadways would minimize turning movement at the intersection of Coleman Road and Craigville Road. The connection is to be provided connecting the two roadways built to Town specifications and gated for emergency access only. The emergency access would ultimately be opened to full access should the Town Board deem it to be necessary.

Eliminating access to either Coleman Road or Craigville Road would require all site traffic to access the road considered for the particular scenario. This would require vehicles destined for other roadways to make additional turning movements, especially at the intersection of Craigville Road and Coleman Road. For example, based on the expected distributions, if access was entirely from Coleman Road, an additional fifty (50) to sixty (60) vehicles would be added to the intersection during the a.m. Peak Hour and seventy (70) to eighty (80) vehicles during the p.m. Peak Hour. If access was solely restricted to Craigville Road, the increases would be between fifteen (15) and twenty (20) vehicles, respectively, for these two peak time periods. Additionally, depending upon the exact location of the access connection to Craigville Road, there may be some additional trips added to the Route 207/Craigville Road intersection.

### 3.9.7 Emergency Access

The Proposed Action proposes emergency access connecting Craigville Road and Coleman Road. The roadway will be designed to Town specifications, unpaved and gated to limit vehicular use. Ultimately, this will be used in part for pedestrian connectivity. The roadway could be opened to allow for full vehicular use should the Town Board deem it be necessary.

### 3.9.8 On-Street and Off-Street Parking

The Proposed Action provides a vast amount of parking alternatives for its residents and future users of the Proposed Action. The single-family homes have

garages and driveways to accommodate its owners while the multi-family and apartments have a mixture of garage under and surface parking. The commercial structures provide surface parking as well as on-street parking for its potential renters and clientele. Finally, on-street parking is also available throughout the development to accommodate the overflow from private parking areas and potential guests.

### 3.9.9 Bicycle and Pedestrian Access

The Proposed Action provides an extensive internal network of paths, sidewalks, roadways and developed open space to allow for and encourage bicycle and pedestrian use. Recreational facilities, plazas, greens and trails will be constructed as part of the project, containing gazebos, benches, picnic tables, focal points and bike racks. The intent of these improvements is to provide pedestrian connectivity, encouraging the use of bicycles and walking as an alternative to automobiles. The Proposed Action also proposes to install sidewalks along Craigville Road, along with a controlled crossing to Hambletonian Park. This will aid in the connectivity of not only the various aspects within the development, but Hambletonian Park, Salesian Park and Land of Goshen Park. The connection can then be carried into the Village of Goshen and to the Heritage Trail through Heritage Estates and Land of Goshen Park. Currently, there is no safe pedestrian access to the existing parks and trails; therefore, reliance on an automobile is mandatory to access those parks and trails. Approval of the Proposed Action is the first step in providing the connectivity needed to promote a pedestrian-friendly environment and minimizing reliance on an automobile to access the parks and trails. Through this “link”, residents may access the Village of Goshen Central Business District, County Government Center, Library, Salesian Park, the Proposed Action, Hambletonian Park and Estates, Land of Goshen Park, Heritage Estates, Brookside Drive and the Heritage Trail through one continuous, circular path.

The pedestrian sidewalks, trails and pathways are intended to be offered for dedication to the Town. Should the offer not be accepted they are to be maintained by either the HOA and/or transportation corporation. Ultimately, the sidewalks associated with the residential units and commercial structures are to be the responsibility of the individual residents and/or occupants. Maintenance and upkeep of the trails, pathways and developed open space will need to be finalized with the town Board prior to final approval. As of yet, the costs cannot be determined since the exact maintenance program is unknown. For example, the rail trails around Orange County are not maintained throughout winter months, the trails and pathways associated with the development may or may not utilize similar maintenance programs.

## 3.10 NOISE AND ODORS

### 3.10.1 Existing Conditions

There are no sensitive receptors for either noise or odors, such as schools, hospitals or nursing homes, either within or adjacent to the Proposed Site. The closest single-family residence lies at a distance of 60 feet from any proposed development.

Noise is considered as “unwanted sound”. Certain activities inherently produce sound levels or sound characteristics that have the potential to produce noise. Most sounds heard in the environment are not composed of a single frequency, but are a band of frequencies, each with a different intensity or level. Levels of sound are measured in units called decibels (dB). Since the human ear cannot perceive all pitches of frequencies equally well, these measures are adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA. A one decibel change in sound is the smallest change detectable to the human ear under suitable laboratory conditions. However, under normal conditions, a change in sound pressure level of two or three decibels is required for the average person to notice a difference. To the average person, a noise level increase of two (2) to three (3) dBA is barely perceptible; an increase of five (5) dBA is noticeable; and an increase of twenty (20) dBA or more is

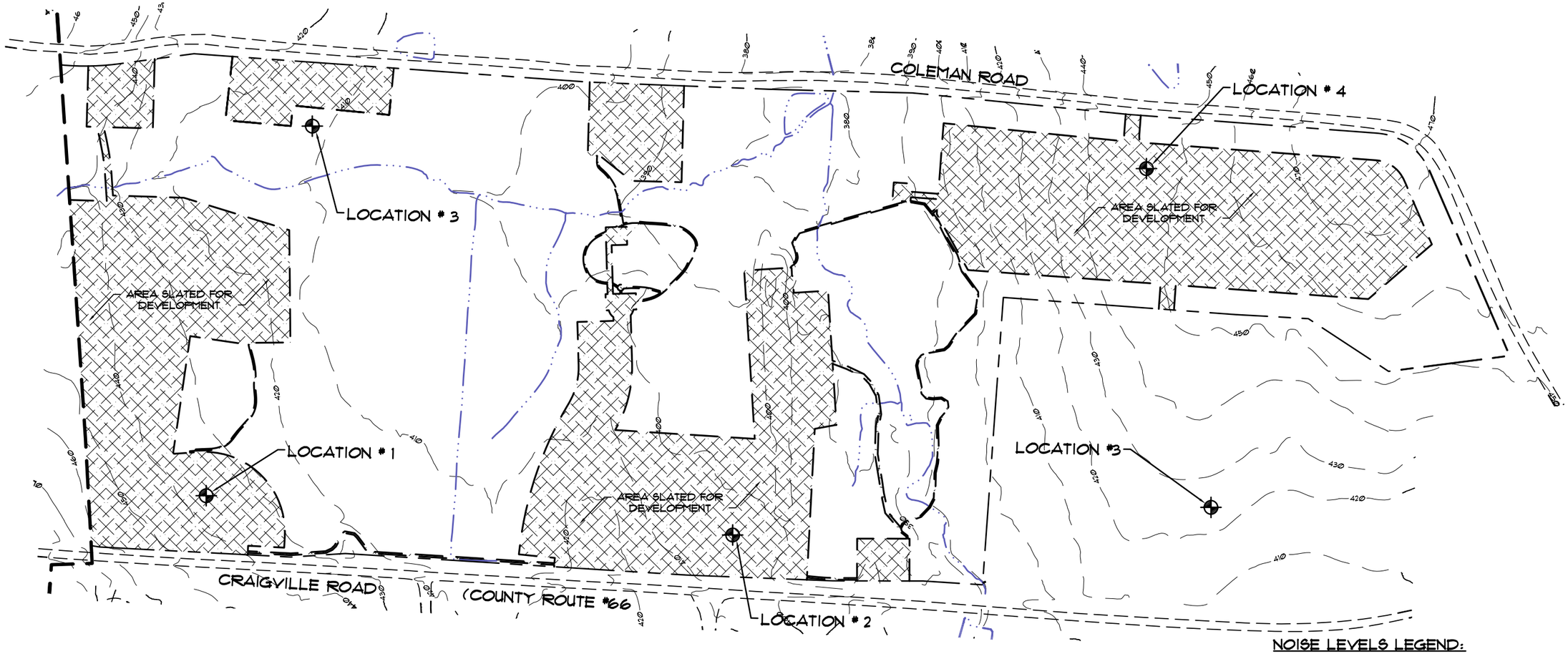
perceived as a dramatic change. Annoyance to people will frequently result from increases of ten (10) dBA or more, depending upon the frequency and duration of the noise events.

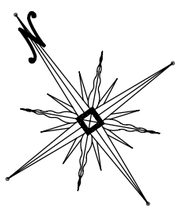
Observations by the Project Sponsor are that no extraordinary noise or odors are present within or at the periphery of the Proposed Site inhibiting its potential for implementation of the Proposed Action. The Proposed Site is typical of a Village fringe area with a mix of single-family dwellings, agricultural operations, Parks and adjacent roadways, including NYS Route 17 (future I-86) and NYS Route 17M, each less than one-half (1/2) mile to the southwest, and Craigville Road is adjacent to the Proposed Site. In addition, there are no heavy commercial or industrial noises present nor is the Proposed Site adversely impacted by noise generated by rail, air travel or deleterious odors caused by industrial and/or other sources.

In order to provide scientific support of this perception in the matter of the ambient noise conditions, representative locations were selected at the Proposed Site to measure ambient noise level in decibels (dBA) and the measurements were conducted between the hours of 10:00 a.m. and 12:00 noon on weekdays. The existing ambient noise levels were recorded at five (5) locations throughout the Proposed Site. These measurements set forth the slow (i.e. average) dBA and maximum (instantaneous) dBA noise level, i.e. decibel, readings at each location. The measurements were taken utilizing an EXTECH 407735 Sound Level Meter with A-weighted filter. No extraordinary, or otherwise atypical, conditions were observed at the time the measurements were taken.

See Figure III-24, "*Noise Levels*".

These measurements document daytime slow dB ambient noise levels ranging from 49.2 to 58.4 dBA, and otherwise tightly clustered between 49.1 and 51.2 dBA, within the Proposed Site. These measurements are within the range of noise levels typically experienced within a typical rural area, though in part within the



300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

NOISE LEVELS LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- TEST LOCATION

E.I.S. FIGURE III-24

# NOISE LEVELS

SCALE: 1 IN. = 300 FT.

ESPOSITO & ASSOCIATES
262 GREENWICH AVENUE, SUITE B
GOSHEN NY, 10924
845.294.0558 Fax 845.294.0580

high side of the range, presumably due to the existing road noise. The existing ambient noise readings fall within the daytime standard of non-instantaneous 60 dBA between the hours of 7:00 a.m. and 8:00 p.m. set forth within §97-50(C)(2) *Environmental Performance Standards* of the Town of Goshen Zoning Code. Temporary construction noise occurring between the hours of 8:00 a.m. and 8:00 p.m. Monday through Friday, or 9:00 a.m. to 8:00 p.m. weekends, is exempt from the noise level regulations, as stated in §70-2(F), *Prohibited Noise.*

### 3.10.2 Future Without the Proposed Project

The existing noise levels and odors without the Proposed Action would remain the same. The only change would be through design and development of surrounding parcels.

### 3.10.3 Potential Impacts

The existing ambient noise should not be substantially affected by the ultimate occupancy of the Proposed Action. Increased noise levels are anticipated from the increased vehicular traffic and construction activities. Traffic volumes would need to double existing conditions for the ambient noise levels to be raised by three (3) dBA, which is barely noticeable to the average hearing activity of a human being. The Project Sponsor has determined there will be no increase to the ambient noise levels, since the source is not doubling. During the construction period, the existing ambient noise levels will however be periodically exceeded during normal day-time construction hours both within the Proposed Site and as may be discernible on adjacent lands. Construction noise will include truck movements carrying heavy equipment and construction materials to the Proposed Site, the use of heavy equipment principally during site preparation and infrastructure installation, the use of lighter equipment during the building construction phase, and, as may be required in very limited amount and on short-term occasion, the conduct of blasting.

The construction that will occur on the Proposed Site will consist of land clearing, grading, infrastructure installation and building construction. In general, heavy

equipment (bulldozers, dump trucks) will be used during the fill, grading and infrastructure development activities. It is important to note that equipment used is not generally operated continuously nor are several pieces of equipment always operated simultaneously. Noise levels of construction equipment typically utilized for these types of activities are presented in the table below. As indicated the highest site average sound levels, eighty-three (83) to eighty-six (86) dBA, are associated with excavation activities with a backhoe.

**Table 26**
**Noise Levels of Major Construction Equipment**

| Equipment Type | Noise Level (dBA) | | |
|---|---|---|---|
| | 50 feet | 400 feet | 800 feet |
| Trucks (General | 91 | 73 | 67 |
| Cement Mixer | 63-71 | 45-53 | 39-47 |
| Bulldozers | 50 | 36 | 26 |
| Chainsaw cutting trees | 75-81 | 57-63 | 51-57 |
| Backhoes | 83-86 | 65-68 | 59-62 |
| Compressor | 67-49-43 | | |
| Dump Truck | 71-83 | 53-65 | 47-58 |
| Jackhammer | 82 | 64 | 58 |
| Generators | 78-60-54 | | |

Source: NYSDEC, Mitigating Noise Impacts, September 29, 2000.

The noise levels presented above are for a distance of fifty (50) feet from the source, but noise actually transmitted from the Proposed Site will be attenuated by a variety of mechanisms. The most significant of these is the diversion of sound waves with distance (attenuation by divergence). In general, this mechanism will result in a six (6) dBA decrease in the sound level with each doubling of distance from the source. For example, the eighty-six (86) dBA maximum sound levels associated with a backhoe will be attenuated to eighty (80) dBA at 100 feet, seventy-four (74) dBA at 200 feet, and sixty-eight (68) dBA at 400 feet. The construction equipment will not normally be operating simultaneously, which will

act to reduce the total noise level. There will, therefore, be periods of time when no equipment will be operating and noise will be at or near ambient levels. Also, construction activities are scheduled to occur during daytime hours, when many people are at work and away from home. Furthermore, the noise levels presented are those that will be experienced by people outdoors. A house or building will complement distance separation and provide significant additional attenuation for those who are indoors. Sound levels can be expected to be up to twenty-seven (27) dBA lower indoors with the windows closed. Even in homes with the windows open, indoor sound levels can be reduced by up to seventeen (17) dBA, EPA 1978.

Based on the concept of noise attenuation by divergence, a resident standing at his property line 150 feet away from the backhoe activity would experience a peak noise level of seventy-seven (77) dBA, which would be reduced to seventy-four (74) dBA if standing near the rear wall of his home 200 feet away from the backhoe activity. In consideration of the additional attenuation caused by location within a home, the same resident within his home 200 feet away from the backhoe activity would experience a peak noise level reduced to as low as fifty-seven (57) dBA during excavation activities with the windows open and a lesser forty-seven (47) dBA with the windows closed.

These noise levels might be compared to the Federal Housing Administration (FHA) standard recommending a maximum ambient noise level of sixty-seven (67) dBA for residential neighborhoods. In other terms, a noise level of sixty-seven (67) dBA is equivalent to normal speech at three feet, or traveling in a car at 30 MPH with the windows closed.

The Project Sponsor anticipates the Proposed Action will not cause the generation of any deleterious odors.

### 3.10.4 Mitigation Measures

In consideration of the attenuation of noise levels provided through distance separation and intervening vegetation, landform and with proper design of pumps, generators and/or other mechanical appurtenances associated with the Proposed Action, it is deemed by the Project Sponsor that there is no anticipated long term impacts that would cause ambient noise levels within the vicinity of the Proposed Site to be exceeded or adversely affect the quiet enjoyment by neighboring residents. In attempts to mitigate potential impacts from the proposed development the following practices will be used:

- The impacts will be limited to the maximum extent practicable, the plans will show the locations and the limits.
- Work associated with each phase and subphase will be completed in the shortest possible time frame, limiting the duration of the impact.
- Use of natural features, i.e. topography, vegetation and distance, to limit noise generation.
- Strict adherence to the noise regulations set forth by the Town of Goshen. Scheduled construction between the hours of 8:00 a.m. and 8:00 p.m. Monday through Friday and 9:00 a.m. and 8:00 p.m. on weekends.
- Ensure that all equipment meets current noise criteria with routine monitoring.
- Disabling all equipment that is not in use.
- Proper design of mechanical equipment associated with the central water and sewer systems.
- Blasting will be done in accordance with NYS and Town license requirements, with notification to property adjoiners, along with pre-blast surveys and test blasts.

The following are unavoidable adverse environmental impacts that are unable to be avoided upon noise and odors associated with the Proposed Site due to the Proposed Action.

- Increase noise levels above ambient reading during periods of construction.

## 3.11 AIR QUALITY

### 3.11.1 Existing Conditions

The existing air quality within the immediate study area is within compliance with the natural air quality standards. The threshold for air quality index is thirty-five (35) ug/$m^3$ (micrograms per cubic meter of air). The estimated index for Goshen, New York is approximately thirty-two (32) ug/$m^3$. Orange County lies within an area to be considered "non-attainment". This is based upon ozone classification by the NYSDEC and EPA. According to the NYSDEC air quality data that is available for numerous pollutants from monitoring stations operated by the Bureau of Air Quality Surveillance, the standard for other pollutants are not contradictory

### 3.11.2 Future Without the Proposed Project

The existing air quality without the Proposed Action would remain the same. The change could be produced through future design and development throughout the Town, along with natural processes that are associated with degradation of air quality.

### 3.11.3 Potential Impacts

The potential impacts on air quality from the Proposed Action would most likely be due to traffic and construction activities. According to the NYSDOT *Environmental Procedure Manual* ("EPM"), it requires that signalized intersections operating with an overall level of service of "C" or worse require air quality analysis. The following intersections have met this requirement:

- Craigville Road & NYS Route 207
- Sarah Wells Trail & NYS Route 207

See DEIS Chapter III, Subsection 9, *"Traffic and Transportation"* and Appendix V, *"Traffic Study"* for a more in depth discussion.

Based on further requirements of the EPM, the Proposed Action does not meet any further criteria or hardships; in turn a detailed micro-scale carbon monoxide (CO) air quality analysis was not deemed necessary nor undertaken. Along with the anticipated levels of service, the expected increase in vehicles at a particular location affects the potential need for a micro scale CO Air Quality Analysis. The intersection of Craigville Road and NYS Route 207 is expected to experience a level of service "E" and "F" during peak periods without mitigation. The actual increase in traffic to this intersection from the Proposed Action is less than two (2%) percent, requiring no further air quality analysis. The intersection of Sarah Wells Trail and NYS Route 207 is anticipated to operate at a level of service "C" or better with signalization during peak periods. Therefore, no further air quality analysis would be required.

During the periods of construction, there are potential impacts from utilizing equipment and dust kicked up during dry conditions. These potential impacts are to be mitigation with a variety of mechanisms.

See DEIS Chapter IV, *"Construction Impacts"* for a more in depth discussion.

### 3.11.4 Mitigation Measures

In attempts to mitigate potential impacts from the Proposed Action, the following practices will be used:

- The impacts will be limited to the maximum extent practicable.
- Work associated with each phase and subphase will be completed in the shortest possible timeframe.
- Strict adherence and monitoring of air quality based on regulations set forth by the Town of Goshen.
- Implementation of dust control measures as needed.
- Disable all equipment that is not in use.
- Construction in accordance with local New York Building Code, Town of Goshen Building Code and NYSDC regulations, where necessary.

The following are unavoidable adverse environmental impacts that are unable to be avoided upon air quality of the Proposed Site due to the Proposed Action:

- Potential for air quality during times of construction from equipment and dust.

## 3.12 COMMUNITY FACILITIES

### 3.12.1 Existing Conditions

The Town Hall of the Town of Goshen is located at 41 Webster Street within the Village of Goshen. Operations of the Building Department, Town Court, parks and recreational services and a number of other administrative offices are contained within this building.

The Town Police Department serves the Town-Outside-Village (TOV) area and operates from the Town Department of Public Works facility at 44 Police Drive approximately two (2) miles from the Proposed Site. Absent any adverse weather conditions or other extenuating circumstances, the estimated response time to a call at the Proposed Site would be approximately seven (7) minutes.

The Town Police Force consists of a Police Chief, six (6) full time officers and fourteen (14) part-time officers. Additional police coverage for the Proposed Site is available from the Orange County Sheriff's office located in the Village of Goshen and the NYS Police. The NYS Police Troop F provides coverage for a five-county area (Rockland, Orange, Ulster, Sullivan, and Green Counties) and employs approximately 500 personnel. Troop F has approximately 20 stations and is capable of drawing manpower from any of these stations in the event of an emergency. Troopers will respond to any complaint received regardless of jurisdiction and maintain great coordination and cooperation with local forces. Troop F also provides special experts to local forces, including homicide investigators when requested. Troop F also has special detail assignments patrolling Interstate Highway 84 and NYS Route 17/Future 86, and provides 24-hour local coverage for the various towns in Orange County.

The Goshen Fire District includes three (3) separate companies within the Town and Village of Goshen. The district has 180 volunteer members. According to the Fire District's website they receive approximately 725 calls a year. This equates to approximately 56 calls per 1000 population. The district owns and maintains eight (8) fire engines, three (3) SUV's, an ATV, a special operations vehicle and a rescue truck. All three (3) companies, the Cataract, Dikeman and Minisink are located within the Village of Goshen off of Route 207. It is anticipated the necessary response time to a call at the Proposed Site would be approximately five (5) minutes.

Goshen Volunteer Ambulance Corps (GOVAC) has approximately 20 members and operates three (3) ambulances, one (1) fly car and two (2) bicycles. The team responds to over 800 calls a year in the Town and Village of Goshen and the Town of Hamptonburgh. The facility is located at 7 New Street, approximately 1.5 miles from the Proposed Site. It is anticipated the necessary response time to a call from the Proposed Site would be approximately five (5) minutes.

One branch of the Orange County Regional Medical Center is located in Goshen approximately two (2) miles from the Proposed Site. The large medical campus, located on Harriman Drive is focused around Arden Hill Hospital that contains 174 beds and employs 521 full time staff. Other facilities located within this medical campus are Arden Hill Life Care Center, Outpatient Behavioral Health Center and Mental Health Unit. The entire medical campus has approximately 450 beds and over 2,500 health care professionals on staff. The Orange County Medical Center also has future plans to construct a new 374-bed hospital in the Town of Wallkill. This new hospital will allow the Center to expand services and ultimately elevate the quality of healthcare services throughout the County.

There are currently two parks within the Town of Goshen both of which are in close proximity to the Proposed Action. Local parks are maintained by a joint Town and Village recreation department serving populations of both

municipalities, or 12,913 residents (2000). The park facilities available to Goshen residents, which in total cover approximately seventy-four (74) acres and include a range of facilities are summarized in the following table:

**Table 27**
**Park Facilities: Town of Goshen**

| Name of Park | Location | Size | Facilities |
|---|---|---|---|
| Land of Goshen Park | Oakwood Drive | 57 Acres | Picnic pavilion with grills, kitchen facility, playground, 4 baseball/ softball fields, 3 soccer fields, volleyball court, wooded walking trail. |
| Ganley Memorial Park | Meadowbrook Lane in existing Hambletonian Subdivision | 3 Acres | Picnic pavilion, playground, basketball court, 1 baseball field |

Source: Goshen Recreation and Parks Commission, 2006

**Table 28**
**Park Facilities: Village of Goshen**

| Name of Park | Location | Size | Facilities |
|---|---|---|---|
| Erie Street Park | Erie Street | 4.5 Acres | Playground, soccer/football field, baseball/softball field, 2 basketball courts, skateboard park. |
| Duane Bruen Memorial Park | Green Street | .37 Acres | Playground, picnic pavilion with grills, basketball court, horseshoe pits, small multi-use field. |
| Lions Memorial Park | Phillipsburg Road | 6.4 Acres | Picnic pavilion with grills in a wooded setting |
| Harriman Square Park | South Church Street | 2.2 Acres | Benches, lawn with shade trees |
| Wallace Park | N. Church Street & Golden Hill Avenue | .73 Acres | Benches, lawn with shade trees |

Source: Goshen Recreation and Parks Commission, 2006

In addition, the Goshen School district maintains eighty-eight (88) acres of athletic fields and contains additional open space at each of its four buildings. Orange County maintains the Orange County Heritage Trail which extends from Goshen into Chester and Monroe. Residents can walk, jog or bike ride on this trail that has been converted from an abandoned rail bed. The County is currently expanding this facility and it is proposed that the trail will eventually run as long

as twenty (20) miles. The Town and Village also administer a variety of recreational programs for residents of all ages.

The Proposed Site lies entirely within the Goshen Central School District that covers most of the Town of Goshen and extends into limited portions of the neighboring Towns of Hamptonburgh, Wallkill, Wawayanda and Chester. As of September 2006 the district has an enrollment of 2,936 students, according to the District Registration Office. The district contains four school buildings located within the northeast corner of the Village of Goshen.

The Goshen School District's 2005-2006 budget totals $48,744,712. $31,266,570, or approximately 64.1 percent, of this amount was scheduled to be raised through real property tax revenues with the balance being either "State aid" or "non-tax revenue". Total annual per pupil expenditure by the School District is currently $16,518. $10,595 of this amount is raised through the local real property tax.

Residents throughout the Town of Goshen are served by the Goshen Public Library and Historical Society which is a participant in the Catskill-Ramapo Library System. The library is located on Main Street in the Village of Goshen and employs approximately eleven (11) staff members and serves a total population of approximately 18,589 (2000). According the library's website the facility houses a complete collection of books, music, and movies for all ages and hosts a number of special events. According to their "Vital Statistics Report" published in 2005 the library has a total circulation of 167,334. The Library raises approximately $500,000 annually which is achieved through the Real Property Tax with a library tax levy included on the school tax bill received by Goshen Central School District property owners.

The Goshen Senior Center is located at 100 Trotter Circle. It is open Monday through Friday 11 a.m. to 3 p.m. The center offers classes, card and movie nights

and organizes trips for local senior citizens. According to the July 2007 newsletter written by the center's director, events are well attended and there is additional space available.

The Proposed Site is currently vacant and does not generate solid waste. Residential solid waste collection within the Town of Goshen is provided by privately owned companies and services are paid for by the individual property owner. Orange County does not have any 'Flow Control' or limit on the amount of personal refuse that can be generated nor do they mandate which collection company a resident or development must use. Orange County does have a recycling program that all residents would have to adhere to which would help to reduce the total amount of discarded waste. According to the Orange County Department of Environmental Facilities and Services, solid waste collected from the Town of Goshen is brought to the New Hampton Transfer Station (formerly known as the Orange County Sanitary Landfill) on Rt. 17M in Goshen and then transferred to approved solid waste disposal sites. Non-residential land uses within the Town utilize private carters for solid waste collection and disposal and also for recyclable materials.

Craigville Road provides access from the Proposed Site into the Village of Goshen where a wide variety of shops, restaurants, banking and other services exist including the Goshen Post Office located on Grand Street. Additional commercial uses are an integral part of the Proposed Action.

### 3.12.2. Future without the Proposed Project

The current demand of the Proposed Site, in its current vacant state, for community services is very small. There are no known circumstances that would affect the existing conditions or cause an increase in present demand for community services at the Proposed Site in its current state.

Without the construction of the Proposed Action, it is acknowledged that a substantial number of other large developments totaling over 1,000 units have either recently been approved or are currently being considered by the Planning Board. It can be expected that the cumulative impact of these additional units will require an expansion of Town services.

According to the Preliminary Enrollment Projection Update Report for the Goshen Central School District without any of the Proposed Action the School District is likely to grow to between 2918 and 3239 students by the year 2010.

### 3.12.3 Potential Impacts

It's been estimated that the Proposed Action will generate approximately 616 new residents based on 2000 US Census Bureau Public Use Microdata Samples for New York State. This increase represents a 4.77% increase in the Town's 2000 population of 12,913.

The development of the Proposed Action will result in an increase in user-fee supported permitting, inspection and related activities during the construction period and as subdivision improvements are installed and lot by lot development occurs. After this point, we do not anticipate any abnormal increase in demand for Town Hall and general governmental services based upon a 4.77% increase in population.

The Project Sponsor does not anticipate that the Proposed Action will have a substantial impact on the demand for police services within the community or the ability of local, County or State Police agencies to continue to deliver services within their jurisdictions. The Police Department was solicited for comments on the Proposed Action as part of the preparation of this DEIS and declined to provide feedback. However, they will continue to have an opportunity to provide comments throughout the review and comment period.

The Project Sponsor does not anticipate that the Proposed Action will have a substantial impact on demand of Fire Protection Services within the community or an effect on the ability of the Fire Department to deliver services to existing developments. If calls continue similarly to the current rate, it can be expected that the Proposed Action would add approximately thirty-four (34) calls per year or an additional 4.77% in call volume.

The Goshen Fire District's 1st Assistant Chief Jeremy Cohen stated two general concerns related the majority of residential subdivisions are availability of water for hydrant flow and road width to ensure adequate access to homes. The Proposed Action is in conformance with both concerns.

It is not anticipated that the development of the Proposed Action will produce a substantial demand for emergency medical services, as would for instance the specialized population of a nursing home or other similar facility, nor is it anticipated to impact the continued delivery of emergency medical services throughout the community. GOVAC was solicited for comments regarding the Proposed Action as part of the preparation of this DEIS but declined to provide feedback. However, they will continue to have an opportunity to provide comments throughout the review and comment period.

The increased amount of potential residents from the Proposed Action is not anticipated to have a substantial impact on either demand at the hospital or the ability of the hospital to provide services to the community.

The addition of approximately 616 new residents will increase usage of local parks. While demand at the above listed existing parks for athletic field space is high, passive use of these parks is below capacity according to the Town of Goshen Recreation Study prepared by the Orange County Planning Department.

The Proposed Action can be expected to generate approximately 90 school aged children that would be expected to attend public school based the types of residential structures proposed in the subdivision and Residential Demographic Multipliers from Rutgers University Center for Urban Policy Research. The breakdown of calculations are provided in the following table:

**Table 29**
**School Child Generation**

| Number of Units | Type of Dwelling Unit | Number of Bedrooms | Multiplier | Public School-Aged Children Generated |
|---|---|---|---|---|
| 69 | Single Family > $329,500 | 4 | 0.87 | 60.03 |
| 44 | Townhouse Units > $269,500 | 3 | 0.28 | 12.32 |
| 116 | Apartment Units | 2 | 0.15 | 17.40 |
| **POTENTIAL PUBLIC SCHOOL CHILDREN GENERATED** | | | | **89.75** |

For further explanation see the Fiscal Impact Section of this DEIS.

The Proposed Action can be projected to increase the total enrollment of the Goshen Central School District by 3.07% of its 2006 enrollment total of 2,936 as reported by the Goshen Central Schools registration office. This increase is expected to take place over a number of years as homes are occupied and students will be spread out over all twelve (12) grade levels.

The Goshen Central School District has been actively responding to present enrollment and planning for future growing enrollment in recent years through active implementation of measures involving expansion and enhancement of both their capital facilities and their educational programs. Facilities such as Scotchtown Elementary School Building have been expanded to deal with increases in enrollment but according to the district publications, additional capital projects will be needed in the future.

According to a report titled *The Future is Now: A long Range Plan for the Goshen Public Library and Historical Society, 2005-2010*, prepared by the Goshen Public Library and Historical Society Planning Committee with assistance from Library Development Solutions in June 2005, the library has been diligent in exploring all opportunities for either expanding the library in place or identifying property where the library and historical society can expand to meet the needs and demands of the community it serves. The library plans to expand its scope of services it provides, expanding library hours, and possibly increase staff. Based on this report and the library's existing plans to expand its operations, the Project Sponsor does not anticipate that the Proposed Action will have a substantial impact on the Goshen Library and Historical Society.

According to the 2000 U.S. Census, approximately 17% of Goshen residents are age 65 or older. As the Proposed Action is not age restricted it would not be likely that a higher percentage of senior citizen residents would elect to live here. Therefore, based upon the estimate of approximately 616 total residents, it can be expects that no more than approximately 104 senior citizens would reside in the Proposed Action. The Project Sponsor does not expect that all of the new residents age sixty-five (65) and older would participate in Senior Center activities.

The U.S. Environmental Protection Agency estimates the national per capita garbage generation rate to be approximately 4.5 pounds of solid waste per person per day. Using this assumed rate the anticipated 616 new residents of the Proposed Action would generate an estimated 2,772 pounds of solid waste per day which is equal to 41.6 tons of solid waste per month. The Project Sponsor does not anticipate that this amount will have a substantial impact on the ability of responsible parties to provide for management, collection and processing of this waste in accordance with the requirements of the Orange County Waste Management Program.

Proposed non-residential development will use private carters to remove and dispose of solid waste and for the collection of recyclable materials. This service would be paid for by the individual business owners and would not result in any strain on Town services. Solid waste and recyclables would be stored on-site in enclosed dumpsters which will be designed to avoid visual impacts. It is difficult to determine exactly how much waste will be generated by the commercial development before the exact use is determined.

Larger quantities of waste will be generated due to construction and development of the Proposed Action. This waste will be disposed of appropriately in accordance with Orange County requirements and pertinent NYSDEC Regulations.

The Orange County Department of Environmental Facilities and Services Deputy Commissioner Peter Hammond reports that at the present time, the Orange County transfer stations would be fully able to accommodate the additional solid waste capacity generated by the Proposed Action.

The estimated 616 new residents would most likely use shopping, banking and other services located in and around the Town and Village of Goshen providing increased economic benefit to business owners.

### 3.12.4 Mitigation Measures

In attempts to mitigate potential impacts from the Proposed Action, the following practices will be used:

- Town Hall Services: The Project Sponsor concludes no major impacts are anticipated related to town hall and general governmental services and any slight impacts would be mitigated through the increase user fees and, or tax revenue no additional mitigations are required.
- Police Protection: No mitigations are required.

- Fire Protection: The system will be designed in accordance with NYSDOH and OCDOH regulations. The subdivision will contain 22 fire hydrants spaced no more than 400 feet apart. The system will also be designed in accordance with ISO standards and will provide required fire flow storage and water pressure of 1,500 gallons per minute (gpm). As discussed in the Fiscal Impact Section of this DEIS, the Goshen Fire District Number 1 assesses a tax of $1.8116 per $1,000 of assessed value. At this current tax rate the district will receive $37,833 in annual net revenue from the Proposed Action at full built out.
- Emergency Services: No mitigations are required.
- Hospitals: As no major impacts are anticipated related to hospitals due to existing capacity and the newly proposed hospital development, no mitigations are required.
- Recreation Facilities: In accordance with the design guidelines of the HR and RU zones the Proposed Action will be designed in a cluster pattern to allow for open and recreational space to be provided on the Proposed Site. The HR Zone will contain approximately 44.6 acres of open space. Open Space in the RU Zone will be broken down into 8.2 acres of open space and 6.5 acres of deed restricted conservation easements to the rear of lots in the northeast corner of the Proposed Action.
- Schools: As discussed in the Fiscal Impact Section of this DEIS, the School District can expect to bring in additional tax revenue as a result of the Proposed Action.
- Libraries: Based on the above plans for library expansion, no major impacts are anticipated with regard to library services and therefore mitigations are not required.
- Town Senior Center: Additional space is available for participation at Goshen Senior Center events and activities no further mitigations are required.
- Solid Waste Management: Residents of the Proposed Action would be required to participate in the Orange County Recycling Program which

would help to reduce the amount of total waste to be discarded. As solid waste collection is privately funded it can be assumed that any impacts on waste disposal will be mitigated by increased fees brought in from individual consumers. No further mitigations are required.

- Access to shopping, banking, Post Office and other services: No mitigations are required.

The following are unavoidable adverse environmental impacts that are unable to be avoided upon community facilities of the Proposed Site due to the Proposed Action:

- Potential decrease of residual capacity within the area's solid waste transfer stations, upwards of 41.6+ tons per month at full build-out.

## 3.13 FISCAL IMPACT

### 3.13.1 Existing Conditions

Currently the Proposed Site, which is vacant, demands very few municipal services from its taxing jurisdictions. The Proposed Site is divided into two parcels known as tax lot 8-1-1.1 consisting of 11+ acres and tax lot 8-1-48 consisting of 84+ acres. According to the 2006 property tax bill and the Orange County Department of Real Property, the entire Proposed Site generates a total of $25,931.22 for its taxing jurisdictions based on a total assessed value of $703,100. The breakdown of the tax bill for 2006 for both tax lots is indicated in the table below and on the following page.

**Table 30**
**Existing Tax Bill: 8-1-1.1**

| Taxing Jurisdiction | Tax Rate /$1000 AV | Tax Revenue |
|---|---|---|
| Orange County | 5.058700 | $556.46 |
| Town of Goshen | 1.433900 | $157.73 |
| Highway Department | 1.597600 | $175.74 |
| Part Town | 1.345900 | $148.05 |
| Goshen FD # 1 | 1.811600 | $199.28 |
| Goshen CSD | 25.633544 | $2,819.69 |
| All Jurisdictions | | $4,056.95 |

| **Table 31**<br>**Existing Tax Bill: 8-1-48** | | |
|---|---|---|
| **Taxing Jurisdiction** | **Tax Rate /$1000 AV** | **Tax Revenue** |
| Orange County | 5.058700 | $3,000.31 |
| Town of Goshen | 1.433900 | $850.45 |
| Highway Department | 1.597600 | $947.54 |
| Part Town | 1.345900 | $798.25 |
| Goshen FD # 1 | 1.811600 | $1,074.46 |
| Goshen CSD | 25.633544 | $15,203.26 |
| **All Jurisdictions** | | **$21,874.27** |

Source: Town of Goshen Receiver of Taxes

### 3.13.2 Future Without the Proposed Project

If the property remains undeveloped the assessed value, and the resulting, the tax bill would remain approximately the same.

### 3.13.3 Potential Impacts

In order to assess the potential fiscal impacts of the Proposed Action on local taxing jurisdictions, the Proposed Action was appraised, tax revenue calculated and costs calculated. The Per Capita Multiplier and Proportional Valuation average costing methods, as described in the *New Practitioners Guide to Fiscal Impact Analysis,* were employed to calculate costs. The revenues and costs are a calculation of how the Proposed Action would impact the community if it were fully built and occupied in 2006; it is not a projection of future revenue. Fiscal impact analysis requires that the Proposed Action be analyzed in this manner to reduce the number of unknown factors that would complicate and reduce the accuracy of a projection of future costs and revenues.

Before calculating tax revenue from the residential portion of the development, each residential element of the proposal must be valued. Assessors typically compare new housing against the assessed value of comparable existing housing.

The assessor maintains a comparison between the sales price and assessed valuation for one, two and three family residents. This ratio known as the Residential Assessment Ratio ("RAR") can be used to approximate the assessed value of one-two and three-family residences based on their sales prices. Because the proposed townhouses are proposed on fee-simple lots and are not to be owned in condominium, they also may be assessed by utilizing the RAR. The 2006 RAR for the Town of Goshen was 48.21.

Multifamily units and apartments above retail uses are valued based on their income potential, even if they are to be sold. Because it is difficult to reliably predict the income that a for-sale unit could receive, instead the relationship between condo flat sales prices and market value was assessed. Based on the Whispering Hills condominium units, two-bedroom condo flats have market values of approximately 25% of their sales price. Condominium multifamily units which are assessed based on their income potential are not included in the calculation of RAR. It is therefore more appropriate to apply the Equalization Rate (ER in Goshen was 55.0 in 2006), which is a ratio between the total assessed value and total market value in a Town. The table on the following page shows the calculation of residential assessed value ("AV"):

**Table 32**
**Calculation of Residential Assessed Value**

| Unit Type | # | Sales Price | Market Value | Assessment Rate Used | Assessed Value | Total AV |
|---|---|---|---|---|---|---|
| Premium Estate Lot 4-Bed SFD | 12 | $750,000 | $750,000 | RAR | $361,575 | $4,338,900 |
| Estate Lot 4-Bed SFD | 4 | $700,000 | $700,000 | RAR | $337,470 | $1,349,880 |
| Premium Cluster Lot 4-Bed SFD | 41 | $475,000 | $475,000 | RAR | $228,998 | $9,388,898 |
| Cluster Lot 4-Bed SFD | 12 | $425,000 | $425,000 | RAR | $204,893 | $2,458,710 |
| 3-Bed Townhouse | 44 | $350,000 | $350,000 | RAR | $168,735 | $7,424,340 |
| 2-Bed Condo Flats | 108 | $250,000 | $63,553 | ER | $34,954 | $3,775,064 |
| 2-Bed Mixed Use Condo Flats | 8 | $225,000 | $57,198 | ER | $31,459 | $251,671 |
| **Total** | 229 | | | | | $28,987,462 |

Based on a random survey of mix uses buildings in the Village of Goshen, mixed-use and traditional commercial buildings may be reasonably assessed at approximately $65 per sq. ft. The Proposed Action includes 30,000± sq. ft. of commercial floor area, which would be valued at $1,950,000. The entirety of the Proposed Action would therefore be valued at $30,937,462. The taxes generated by the Proposed Action to each taxing jurisdiction are calculated in the following table:

**Table 33**
**Total Potential Tax Revenue Generated**

| Taxing Jurisdiction | Tax Rate /$1000 AV | Tax Revenue |
|---|---|---|
| Town of Goshen (Town, Hwy, Part Town) | 4.377400 | $136,538 |
| Orange County | 5.058700 | $157,789 |
| Goshen FD #1 | 1.811600 | $56,507 |
| Goshen CSD | 25.633544 | $799,552 |
| All Jurisdictions | 36.881244 | $1,150,385 |

Based on 2000 US Census Bureau Public Use Microdata Samples for New York State, the following schoolchild and population multipliers may be used to derive an anticipated population of the Proposed Action. The results are indicated in the following table:

**Table 34**
**Proposed Development Population**

| Unit Type | # | Population per Unit | Public Schoolchildren per Unit | Population | Public School-children |
|---|---|---|---|---|---|
| Premium Estate Lot 4-Bed SFD | 12 | 3.67 | 0.87 | 44.04 | 10.44 |
| Estate Lot 4-Bed SFD | 4 | 3.67 | 0.87 | 14.68 | 3.48 |
| Premium Cluster Lot 4-Bed SFD | 41 | 3.67 | 0.87 | 150.47 | 35.67 |
| Cluster Lot 4-Bed SFD | 12 | 3.67 | 0.87 | 44.04 | 10.44 |
| 3-Bed Townhouse | 44 | 2.83 | 0.28 | 124.52 | 12.32 |
| 2-Bed Condo Flats | 108 | 2.05 | 0.15 | 221.4 | 16.2 |
| 2-Bed Mixed Use Condo Flats | 8 | 2.05 | 0.15 | 16.4 | 1.2 |
| Total or [average] | 229 | [2.69] | [0.39] | 616 | 90 |

Next the Per Capita Costs for each jurisdiction must be calculated. This is done using formulae and refinement coefficients found in the *"New Practitioner's Guide"*. The following worksheets show derivation of the Per Capita Costs as well as the Total Nonresidential Costs for each Jurisdiction:

**Table 35**
**Town Per Capita and Non-Residential Costs**

| Town Derivation of Per Capita Cost (Town and Highway) | | | |
|---|---|---|---|
| A | 1 | Total Annual Expenditures to Be Raised by Taxes | $2,175,148 |
| B | 1 | Nonresidential Real Property Value | $561,559,594 |
| C | 1 | Total Local Real Property Value | $1,324,819,564 |
| D | 1 | Percentage of Total Value in Nonresidential Use [B1/C1] | 42.39% |
| E | 1 | Nonresidential Land Parcels | 1,204 |

| | | | |
|---|---|---|---|
| F | 1 | Total Land Parcels | 4,708 |
| G | 1 | Average Nonresidential Parcel Value [B1/E1] | $466,411.62 |
| H | 1 | Average Parcel Value [C1/F1] | $281,397.53 |
| I | 1 | Ratio of Average Nonresidential to Average Parcel Value [G1/H1] | 1.6575 |
| J | 1 | Refinement Coefficient for Determining Nonresidential Share of Expenditures | 1.74 |
| K | 1 | Municipal Expenditures Attributable to Nonresidential Uses [A1xD1xJ1] | $1,604,269 |
| L | 1 | Municipal Expenditures Attributable to Residential Uses [A1-K1] | $570,879 |
| M | 1 | Population (2006 US Census Estimate) | 13,743 |
| N | 1 | Per Capita Municipal Expenditures to Be Raised by Taxes | $41.54 |
| **Town Derivation of Per Capita Cost (Part Town)** | | | |
| A | 2 | Total Annual Expenditures to Be Raised by Taxes | $744,829 |
| B | 2 | Nonresidential Real Property Value | $561,559,594 |
| C | 2 | Total Local Real Property Value | $1,324,819,564 |
| D | 2 | Percentage of Total Value in Nonresidential Use [B2/C2] | 42.39% |
| E | 2 | Nonresidential Land Parcels | $1,204 |
| F | 2 | Total Land Parcels | $4,708 |
| G | 2 | Average Nonresidential Parcel Value [B2/E2] | $466,412 |
| H | 2 | Average Parcel Value [C2/F2] | $281,398 |
| I | 2 | Ratio of Average Nonresidential to Average Parcel Value [G2/H2] | 1.6575 |
| J | 2 | Refinement Coefficient for Determining Nonresidential Share of Expenditures | 1.74 |
| K | 2 | Municipal Expenditures Attributable to Nonresidential Uses [A2xD2xJ2] | $549,345 |
| L | 2 | Municipal Expenditures Attributable to Residential Uses [A2-K2] | $195,484 |
| M | 2 | Population (2006 US Census Estimate) | 8,303 |
| N | 2 | Per Capita Municipal Expenditures to Be Raised by Taxes | $23.54 |
| **Town Derivation of Nonresidential Cost** | | | |
| O | | Proportion of Proposed Assessed Value to Average Value of Nonresidential | 4.73 |

| | | | |
|---|---|---|---|
| P | | Refinement Coefficient for Determining Expenditure Share of Proposed Use | 0.57 |
| Q | | Proportion of Proposed Assessed Value to Total Value of Nonresidential | 0.003925051 |
| R | | Share of Town Expenditures Assigned to Proposed Use [(K1+K2)*P*Q] | $4,818.23 |

**Table 36**

**Fire District Per Capita and Non-Residential Costs**

| | | |
|---|---|---|
| **Fire District Derivation of Per Capita Cost** | | |
| A | Total Annual Expenditures to Be Raised by Taxes | $1,392,115 |
| B | Nonresidential Real Property Value | $561,559,594 |
| C | Total Local Real Property Value | $1,324,819,564 |
| D | Percentage of Total Value in Nonresidential Use [B/C] | 42.39% |
| E | Nonresidential Land Parcels | 1,204 |
| F | Total Land Parcels | 4,708 |
| G | Average Nonresidential Parcel Value [B/E] | $466,411.62 |
| H | Average Parcel Value [C/F] | $281,397.53 |
| I | Ratio of Average Nonresidential to Average Parcel Value [G/H] | 1.6575 |
| J | Refinement Coefficient for Determining Nonresidential Share of Expenditures | 1.74 |
| K | Fire Expenditures Attributable to Nonresidential Uses [AxDxJ] | $1,026,747 |
| L | Fire Expenditures Attributable to Residential Uses [A-K] | $365,368 |
| M | Population (2006 US Census Estimate) | 13,743 |
| N | Per Capita Municipal Expenditures to Be Raised by Taxes | $26.59 |
| **Fire District Derivation of Nonresidential Cost** | | |
| O | Proportion of Proposed Assessed Value to Average Value of Nonresidential | 4.73 |
| P | Refinement Coefficient for Determining Expenditure Share of Proposed Use | 0.57 |
| Q | Proportion of Proposed Assessed Value to Total Value of Nonresidential | 0.003925051 |

| | | |
|---|---|---|
| R | Share of Fire District Expenditures Assigned to Proposed Use [K*P*Q] | $2,297.12 |

**Table 37**
**County Per Capita and Non-Residential Costs**

| | | |
|---|---|---|
| **County Derivation of Per Capita Cost** | | |
| A | Total Annual Expenditures to Be Raised by Taxes | $99,102,312 |
| B | Equalized Nonresidential Real Property Value | $2,062,036,163 |
| C | Total Local Equalized Real Property Value | $5,138,392,345 |
| D | Percentage of Total Value in Nonresidential Use [B/C] | 40.13% |
| E | Nonresidential Land Parcels | 34,365 |
| F | Total Land Parcels | 130,579 |
| G | Average Nonresidential Parcel Value [B/E] | $60,003.96 |
| H | Average Parcel Value [C/F] | $39,350.83 |
| I | Ratio of Average Nonresidential to Average Parcel Value [G/H] | 1.52 |
| J | Refinement Coefficient for Determining Nonresidential Share of Expenditures | 1.75 |
| K | County Expenditures Attributable to Nonresidential Uses [AxDxJ] | $69,597,053 |
| L | County Expenditures Attributable to Residential Uses [A-K] | $29,505,259 |
| M | Population (2006 US Census Estimate) | 372,893 |
| N | Per Capita County Expenditures to Be Raised by Taxes | $79.13 |
| **County Derivation of Nonresidential Cost** | | |
| O | Proportion of Proposed Assessed Value to Average Value of Nonresidential | 36.73 |
| P | Refinement Coefficient for Determining Expenditure Share of Proposed Use | 0.23 |
| Q | Proportion of Proposed Assessed Value to Total Value of Nonresidential | 0.001068919 |
| R | Share of County Expenditures Assigned to Proposed Use [K*P*Q] | $17,110.53 |

| **Table 38 Cost Per Student** | | |
|---|---|---|
| **Derivation of Per Student Cost** | | |
| A | Total Annual Expenditures to be raised by local levy | $31,266,570 |
| B | Average Daily Enrollment | 2,936 |
| C | Total Per Child School District Tax Expenditures [A/B] | $10,649 |

The development populations calculated previously can be multiplied by the per capita residential tax levy to calculate the tax costs to each taxing jurisdiction based on existing conditions. This cost can then be compared against the calculated tax revenue for each jurisdiction to calculate the net fiscal impact to each taxing jurisdiction, summarized in the following table:

**Table 39**
**Net Fiscal Impact**

| Taxing Jurisdiction | Development Population | Per Capita Tax Cost | Residential Tax Cost | Nonresidential Tax Cost | Total Tax Cost | Total Tax Revenue | Net Fiscal Impact |
|---|---|---|---|---|---|---|---|
| Town of Goshen | 616 | $65.08 | $40,091 | $4,818 | $44,910 | $136,538 | $91,629 |
| Orange County | 616 | $79.13 | $48,741 | $17,111 | $65,852 | $157,789 | $91,937 |
| Goshen FD #1 | 616 | $26.59 | $16,377 | $2,297 | $18,674 | $56,507 | $37,833 |
| Goshen CSD | 90 | $10,649.38 | $958,444 | $0 | $958,444 | $799,552 | -$158,892 |
| Total - All Jurisdictions | | $10,820.17 | $1,063,653 | $24,226 | $1,087,879 | $1,150,385 | $62,506 |

Based on average costing methods, were the Proposed Action built and occupied in 2006 it would generate more tax revenues than costs for the Town, County and Fire District. It would produce more tax costs than revenues for the school district. The net impact of the Proposed Action on all taxing jurisdictions is a modest increase in net revenue.

Through the study of the anticipated fiscal impacts associated with the Proposed Project, the Project Sponsor has determined the projected population is an

economic benefit to the local commercial and service establishments within the Town and Village of Goshen. Ultimately, the local economy would not experience changes in terms of size and scope of what is currently available nor would a demand be created for additional economic sectors. It is further anticipated that the Proposed Action is not large enough for any impacts to be realized on a more regional scale.

### 3.13.4 Mitigation Measures

While the school district impact is negative, the net impact to all jurisdictions is positive. On the whole, impacts to the Town taxpayer will be positive. The negative impact to the school district is primarily due to the reduced assessments assigned to condominium real estate in the Town. Were condominium real estate assessed at full market value in the Town, the Proposed Action would provide a net revenue of approximately $148,000 to the school district rather than a $159,000 deficit. One way to mitigate this would be for the School District to be certified as a Homestead Assessing Unit. This would allow full market assessment of condominium real estate.

The Project Sponsor has determined there are no unavoidable adverse environmental impacts that are unable to be avoided upon fiscal impacts of the Proposed Site due to the Proposed Action.

See DEIS Chapter VII, *"Unavoidable Adverse Impacts"* for a complete listing.

## 3.14 CULTURAL RESOURCES

### 3.14.1 Existing Conditions

The service, experience and expertise of BTK Associates ("Project Archaeologist") were retained by the Project Sponsor to conduct a survey and assessment of the cultural resources, including historic and archaeological resources, of the Proposed Site. The Project Archaeologist conducted this effort in accordance with the Standards for Cultural Resource Investigations ("CRI") set forth by the New York Archaeological Council and successively undertook a

Phase 1A Literature Search and Feasibility Study and a Phase 1B Field Investigation.

See DEIS Appendix J, *"Phase 1 Cultural Resource Survey of the Proposed Maplewood at Goshen"*.

As discussed in greater detail in the full report, during its Phase 1A effort the Project Archaeologist determined, based upon its research and in consultation with the New York State Office of Parks, Recreation and Historic Preservation, the following:

- There are no structures or sites presently listed on the State or National registers of Historic Places either within or contiguous to the Proposed Site.
- The Proposed Site had not been previously subjected to archaeological testing.
- The Physiographic characteristics of the Proposed Site, including presence of some 41± acres of wetland, view sheds and well-drained soils and proximity to the Otter Kill, as well as previously identified prehistoric site recorded in the New York State Museum's files, combine to assess the Proposed Action's location as being sensitive for potential prehistoric resources.
- Zones of potential historic sensitivity within the Proposed Site include locations proximal to the Church Park Historic District and Historic National Landmark located in the Village of Goshen.

Historical research indicates that the property was in the possession of the Carpenter family by 1800. It passed through the family to Mary Ellen Haight, who inherited a 183-acre homestead, *Napknoll*. Mary Ellen and her husband, wealthy New York merchant David Haight, created a park-like estate with an artificial lake (Haight's Pond), trails and outbuildings. Around 1901, the large parcel, including the Proposed Site, was owned by New York City Police official John McCullagh and his wife, who called it *Low Wood Park*. In 1905, the

property was acquired by Grant Hugh Browne. He renamed the estate *Brownleigh Park* and added a horse track, remodeled a horse show ring into a prizefighting arena and made other improvements. In 1925, the property was acquired by the Catholic Salesian Fathers, who converted it into a residential school. In 1928, the arena and a two-story, 120 foot long stable/carriage house burned.

The Phase 1B Archaeological Survey was undertaken for each Area of Potential Effect ("APE") within the Proposed Site including the residential and commercial development areas, the vehicular access ways and proposed well sites. In conducting the work, the Project Archaeologist divided the Proposed Site into eight distinct test areas (Grids one (1) through eight (8)) based on topography and other physiographic characteristics.

From December 11, 2006 until January 12, 2007, and from May 17 to 21, 2007, the Project Archaeologist carried out a Phase 1B cultural resource survey of the Proposed Action. The Phase 1A assessment documented previous land uses, environmental conditions and current uses of the subject property. Based on this research and visual inspection, sensitivity of the vicinity for prehistoric and historic cultural resources was assessed. Because of the proximity of known Precontact sites, the geology and geography of the Proposed Site, and historic research, impacted areas were recommended for field testing with the exception of steep and/or poorly drainage areas.

The fieldwork included a pedestrian reconnaissance, which covered areas slated for construction and those beyond the potential impacts. Such a pedestrian survey looks for surface evidence of historic or prehistoric cultural resources, as well as areas of steep slope. Much of the Proposed Site was evaluated as having the potential for containing prehistoric sites. Regular interval shovel testing examined the areas evaluated as having this potential.

The APE associated with the Proposed Action was divided into eight areas, defined as Grids, to facilitate testing. The Phase 1B survey looked for anomalies and artifacts exposed on the survey. This included soils exposed in trails, tree falls, rodent burrows and eroded areas. For simplicity and accuracy in mapping, grids were established in feet. "Grid North" was usually oriented to be at a right angle to Coleman Road or Craigville Road.

Shovel tests measured about thirty (30) centimeters on a side. Depths were recorded in centimeters. Soil textures were determined using a flow chart diagram. Soil colors were determined with the aid of a Munsell Soil Color Chart. Recovered artifacts are listed in the Artifact Inventory of the Cultural Survey. All shovel test material was screened through ¼- inch mess hardware cloth, with excavations promptly refilled.

Some shovel tests which produced artifacts became the center of additional excavations, intended to determine the potential significance of the finds. Eight additional radial tests were dug around these positive shovel tests. These tests were placed in the cardinal directions, at three feet (3') and ten feet (10') distant from the positive test.

### 3.14.2 Future Without the Proposed Project

There are no known circumstances that would impact the Existing Conditions, as cited above, and cause such to be altered in the No Build Condition.

### 3.14.3 Potential Impacts

Background research reached a conclusion that much of the Proposed Site had sensitivity for both Precontact and Historic-era cultural resources. The Proposed Site was divided into eight Grids for the Phase 1B archaeological survey. In Grid one (1), a Precontact flake was found in a shovel test. Supplemental tests did not produce any artifacts or features. Also in Grid 1, a nail was found in a shovel test. Supplemental tests did not produce any more finds. These two find spots are not considered potentially significant. No artifacts or features were encountered in

Grid two (2). A nail was found in one Grid three (3) test. Supplemental tests did not produce any finds; this location is not considered potentially significant.

In Grid four (4), a subterranean historic stone feature was mapped at the base of the slope. This rectangular stone enclosure may be a milk house or well. This feature should be preserved within the landscaping of the Proposed Action. Prior to construction, it should be surrounded by protective fencing. If preservation in place of this feature is not possible, a Phase two (2) investigation in Grid four (4) is recommended.

In the west side of Grid five (5), the ruins of a very long building are bisected by the property/Village line. This was likely a carriage house/stable constructed by sportsman Grant Hugh Browne. It also may have been the original building used as a school by the Salesians. The carriage house burned in 1939, the same night as a huge gymnasium, which was not in the Proposed Site. A Phase two (2) historical and archaeological investigation of the features and deposits in Grid five (5) is recommended. A survey of these ruins could be complicated by the fact that approximately half of the ruins of a large building are on Village of Goshen property and outside the Proposed Site. It is suggested that any further investigations of the ruins in Grid 5 should be carried out following consultations with the Village of Goshen and the Town/Village Historian. The consultation will ensure that both involved landowners associated with the found ruins will understand potential impacts and possible preservation that may be needed. The proposed investigations would include historic research including attempts at compiling oral histories from local respondents. Fieldwork would commence with clearing and drawing the ruins. These investigations would be followed by selective archaeological excavations.

No sites were found and no further investigations are recommended for Grids six (6), seven (7) and eight (8).

### 3.14.4 Mitigation Measures

Potential impacts to the subterranean historic stone feature located in Grid four (4) will be mitigated by avoiding the structure during construction. The feature will be preserved within a landscape/lawn area. Prior to construction the structure will be fenced off with four foot (4') high orange PVC snow fence to eliminate damage to the structure during construction. Should preservation not be possible, a Phase two (2) investigation will be conducted within the immediate area of the structure and the structure will be recorded in accordance with State and Federal protocols.

The existing remnants of Haights' Pond concrete dam will be avoided during construction, no improvements are proposed in the vicinity of the dam. Should it be determined that the existing structures may be impacted, a Phase two (2) investigation of the Haights' Pond dam shall be conducted. Should preservation not be possible, a Phase two (2) investigation will be conducted within the immediate area of the structure and the structure will be recorded in accordance with State and Federal protocols.

The foundation in Grid five (5) straddles the municipal line between the Town and the Village of Goshen. Part of the foundation lies within the Village and Town-owned Salesian Park. The foundation should be salvaged within the landscape/lawn area that does not contain any improvements associated with the Proposed Action. Prior to construction, the ruins should be fenced with a four foot (4') high orange PVC snow fence to eliminate damage to the structure during construction. Should preservation not be possible, a Phase two (2) investigation will be conducted within the immediate area of the structure and the structure will be recorded in accordance with state and Federal protocols.

The Project Application has determined there are no unavoidable adverse environmental impacts that are unable to be avoided upon cultural resources of the Proposed Site due to the Proposed Action.

See DEIS Chapter VII, *"Unavoidable Adverse Impacts"* for a complete listing.

## 3.15 AGRICULTURAL RESOURCES

### 3.15.1 Existing Conditions

The area in the vicinity of the Proposed Action is categorized as Agricultural District #1 by the County of Orange. The Proposed Site itself does not currently contain active farming operations.

There are a variety of farming operations within a one half (1/2) mile radius of the Proposed Site. They consist of crop production, hay fields, dairy farms and horse paddocks. The Banbury Cross Farm is located to the northeast across Coleman Road. It consists of vacant farmland that may periodically hay its fields; additionally the main focus of the farm is horse paddocks and pastures to the southeast. At the intersection of Craigville Road and Hasbrouck Road are lands that periodically hay their fields and plant minor crops. Further to the southeast along Knoell Road is the Broderick Farm. There lands are of a vacant dairy farm that periodically hays its fields. Finally, to the south along Old Chester Road, is the Kolk Farm which utilizes its lands for crop production to supplement dairy farming within other parts of the Town.

The aforementioned farms are the most likely to be potentially impacted by the Proposed Action. Further out from the Proposed Site various other farming operations do exist within the Town of Goshen.

### 3.15.2 Future Without the Proposed Project

The Proposed Site does not contain any significant agricultural resources. Currently, no agricultural activities or operations exist and there are no offsite agricultural operations that are dependent upon existing site resources. Therefore, there would be no significant change to the surrounding agricultural land uses.

### 3.15.3 Potential Impacts

The Proposed Action should not cause any significant impacts to the existing farm operations, according to the Project Sponsor, within the vicinity of the Proposed Site. The minimal operations within direct correlation are either vacant and/or have minor operations that do not consist of daily interaction. Due to this factor, the potential for conflicts between traffic and farm equipment are to be at a minimum, limited to short durations at any one time.

### 3.15.4 Mitigation Measures

There is no mitigation scheduled in regards to agricultural resources.

# IV. CONSTRUCTION IMPACTS

## 4.1 Anticipated Impacts

The principal anticipated construction impacts associated with the development of the Proposed Action are as follows:

- The impact of construction traffic on the adjacent roadway network.
- The impact of construction noise on adjacent and nearby properties.
- The potential for erosion within the Proposed Site and its periphery.
- The potential for degradation of water quality within wetlands and stream courses.
- The removal of vegetation in areas where vegetative cover will become impervious surface and/or restored in the form of lawns, meadows and landscaped areas.
- The displacement of wildlife in areas where suitable habitat will be restored for like or similar species.
- Visual impact associated with site preparation and construction activities.
- The control and disposal of construction debris.
- The opportunity for "contractor error" in implementing environmental protection measures and executing the design plans as approved by the Town Planning Board and other involved agencies.

The Project Sponsor is anticipating a construction schedule to be over a three (3) to four (4) year period dependent upon market demand, ensuring occupancy and use of proposed infrastructure and structures. Construction is expected to start approximately six (6) to eight (8) months after final approval and with an expected completion of 2011 to 2012. The construction schedule of the Proposed Action is to be broken down into a total of four (4) phases, each implemented independently of each other, so as to satisfy the regulations of the NYSDEC and minimize the overall disturbance and development impact of the Proposed Action.

See DEIS Figure I-3 *"Phasing Plan"*

Phase one (1) will consist of the development within the central portion of the Proposed Site and start with the central water and sewer components. Then Road "D" containing the 50' x 110' single-family homes and Road "F" including the town homes and rear-loaded units will be developed. Next would be the mixed and commercial area associated with Road "E". The last aspect of this phase is the multifamily units at the end of Road "F" and the stand alone commercial structure along Craigville Road. Phase I will consist of an overall disturbance of 12.4± acres and a wetland disturbance of 0.3± acres, either temporary or permanent. This phase is to consist of approximately 7 sub-phases with some potential overlap, none of which are subject to be over 3.0± acres.

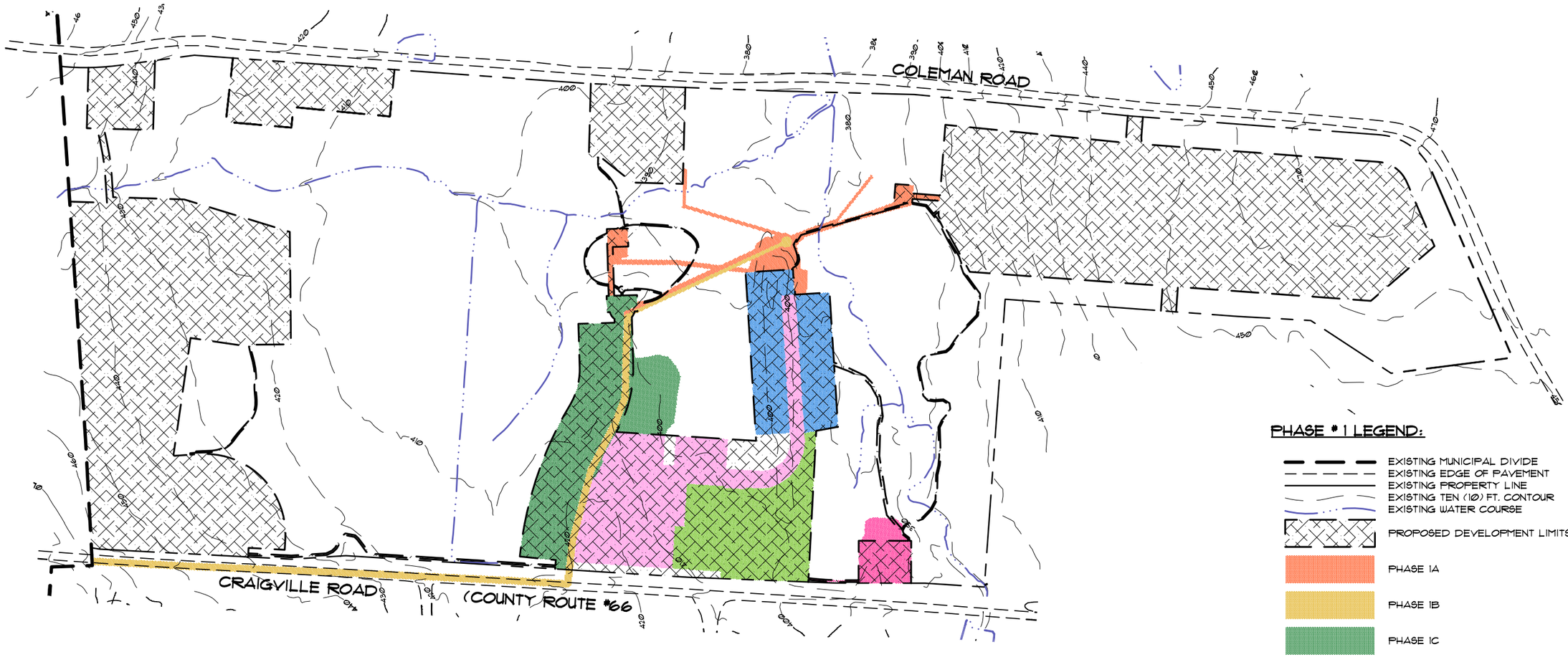
See DEIS Figure IV-I *"Phase 1"*.

Phase two (2) is to consist of the roadway and stormwater system associates with estate lots along Coleman Road. Next would be the implementation of the upper then lower estate lots. Phase two (2) will consist of an overall disturbance of 7.1± acres. This phase is to consist of approximately three (3) sub-phases, none of which are subject to be over 3.5± acres.

See DEIS Figure IV-2 *"Phase 2"*.

Phase three (3) will consist of the residential cluster along Craigville Road, near the Village line. The start of it will be the central water and sewer associated with the cluster followed by Roads "A" and "B" along with their associated 50' x 110' lots and town homes. Next would be multifamily units and then Road "C" with the remaining residential structures. Phase three (3) will consist of an overall disturbance of 11.1± acres and a wetland disturbance of 0.76± acres, either temporary or permanent. This phase is to consist of approximately five (5) sub-phases, none of which are subject to be over 4.6± acres.

See DEIS Figure IV-3 *"Phase 3"*.




## PHASE # 1 LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- PHASE 1A
- PHASE 1B
- PHASE 1C
- PHASE 1D
- PHASE 1E
- PHASE 1F
- PHASE 1G

## PHASE 1:

PHASE 1A DEVELOP WATER SYSTEM, TO INCLUDE DISINFECTION SYSTEM AND 250,000 GALLON WATER TOWER. INSTALL PIPING THROUGH WETLAND AREAS (WATER AND SEWER.)

PHASE 1B DEVELOP SEWER PUMP SYSTEM (P.S.#1) CONNECT FORCE MAIN TO THE VILLAGE OF GOSHEN

PHASE 1C GRADE MAIN ACCESS ROAD (ROAD "D") AND DEVELOP 50' X 110' LOTS.

PHASE 1D DEVELOP ROAD "F" WITH TOWNHOUSE AND REAR UNITS.

PHASE 1E DEVELOP MIXED USE AND COMMERCIAL AREA ON ROAD "E"

PHASE 1F DEVELOP MULTIFAMILY BUILDINGS

PHASE 1G DEVELOP STAND ALONE COMMERCIAL BUILDING

## PHASE 1 DISTURBANCE:

TOTAL DISTURBANCE: 12.36 ACRES

WETLAND DISTURBANCE: 0.264 ACRES
*(INCLUSIVE TO ABOVE)

| | |
|---|---|
| TEMPORARY | 0.0872 ACRES |
| PERMANENT | 0.1775 ACRES |

| | |
|---|---|
| PHASE 1A | 1.36 ACRES |
| PHASE 1B | 0.94 ACRES |
| PHASE 1C | 2.97 ACRES |
| PHASE 1D | 2.86 ACRES |
| PHASE 1E | 2.19 ACRES |
| PHASE 1F | 1.36 ACRES |
| PHASE 1G | 0.74 ACRES |

*NOTE: SOME OVERLAP WILL EXIST BETWEEN EACH SUB-PHASE.

300 0 150 300

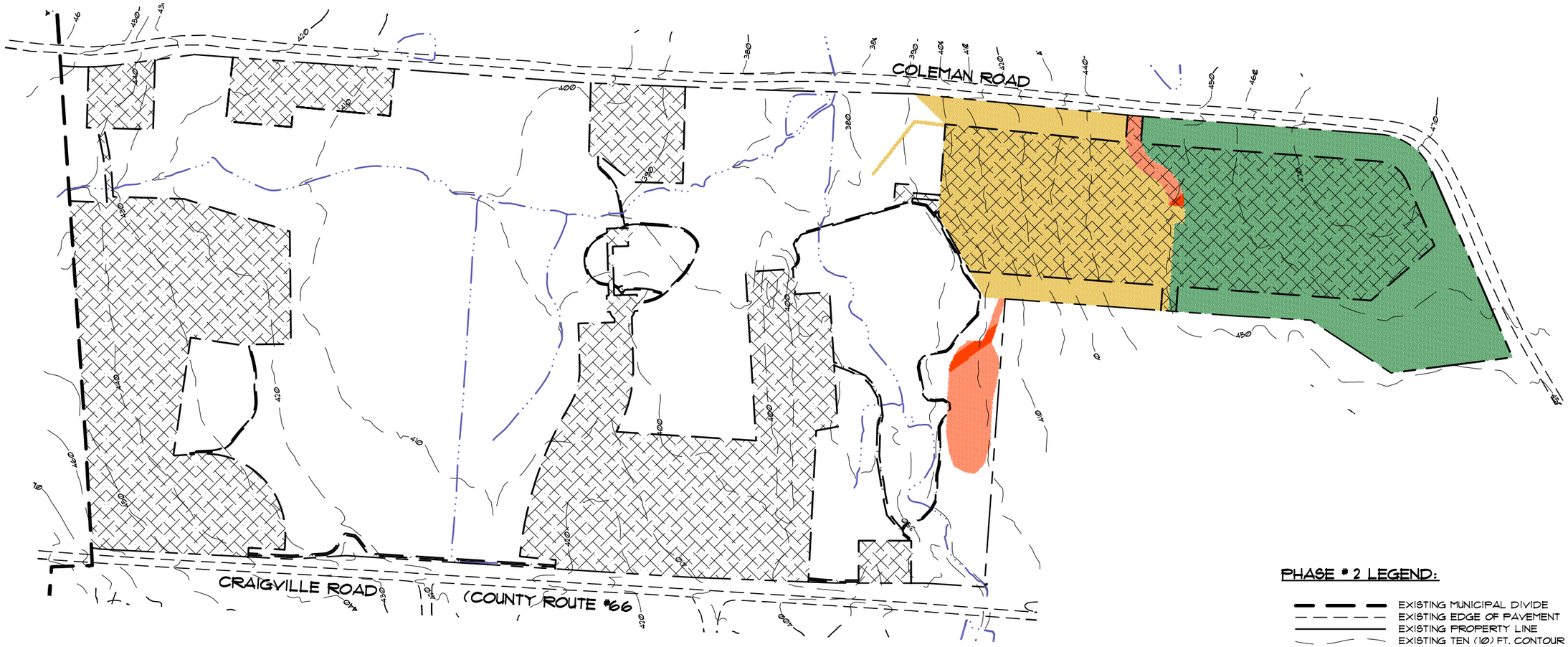
GRAPHIC SCALE:
1 IN. = 300 FT.

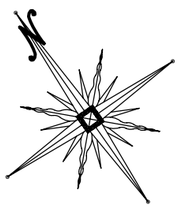
E.I.S. FIGURE IV-1

# PHASE # 1

SCALE: 1 IN. = 300 FT.

ESPOSITO & ASSOCIATES
262 GREENWICH AVENUE, SUITE B
GOSHEN NY, 10924
845.294.0558 Fax 845.294.0580



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GRAPHIC SCALE:
1 IN. = 300 FT.

## PHASE 2:

PHASE 2A ENTRY ROAD AND ESTATE SECTION STORMWATER SYSTEM.
PHASE 2B LOWER LOTS OF ESTATE SECTION.
PHASE 2C UPPER LOTS OF ESTATE SECTION.

## PHASE 2 DISTURBANCE:

TOTAL DISTURBANCE 7.11 ACRES

| | |
|---|---|
| PHASE 2A | 1.56 ACRES |
| PHASE 2B | 3.47 ACRES |
| PHASE 2C | 2.50 ACRES |

## PHASE # 2 LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- PHASE 2A
- PHASE 2B
- PHASE 2C

E.I.S. FIGURE IV-2

# PHASE # 2

SCALE: 1 IN. = 300 FT.

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GOSHEN NY, 10924
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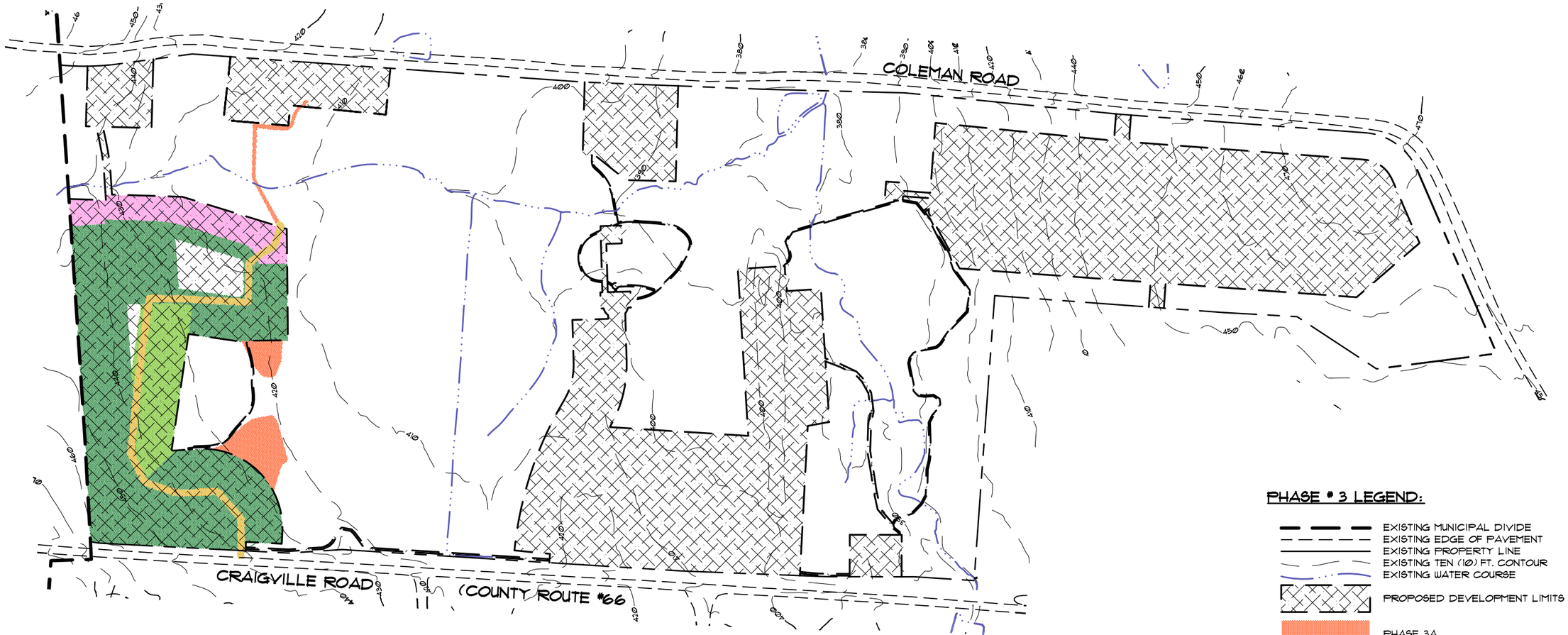


## PHASE # 3 LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- PHASE 3A
- PHASE 3B
- PHASE 3C
- PHASE 3D
- PHASE 3E

## PHASE 3:

PHASE 3A COMPLETE 8" WATER MAIN LOOP ALONG COLEMAN ROAD, INSTALL PIPING THROUGH WETLAND AREAS (WATER AND SEWER), INSTALL STORMWATER POND FOR PHASE 3C.
PHASE 3B DEVELOP SEWER PUMP SYSTEM P.S.#2 TIE LINE INTO FORCE MAIN FROM P.S.#1 TO VILLAGE.
PHASE 3C GRADE MAIN ROADS (ROADS "A" & "B"), DEVELOP 50'x110' LOTS AND TOWNHOUSES.
PHASE 3D DEVELOP MULTIFAMILY BUILDINGS.
PHASE 3E GRADE ROAD "C" AND DEVELOP REMAINING UNITS AND ASSOCIATED STORM WATER SYSTEM.

## PHASE 3 DISTURBANCE:

TOTAL DISTURBANCE 11.07 ACRES

WETLAND DISTURBANCE: 0.076 ACRES
*(INCLUSIVE TO ABOVE)

| | |
|---|---|
| PERMANENT | 0.076 ACRES |
| PHASE 3A | 1.50 ACRES |
| PHASE 3B | 0.38 ACRES |
| PHASE 3C | 4.62 ACRES |
| PHASE 3D | 1.47 ACRES |
| PHASE 3E | 3.93 ACRES |

300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

E.I.S. FIGURE IV-3

# PHASE # 3

SCALE: 1 IN. = 300 FT.

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GOSHEN NY, 10924
845.294.0558 Fax 845.294.0580

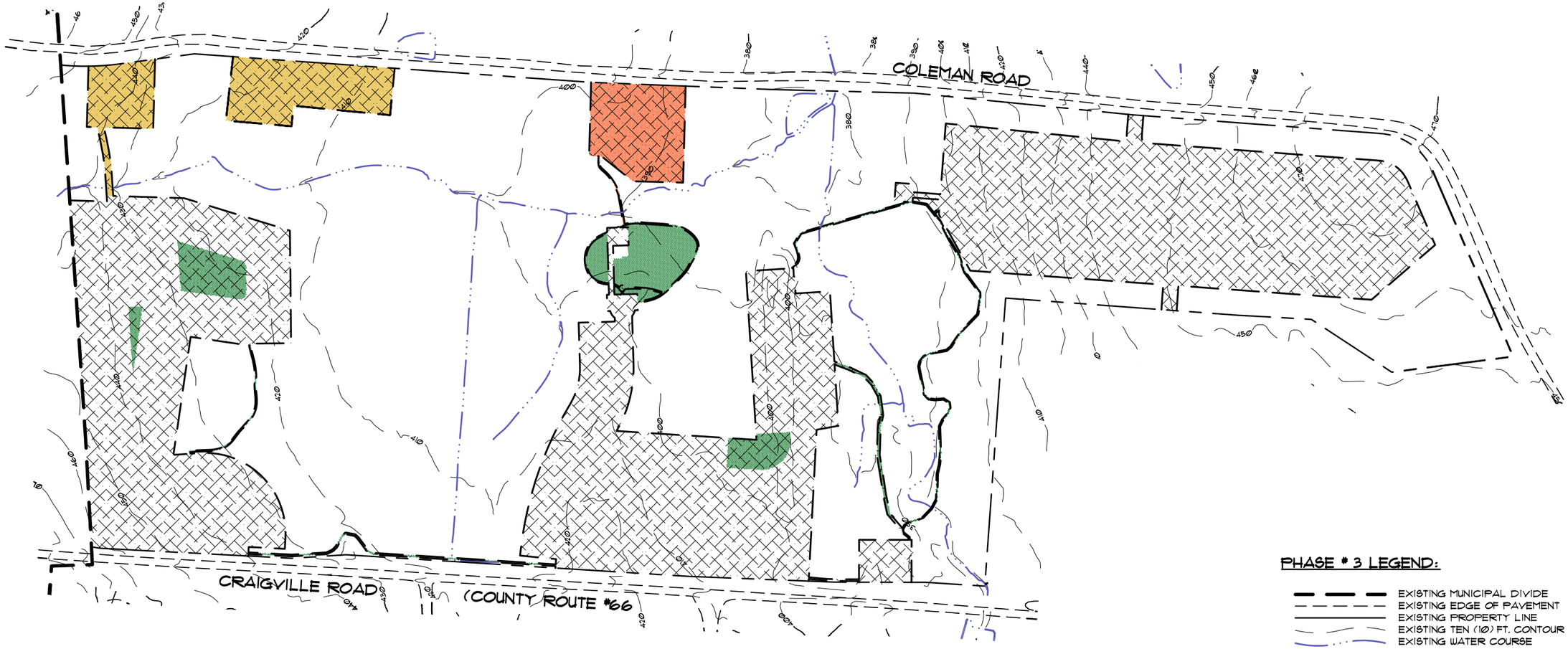
Phase four (4) is to consist of the emergency access to Well #3 and associated estate lot near the central portion of the Proposed Site along Coleman Road. The next subphase will consist of the emergency access and remaining estate lots along Coleman Road. Finally, the recreational amenities are to be completed, finishing the build out of the Proposed Action. Phase four (4) will consist of an overall disturbance of 3.0± acres and a wetland disturbance of 0.2± acres, either temporary or permanent. This phase is to consist of approximately three (3) sub-phases, none of which are subject to be over 1.3± acres.

See DEIS Figure IV-4, *"Phase 4"*.

**4.2 Construction Traffic**

Upon issuing a materials purchase order or executing a contract for construction services the request will be made that all construction traffic, including heavy trucks transporting equipment and construction materials, light trucks and other vehicles, approach the Proposed Site via routes that do not impact established residential neighborhoods. Continual reminders of this are to be implemented through the full build-out of the Proposed Action.

The Proposed Action will implement a stabilized rough grade of the proposed access roads to be utilized by all construction vehicles for ingress and egress. The heaviest of these movements will occur during the initial months of each phase and subphase of the Proposed Action as site preparation and installation of roadways, storm sewers, central water facilities, central sewage facilities and delivery of materials occur. Construction vehicles and workers are to park on-site at all times; additionally, materials and equipment are to be stored within the boundary of the Proposed Site. Construction traffic will consist primarily of construction vehicles arriving at the beginning of the construction period, trucks carrying and delivery supplies and daily trips of construction workers. The larger construction vehicles are to be conveyed to the Proposed Site during the start of each phase. These will limit trips since heavy equipment will be stored on-site until no longer needed. The Proposed Action is to be a balance project in terms of




## PHASE 4.

PHASE 4A: DEVELOP EMERGENCY ACCESS TO WELL #3 AND ADJACENT ESTATE LOTS ON COLEMAN ROAD.
PHASE 4B: GRADE EMERGENCY ACCESS TO SERVICE AREA 2 & DEVELOP REMAINING ESTATE LOTS ON COLEMAN ROAD.
PHASE 4C: COMPLETE WALKING PATHS AND PICNIC AREAS

## PHASE 4 DISTURBANCE:

TOTAL DISTURBANCE 2.952 ACRES

WETLAND DISTURBANCE: 0.22 ACRES
*(INCLUSIVE TO ABOVE)

TEMPORARY 0.147 ACRES
PERMANENT 0.073 ACRES

| | |
|---|---|
| PHASE 4A | 1.02 ACRES |
| PHASE 4B | 1.34 ACRES |
| PHASE 4C | 0.582 ACRES |

## PHASE # 3 LEGEND:

- EXISTING MUNICIPAL DIVIDE
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING TEN (10) FT. CONTOUR
- EXISTING WATER COURSE
- PROPOSED DEVELOPMENT LIMITS
- PHASE 4A
- PHASE 4B
- PHASE 4C

300 0 150 300

GRAPHIC SCALE:
1 IN. = 300 FT.

E.I.S. FIGURE IV-4

# PHASE # 4

SCALE: 1 IN. = 300 FT.

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importing and/or exporting material to the Proposed Site. The anticipated trip generation for construction vehicles, deliveries and miscellaneous trucks to and from the Proposed Site is estimated to be an average of ten (10) trips per day per phase, five (5) inbound and five (5) outbound. The construction deliveries of equipment, materials and supplies are usually during the day at times of off peak transportation hours, minimizing the impact of construction traffic. Workers typically arrive and depart the Proposed Site prior to the standard peak commuting hours. The estimated trip generation for individual construction workers average approximately forty-six (46) trips per day per phase, twenty-three (23) inbound and twenty-three (23) outbound. Additionally, the movements to the Proposed Site are opposite of those leaving for work and/or arriving home from work.

It is determined and understood that there will be a mix of resident and construction traffic within the Proposed Site as structures within the Residential Clusters are completed and occupied while work continues on the build-out of the remaining development over a period of three (3) to four (4) years. The construction traffic at this point in the process will be generated only by the needs of the individual building lots for materials, equipment and workers. The associated infrastructure routinely involving heavier equipment and materials will have been earlier installed. Those involved in the construction will be routinely advised and all access ways shall be maintained unobstructed and in an otherwise safe convenient condition for the residents.

### 4.3 Construction Noise

During the construction period trucks and other heavy equipment working within the Proposed Site as well as conveying equipment and materials to the location will generate noise substantially in excess of the ambient noise levels. The effect of this noise generation will be substantially attenuated as one moves away from the source of the noise through a combination of factors, including distance, intervening topography and vegetation. To the extent any such temporary impact

from construction may exceed sixty (60) dBA it is exempt from the noise regulations set forth within Chapters 70, *Noise*, and Chapter 97, *Zoning Code of the Town of Goshen* provided the construction activity occurs between 8:00 a.m. and 8:00 p.m., Monday through Friday and 9:00 a.m. to 8:00 p.m. on weekends and holidays.

Issuance of a materials purchase order or executing a contract for construction services outside the normal construction hours cited within the Town Code will be respective for any noisome activities which would cause the Town's regulations to be exceeded.

### 4.4 Construction Air Quality

During the construction period utilization of equipment, clearing, excavation, grading and movement of material within the Proposed Site will potentially generate increased dust levels and $CO_2$ output. Construction related impacts associated with heavier equipment are most likely to cause these impacts, anticipated to be a relatively short duration and mitigated to the maximum extent practicable. To control dust water and/or other dust control agents are to be applied at effected locations and in quantities and frequencies required to prevent nuisance to the surrounding area. Equipment will be properly maintained and limit idle time so as to regulate and eliminate the amount of emissions.

### 4.5 Potential for Erosion

A comprehensive Stormwater Pollution Prevention Plan has been prepared to address the interrelated topics of stormwater management, stormwater quality, erosion/sediment control, and stormwater infrastructure maintenance for the Proposed Action, both during the construction period and over the long-term, post construction.

The SWPPP also sets forth both erosion and sediment control measures to be incorporated during construction, consistent with guidelines presented in the NYSDEC publication entitled *Stormwater Management Design Manual* and

includes discussion of stormwater infrastructure maintenance requirements and the presentation of related "checklists" prepared by NYSDEC.

A phasing plan and schedule has been designed in accordance with NYSDEC SPDES General Permit (GP-02-01) and other requirements concerning the extent of Proposed Site, i.e. not more than five (5) acres, that may be disturbed at any one time during the construction period.

**4.6 Potential Degradation of Water Quality, Wetlands and Stream Courses**

In addition to adherence to the SWPPP, mitigation of any potential effect on the Proposed Site's water resources due to construction activities will also be addressed through measures that may have to be employed to comply with ACOE federal wetland regulatory requirements related to Nationwide Permits 12, 14, 16, 29, 39 and/or 42, as related to a limited combination of temporary and/or permanent encroachments on jurisdictional wetlands for intended roadways, emergency access, utility piping, well site development, and/or recreational trails.

**4.7 Vegetation Removal and Wildlife Displacement**

It is acknowledged there will be removal of vegetation during the construction period, involving approximately 34± acres of land developed for roadways, structures and other development, a majority will ultimately be returned to a vegetated state as lawn, meadow or landscaped area. In order to control the extent of removal, construction/disturbance limit lines will be depicted on the final project drawings, conspicuously marked in the field, and carefully monitored during the construction period.

The Proposed Action will cause the removal of vegetation and natural cover types, none of which are categorized as endangered, threatened and/or significant. During the construction period, there will be displacement of wildlife, none of which are categorized as endangered, threatened and/or significant, much will be restored with a variety of vegetative cultural cover types providing suitable habitat.

**4.8 Visual Impact**

In respect to the views of the Proposed Site that are available from adjacent roadways or neighboring residential properties, as discussed in Chapter III, Subsection 2, *"Visual Character"*, these views may be less pleasing during the periods of site preparation and construction activities, along with a period of the post construction as implemented landscaping is established.

**4.9 Blasting**

Although blasting is not anticipated, should the unforeseen need arise, the protocols by the Town of Goshen, Chapter 58A, and the State of New York Code of Rules and Regulation, 12NYCRR Part 39, are to be strictly adhered to. The majority of the Proposed Site contains a depth to bedrock of well over five (5) feet according to individual soil classifications and the areas of steep slopes have been avoided to the greatest extent possible. These aforementioned conditions are the basis for potentially no need to blast; yet, the need may arise should construction happen upon shallow areas of bedrock and/or large rock formations. To protect the Proposed Site adjoiners, the blasting contractor shall meet but not be limited to the following protocols:

- Contractor shall be a licensed blaster in the State of New York and will provide the Town with a current Certificate of Insurance naming the municipality as an additionally insured party.
- Conduct pre-blast survey of the adjoining properties.
- Perform test blasts with seismic readings along property lines to determine maximum charge size.
- Ensure blast areas are to be covered by steel mats.
- Notify all adjoiners, town Police and Building Inspector's office prior to blasting.

As previously mentioned, these guidelines are to be incorporated at a minimum along with any further protocols provided by the Town, County and/or State.

Further protocols and compensation measures will be discussed with the Planning Board and appropriate actions will be in place prior to final approval.

**4.10 Control and Disposal of Construction Debris**

The Proposed Site will be "policed" prior to the start of construction activity, all construction debris shall be collected daily and stored in covered containers and routine "policing" throughout all construction phases will occur to ensure a workmanlike appearance and to control litter from blowing either within the Proposed Site or onto neighboring properties.

No burial or burning of construction debris will be authorized on site. Employ of a private carter with disposal occurring at an approved construction and demolition (C&D) landfill and/or transfer station will be required, most likely utilizing carter services that will utilize the proper recycling and disposal of discarded debris. Other usable onsite resources such as timber, firewood, wood chips and unconsolidated fieldstone will be marketed for use and/or reused onsite in proposed landscaping.

**4.11 Construction Techniques**

Design and construction of structures are to be in compliance with the Town Building Code along with applicable County and State regulations. The aforementioned codes and regulations determine energy efficient techniques for new construction.

**4.12 Monitoring of Environmental Compliance and "Contractor Error"**

The implementation of an environmental monitor during the construction period will have the responsibility to periodically inspect site work during the construction period and advise the owner of either conditions that should be remedied to comply with the environmental mitigation measures established by the approved plans, permit and related conditions, or any other "contractor error" noted.

The role of the environmental monitor will complement, but is not intended to substitute for periodic inspection as required during the construction period by representative of the Town of Goshen or other agencies of jurisdiction.

# V. ALTERNATIVES

## 5.1 No Action Alternative

Examination of the No Action Alternative was requested under the Scoping Outline to comply with a fundamental requirement of 6 NYCRR Part 617(9)(b)(5). A No Action Alternative would occur by either the Project Sponsor's withdrawal of its Application for Subdivision Plat Approval for the intended Traditional Neighborhood and Open Space Development or the Planning Board's failure to approve the Application under consideration of the standards and requirements set forth within the Zoning Code and the Land Subdivision Regulations of the Town of Goshen.

The No Action Alternative would cause no perceptible change in the privately owned combined 96± acre Proposed Site. There would neither be construction activity nor subsequent occupancy as depicted within the current plan, nor any of the benefits of the Proposed Action discussed within the DEIS. The development potential of the Proposed Site would remain in accordance with the applicable Town regulations.

It is the Project Sponsor's opinion that there are limited environmental impacts pertaining to the Proposed Action that would be uniquely avoided if either the lead agency, or any of the other involved agencies, were to pursue the No Action Alternative. It is further believed this Alternative would deny the Town of Goshen the benefits of the proposed open space and recreational amenities in satisfying anticipated continuing market demand for single family and affordable housing while meeting at this location a number of the Town's and County's key planning objectives. These planning objectives include, but are not limited to, encouragement of non-conventional, open space subdivision design, provision of central water and sewer facilities, conservation of substantial open space lands and related provision of public access opportunities, and conservation of scenic

vistas, wetlands, woodlands, streams, and other natural attributes of the Proposed Site.

### 5.2 Conventional Residential Development

The Zoning Code §90-18(B), the underlying zoning for Hamlet Residential is Rural Residential. There are three alternatives available to an Open Space Development within the RU District, these being the following:

- Small-scale development of four (4) or fewer lots over any eight-year period, where three (3) of the lots consume a maximum of 25% of the area of the subject parcel.
- Open space development through clustering development within suitable areas with varying lot sizes, all while maintaining a minimum of 50% of the area of the subject parcel as undeveloped open space.
- Conservation density development in which the average lot area is at least twenty (20) acres.

#### 5.2.1 Small-scale Development

Reduced to its basics, the first alternative would allow maximum development over an eight-year period of the following:

- Three lots occupying a total of approximately 24± acres, thus averaging 8± acres, and the fourth lot, the remainder of the subject parcels approximately 72± acres from the 96± acre lands controlled by the Project Sponsor.

The lots would be supported by on-site water and sanitary sewage, through the implementation of individual wells and septics. There would be no requirement for the taking of legal measures to ensure the conservation of open space land and no requirement for the reservation of public access to any of the land.

The small-scale development could be reiterated to the remainder of the subject parcel over subsequent eight-year periods, with the next iteration providing for the following:

- An additional three lots from the remaining 72± acres controlled by the Project Sponsor. These lots occupying approximately 18± acres and reducing the remainder of the subject parcel with approximately 54± acres.

This iterative process might and shall continue for additional rounds at eight-year intervals with the production of smaller and smaller lots until one of the following three circumstances arose:

- The lots were inadequate to support individual on-site water supply and sanitary sewage disposal arrangements in accordance with OCHD standards, including, if ultimately brought into consideration, the "49-lot rules" or "50-lot thresholds" set forth within Title 6 of the Environmental Conservation Law with respect to requirement for central water and sewer facilities.
- The number of lots created either caused the permitted average density established within the Town's Zoning Code for lots so served within the Aquifer Overlay (AQ-6) to be exceeded.
- The proposed individual lots could not satisfy the minimum lot area requirement of 2.0 acres within the AQ-6 District.

### 5.2.2 Open Space Development

This option when reduced to its basics would allow for a base number of allowable units based upon finding of a Conservation Analysis. The second alternative would allow for the following:

- The on-site constrained lands equal approximately 50± acres allowing approximately 46± acres unconstrained. Under the AQ-6 District it would permit a base density of 15± units.

The base density could be further increased via potential base densities. This could be accomplished by density transfers, increased preservation of open space, implementation of affordable housing, and/or allowing for public access to the

proposed open space. Similarly to the small-scale development these lots would be serviced by on-site water and sanitary through individual wells and septics.

Under this alternative, legal measures would be taken to permanently restrict future development of the proposed open space. This could be accomplished through deed restriction, implementation of a restricted covenant within a conservation easement and/or dedication to the Town.

### 5.2.3 Conservation Density Development

Likewise reduced to its basics, the third alternative would allow the following conservation density development:

- The total of four (4) lots would be formed with an average density of 24± acres.

As above, the lots would be supported by on-site water and sanitary sewage through individual wells and septic systems. There would be no requirement for the taking of legal measures to ensure the conservation of open space land and no requirement for the reservation of public access to any of the land.

The following table compares the potential impacts associated with each presented alternative:

**Table 40**
**Alternative Comparison Matrix**

| Type of Impact | Small-Scale Development | Open Space Development | Conservation Density Development |
|---|---|---|---|
| Number of Units | 32 Residential Units | 15 Base Units or 16 Aquifer Units | 4 Residential Units |
| Land Use, Zoning and Public Policy | Consistent with Zoning and Comprehensive Plan | Consistent with Zoning and Comprehensive Plan | Consistent with Zoning and Comprehensive Plan |
| Visual Character | Minimal impacts to existing views, selective clearing in building envelopes. | Minimal impacts to existing views, selective clearing in building envelopes. | Minimal impacts to existing views, selective clearing in building envelopes. |
| Vegetation and Wildlife | 17% of Proposed Site's cover types removed, limited to building envelopes | 8% of Proposed Site's cover types removed, limited to building envelopes | 2% of Proposed Site's cover types removed, limited to building envelopes |

| | | | |
|---|---|---|---|
| Wetlands and Surface Hydrology | 17% of Proposed Site with alteration of drainage flows, no impact on wetlands | 8% of Proposed Site with alteration of drainage flows, no impact on wetlands | 2% of Proposed Site with alteration of drainage flows, no impact on wetlands |
| Geology, Topography and Soils | 17% of Proposed Site disturbed. | 8% of Proposed Site disturbed. | 2% of Proposed Site disturbed. |
| Ground and Surface Water Resources | 12,800± gpd taken from bedrock aquifer. | 6,400± gpd taken from bedrock aquifer. | 800± gpd taken from bedrock aquifer |
| Stormwater Resources | 6 – 7± acres of impervious surface, 0% increase in runoff. | 3 - 4± acres of impervious surface, 0% increase in runoff. | 1 – 2± acres of impervious surface, 0% increase in runoff. |
| Infrastructure and Utilities | Minor increase of demand for public and private infrastructure and utilities. | Minor increase of demand for public and private infrastructure and utilities. | Minor increase of demand for public and private infrastructure and utilities. |
| Traffic and Transportation | Total trips<br>Peak a.m.: 7<br>Peak p.m.: 22<br>Peak Weekend: 18 | Total trips<br>Peak a.m.: 3<br>Peak p.m.: 11<br>Peak Weekend: 9 | Total trips<br>Peak a.m.: 1<br>Peak p.m.: 3<br>Peak Weekend: 2 |
| Noise & Odor | Minimal increase in construction noise & odor, consistent with ambient levels post construction. | Minimal increase in construction noise & odor, consistent with ambient levels post construction. | Minimal increase in construction noise & odor, consistent with ambient levels post construction. |
| Air Quality | Minimal impact, conditions well below specified standards. | Minimal impact, conditions well below specified standards. | Minimal impact, conditions well below specified standards. |
| Community facilities | Minimal impact, existing facilities can handle demand | Minimal impact, existing facilities can handle demand | Minimal impact, existing facilities can handle demand |
| Fiscal Impact | Net taxes: $230,077<br>County: $31,488<br>Town $27,264<br>Fire: $11,264<br>School: $159,910.4<br>117 Total Residents<br>28 School Age | Net taxes: $115,039<br>County: $15,744<br>Town $13,632<br>Fire: $5,632<br>School: $79,955<br>59 Total Residents<br>14 School Age | Net taxes: $28,760<br>County: $3,936<br>Town $3,408<br>Fire: $1,408<br>School: $19,989<br>15 Total Residents<br>3 School Age |
| Cultural Resources | No substantial effect to identified areas | No substantial effect to identified areas | No substantial effect to identified areas |
| Agricultural Resources | No substantial effect on resources. | No substantial effect on resources. | No substantial effect on resources. |

**5.3 Residential Units Within the Commercial Structures**

This alternative would make use of the 30,000 sq. ft. of proposed commercial space as additional residential apartments or flats. Implementation of the alternative would only take place should the commercial component of the Proposed Action not be marketable. This change to the development plan would require the Applicant to submit an amended Site Plan Application to the Planning Board for review and approval. This alternative is currently being evaluated to demonstrate that the development thresholds for the residential development would not be significantly greater than those being evaluated under the commercial development alternative.

The 30,000 sq. ft. of commercial space may be converted to an additional twenty-four (24) two (2) bedroom apartments. As noted on Table 3, *Density Breakdown Calculations for the HR Land Use District*, the fractional density under the current plan with the commercial space is 189 units. The addition of the twenty-four (24) units would result in the following unit count:

- 24 units X .75 = 18 units
- 18 units + 189 units = 207 units

The 207 units equals the maximum allowed dwelling units under §97-15(J) of the Zoning Code.

See DEIS Chapter III, Subsection 3, *"Land Use and Zoning"*, for a more in depth discussion.

The average rate of 2.05 residents per two-bedroom multi-family dwelling unit would increase the population of the Proposed Action by forty-nine (49) residents. Of the additional forty-nine (49) residents, four (4) would be of school age. The additional school age children represent a .1% increase to the Goshen School District enrollment.

The total vehicular trips during peak hours would be increased by:

- a.m. Peak: 2 Trips

- p.m. Peak: 9 Trips
- Saturday Peak: 7 Trips

Although the vehicle trips during peak hours would increase, the anticipated trips generated by the commercial development would be eliminated.

The additional forty-nine (49) residents will create an increased demand on infrastructure and utilities. The 30,000 sf. of commercial space will require 3,000 gpd of water and sewer treatment. The 49 additional residents will require 3,675 gpd of water and required sewer treatment. The net daily increase in water and sewer would be 675 gpd. The water system and on-site WWTP will be designed to accommodate the additional flows. Another benefit would potentially reduce the amount of disturbance and impervious surface, since the allotted parking requirements are much less for residential components vs. commercial components.

The commercial component is anticipated to provide a positive tax revenue of $71,918.43, eliminated with the implementation of this alternative. It can be reasonably concluded based upon the fiscal analysis compared to twenty-four (24) additional apartments the anticipated tax revenue would be $27,846.08.

The various impacts studied throughout the DEIS have been analyzed for the 30,000 sq. ft. of commercial space. Since the footprints and site design is not intended to dramatically change, just the intended use therefore no substantial change is anticipated.

### 5.4 Alternative Layouts

The Scoping Document further lists pedestrian and bicycle alternatives from the Proposed Action of Maplewood Village to:

- Salesian Park
- Hambletonian Park Subdivision
- Land of Goshen Park

The Proposed Action provides for not only extensive on-site pedestrian and bicycle connections, but also connections to Salesian Park, Hambletonian Park Subdivision, Land of Goshen Park and the Veteran's Cemetery.

### 5.4.1 Salesian Park Pedestrian / Bicycle Connections

The Proposed Action allows for a pedestrian connection to the Salesian Park. This could at a point in the future, be picked up by the Village along the northwest property line, and further connected through the Salesian property to NYS Route 207. At or near this same point is a proposed visitor parking lot that could possibly provide future vehicular connection between the Proposed Action and Salesian Park.

### 5.4.2 Hambletonian Park Subdivision Pedestrian / Bicycle Connections

Similar to the Salesian Park, a pedestrian connection from the Proposed Action to Hambletonian Park is provided for between Road "D" and Oakwood Drive across Craigville Road. The crossing would provide a painted crossway with appropriate signage in conformity to the Manual of Uniform Traffic Control Devices. Additionally, the Project Sponsor would petition the Town Board to request a speed limit change by the County between Coleman Road and the Village of Goshen to 30 mph.

### 5.4.3 Land of Goshen Park Pedestrian / Bicycle Connections

The direct line between the Proposed Site and its development to Land of Goshen Park is not evident. Yet, the proposed connection across Craigville Road into Hambletonian Park would allow for indirect connection through their network of roads and a pedestrian bridge that exists between the Hambletonian Park and Land of Goshen Park.

The Proposed Action also proposed a stub road to the northeast edge of the Orange County Veterans Cemetery. This would not only allow for future vehicular access but similarly pedestrian and bicycle access. This would connect

the Proposed Action to the Orange County Veterans Cemetery and alternatively could potentially provide future connection to Land of Goshen Park.

# VI. POTENTIAL GROWTH INDUCING ASPECTS

The Proposed Action will permit the Project Sponsor to undertake the development of the Maplewood Village of Goshen pursuant with market demand, the intended land use, density and site layout as presented on the Preliminary Subdivision Plat submission accompanying the DEIS.

The development of the Proposed Action will add a projected 616 residents to the Town of Goshen, assuming all residents are either new residents of the Town or are current residents who will be followed in their present residences by similarly sized households. These 616 residents will increase the last reported Year 2000 Town population of 12,913 by approximately five (5%) percent over a projected three (3) to four (4) year construction period and indirectly cause a minor expansion of jobs and a commensurate increment of additional demand for retail, business and other services throughout the community. This will include local retail, business service and personal service establishments within the Town and Village of Goshen as well as other regional and national retailers located within nearby communities, such as Middletown, Wallkill and Newburgh.

The Project Sponsor has anticipated, however, that the development of the Proposed Action will not directly induce significant growth either in the vicinity of the Proposed Site or elsewhere throughout the Town of Goshen that would not have otherwise occurred. Moreover, the Proposed Action does not require the Town to make any precedent-making policy or legislative decisions regarding permissible land use or authorized density. The Proposed Action is a Hamlet Development consistent with nationally recognized Traditional Neighborhood Development Design Guidelines.

# VII. UNAVOIDABLE ADVERSE IMPACTS

This section identifies adverse environmental impacts that cannot be avoided with or without mitigation measures, summarizing those established elsewhere in the DEIS. These unavoidable effects, none of which is deemed so significant by the Project Sponsor, suggest that the Proposed Action should not go forward. These include the following:

- Conversion of approximately 34± acres of the 96± acre Proposed Site from vacant, rural land to developed portions of the Proposed Action, including the Residential Clusters, Estate Lots, Commercial Development, as well as parcels devoted to components of the central water and sewer systems.
- Substantial removal of existing vegetation from approximately 34± acres of the Proposed Site as site disturbance occurs to provide for lot-by-lot residential and commercial development along with supporting infrastructure, including roadways, water and sanitary sewage facilities, stormwater management facilities, franchise utilities, recreation amenities and public spaces.
- Concurrent displacement of existing wildlife habitat in areas where vegetation removal and site disturbance have occurred.
- Disturbance and alteration of existing soils within approximately 35 percent of the Proposed Site.
- Disturbance to 1.29± acres with existing slope between 15% and 20% and an additional 1.86± acre with existing slope in excess of 20% percent.
- Disturbance to bedrock in limited areas where water supply wells have been drilled, or potential blasting occurs.
- Related to the above consideration of existing soils and/or bedrock, “cuts” and “fills” in excess of 10 feet within areas of the Proposed Site.
- Disturbance to a currently depicted 0.56± acres of ACOE jurisdictional wetlands to accommodate the Proposed Action on either a temporary or permanent basis.

- Creation of approximately 14.81± acres of new impervious surface occupying 15.43% of the Proposed Site and consisting of subdivision roadways, walks, utility improvements, structures and associated driveways.
- Periodic, short-term generation of noise in excess of existing ambient levels within and adjacent to the Proposed Site principally by trucks carrying heavy equipment and construction materials to the Proposed Site and by heavy equipment involved in site preparation and infrastructure installation.
- Incidence of heavy truck, light truck and automobile traffic bringing equipment, materials and workers to the Proposed Site during the construction period.
- Visibility, albeit for the most part limited and mitigated to the maximum extent practical by distance separation and intervening vegetation, of development from adjacent residentially-developed lands, vacant lands, and travel ways, including Craigville Road, Coleman Road and other outlying areas.

In addition, the following factors may be associated and considered "Unavoidable Adverse Environmental Effects":

- Consumption of petrochemical energy resources during both the period of construction activity and continuing through occupancy of the Proposed Action.
- During full buildout and occupancy an estimated 65,800± gpd in water taking from bedrock wells.
- During occupancy loss of residual capacity in existing highways and intersections within the vicinity of the Proposed Site.
- During occupancy loss of 65,800± gpd in the residual capacity of the Village of Goshen WWTP.
- During occupancy loss in the residual capacity, or increase in burden upon, community facilities and services to the extent attributable to 616

persons, including ninety (90) school age children, eight two (82) of whom are anticipated to attend public schools.

- In comparing the above demand to real property tax revenues, an annual net fiscal benefit of $91,629.00± would be experienced by the Town of Goshen and an annual net fiscal loss of $158,892.00± would be experienced by the Goshen Central School District.

# VIII. PROJECT IMPACTS ON ENERGY USE AND SOLID WASTE MANAGEMENT

Development of the Proposed Action will not have a significant adverse effect on either the use or conservation of energy resources or the local existing solid waste management operations.

Orange and Rockland Utilities, Inc. is prepared to provide electric and natural gas service to the Proposed Site to fully meet the projected demand of the new structures, commercial space, and facilities associated with these units, such as street lighting, the central water and sewer systems pursuant to franchise and Public Service Commission requirements. Other fuels sources, if utilized for heating and cooling, are readily available in the local marketplace.

Furthermore, the Proposed Action will be exclusively new construction that would be designed and constructed on an energy-efficient basis in accordance with the requirements of the pertinent ICBO New York State Codes including but not limited to the Residential Building Code and the Energy Conservation Code, along with guidelines and regulations established by the Town's Building Code

Additionally, the compact layout plan of the Mixed-Use Traditional Neighborhood, proximity to Land of Goshen Park, Salesian Park, the Village of Goshen, and the development of a pedestrian/bicycle connections linking all these amenities, in addition to encouraging recreational activities by residents of the Proposed Action intermodal means of transportation that would otherwise be a fuel-powered vehicle trip.

In the case of solid waste, typical domestic solid waste generation of an estimated 4.5 pounds per day per person, or a total of 41.6± tons per month, will occur upon full buildout and occupancy of the Proposed Action. The only extraordinary generation of solid waste caused by the development of the Proposed Action will

be typical construction and demolition ("C & D") waste during the construction period; C & D waste will be routinely collected from throughout the construction site, housed in appropriate containers and periodically transported by a private carter from the construction site to a licensed C & D Landfill and/or transfer station. These private carters will most likely utilize means of recycling the waste into usable end products for resale. Useable onsite resources such as timber, firewood, woodchips and unconsolidated fieldstone will be marketed for use and/or reused onsite in proposed landscaping.

# IX. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF ENVIRONMENTAL RESOURCES

This section provides a brief summary of the environmental resources that will be lost, both in the immediate future and in the long term, if the Proposed Action is carried out. The below resources are considered to be irreversibly and irretrievably "committed" (i.e., consumed, converted or otherwise made unavailable for future use):

- The 96± acre Proposed Site will be developed to satisfy residential market demand and the owner's investment objectives, within the framework of a Traditional Neighborhood Development designed in accordance with the conservation-based land development parameters established by the enacted Town of Goshen's Zoning Code and nationally-recognized TND Design Guidelines.
- A projected net $56,500,000± in capital will be committed to project development and home purchases.
- Existing vegetation on approximately 34± acres of the Proposed Site will be substantially removed for internal roadways, stormwater management and other utility improvements including water supply and sanitary sewage systems, service lands and ways, sidewalks, driveways, house sites and related appurtenances. Approximately 50% of the disturbed area will be landscaped with native, non-endangered species of grasses, groundcovers, trees and shrubs.
- Existing wildlife habitat will be temporarily displaced from a like portion of the Proposed Site though restored to the maximum extent practicable as the above-cited landscaped areas are repopulated by small mammals and birds.
- Existing soils on approximately 34± acres of the Proposed Site will likewise be altered. These soils will be replaced with residential and commercial structures, related accessory structures, roadways, utility

improvements, service lands and ways, sidewalks, driveways and other impervious surfaces, on approximately 14.81± acres of the 96± acres.

- Existing topography will be altered including 1.29± acres with slopes between 15% and 20% and an additional 1.86± acres with slopes in excess of 20%.
- A maximum 0.33± acres of ACOE federal jurisdictional wetland will be permanently altered pursuant to Nationwide Permits 12, 14, 16, 29, 39 and/or 42, representing approximately 1% the ACOE jurisdictional wetlands within the Proposed Site.
- Construction materials, labor and petrochemical energy resources will be committed to, and consumed by, the work.

Several impacts on public facilities and services will also occur, most particularly the following at full build-out:

- Some loss of residual capacity will occur with respect to existing highways and intersections within the vicinity of the Proposed Site due to the generation of additional traffic, through the implementation of recommended improvements (as required under either the "Existing" or the "No Build" Condition) additional net residual capacity would, in fact, be increased.
- Water taking from bedrock wells estimated to be 65,800± gpd in accordance with NYSDEC and OCHD design standards will occur.
- Discharge of treated effluent generated by sewage flow estimated to average 65,800± gpd in accordance with NYSDEC standards will occur as additional discharge from the Village of Goshen WWTP, with accommodation of the sewage by the Village WWTP causing a commensurate reduction in residual capacity.
- Demand for increased public services will be experienced, including education, recreation, fire protection, police protection and other emergency services, along with other general governmental functions, due to a projected resident population of 710 persons within the Proposed

Action including additional school-age children to be educated by the Goshen Central School District and a commensurate loss of residual capacity in related facilities.

- Additional maintenance responsibility will be borne by the Town of Goshen with respect to roadway and related improvements and by a Town Water District, Town Sewer District and a Town Drainage District, respectively, in the matters of the proposed central water system, central sanitary sewage system, and stormwater improvements.

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# EXHIBITS

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# Conservation Analysis Findings

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# CONSERVATION ANALYSIS FINDINGS
# TOWN OF GOSHEN

NAME OF PROJECT: SALESIAN VILLAGE
S/B/L: 8-1-48

DATE: November 18, 2004

RESOLUTION TO APPROVE THE "CONSERVATION ANALYSIS" FOR SALESIAN VILLAGE:

WHEREAS, the Planning Board reviewed the "Conservation Analysis" map prepared by Lane and Tully (dated 9-28-04) per the requirements of § 97-20B of the Town Code.

WHEREAS, the Planning Board conducted a site walk on November 6, 2004, confirming natural and cultural resources depicted in the "Conservation Analysis" map.

WHEREAS, the Planning Board discussed the conservation analysis at its meeting on November 4, 2004.

WHEREAS, the Planning Board finds that the following features contribute to the Primary Conservation Area:

- The wetlands in the northern and central portion of the property.
- The small wetland on the south side of Coleman Road that feeds the pond on the north side
- The stream at the northwest corner of the property that flows along Coleman toward the middle.
- The steep slopes in the HR zone.
- The 100 foot no-use radius and the 200 foot restricted use around the wells.

WHEREAS, the Planning Board finds that the following features contribute to the Secondary Conservation Areas.

- The buffer along Coleman Road and Craigville Road.
- The scenic corridor on Craigville Road and Coleman Road
- The shale ridge along the center of the property.
- The mature trees of 12 inch dbh

NOW THEREFORE BE IT RESOLVED, that the Planning Board determines that based on its preliminary review, the "Conservation Analysis" does adequately identify the sites natural resources and therefore the applicant is advised to proceed with the application with the following considerations:

1) The areas identified above as Primary Conservation Areas should be permanently preserved by a conservation easement.

2) The areas identified above as Secondary Conservation Areas should be avoided during the design and construction of the proposed development.

3) The design of the proposed development should consider the following:

   A. The layout of roads, lots, and houses should preserve existing trees and hedgerows, particularly the mature forest in the RU zone.
   B. The 200 foot cemetery setback
   C. Low Impact Development techniques including narrow interior streets, stormwater management techniques, and street tree planting.
   D. Connections to the Village and Town parkland through the Salesian Village development and along Craigsville Road
   E. Conservation of the ridge on Craigsville Road leading to the pond and improved access to the pond
   F. Underground electrical utilities

4) This review is based on preliminary analysis and should not be construed as a final approval of any kind. Upon further analysis of the proposed subdivision application the Planning Board may find it necessary to modify its findings with respect to the Conservation Analysis.

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# Full Environmental Assessment Form

*617.20*
*Appendix A*
*State Environmental Quality Review*
# FULL ENVIRONMENTAL ASSESSMENT FORM

**Purpose:** The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

**Full EAF Components:** The full EAF is comprised of three parts:

**Part 1:** Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.

**Part 2:** Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially large impact. The form also identifies whether an impact can be mitigated or reduced.

**Part 3:** If any impact in Part 2 is identified as potentially large, then Part 3 is used to evaluate whether or not the impact is actually important.

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## THIS AREA FOR LEAD AGENCY USE ONLY

## DETERMINATION OF SIGNIFICANCE -- Type 1 and Unlisted Actions

**Identify the Portions of EAF completed for this project:** ☑ Part 1 ☑ Part 2 ☑ Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

☐ A The project will not result in any large and important impact(s) and, therefore, is one which **will not** have a significant impact on the environment, therefore a **negative declaration will be prepared.**

☐ B Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore a **CONDITIONED negative declaration will be prepared.***

☐ C The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore a **positive declaration will be prepared.**

*A Conditioned Negative Declaration is only valid for Unlisted Actions.

Maplewood Village At Goshen

Name of Action

Town of Goshen

Name of Lead Agency

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (if different from responsible officer)

Website

Date

## PART 1–PROJECT INFORMATION
### Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

Name of Action: Maplewood Village At Goshen

Location of Action (include Street Address, Municipality and County)

Craigville Road
Village of Goshen, Orange County, New York

Name of Applicant/Sponsor: ADC Orange, Inc.

Address: 1995 Broadway, Suite 1220

City / PO: New York State: NY Zip Code: 10023

Business Telephone: 212-580-0750

Name of Owner (if different):

Address:

City / PO: State: Zip Code:

Business Telephone:

Description of Action

Subdivision of existing property and construction of 1751 mixed single family dwelling units with associated parking and accessory uses.

**Please Complete Each Question--Indicate N.A. if not applicable**

## A. SITE DESCRIPTION

Physical setting of overall project, both developed and undeveloped areas.

1. Present Land Use: ☐ Urban ☐ Industrial ☐ Commercial ☐ Residential (suburban) ☐ Rural (non farm)
   ☑ Forest ☐ Agriculture ☐ Other _____

2. Total acreage of project area: 95.6 acres.

| APPROXIMATE ACREAGE | PRESENTLY | AFTER COMPLETION |
|---|---|---|
| Meadow or Brushland (Non-agricultural) | ____ acres | ____ acres |
| Forested | 54.6 acres | ____ acres |
| Agricultural (includes orchards, cropland, pasture, etc.) | ____ acres | ____ acres |
| Wetland (freshwater or tidal as per Articles 24,25 of ECL) | ____ acres | ____ acres |
| Water Surface Area | ____ acres | ____ acres |
| Unvegetated (Rock, earth or fill) | ____ acres | ____ acres |
| Roads, buildings and other paved surfaces | ____ acres | ____ acres |
| Other (Indicate type) ACOE Regulated Wetland | 41.0 acres | ____ acres |

3. What is predominant soil type(s) on project site? Mardin and Erie
   a. Soil drainage: ☐ Well drained ____% of site ☐ Moderately well drained ____% of site.
   ☐ Poorly drained ____% of site
   b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? ____ acres (see 1 NYCRR 370)

4. Are there bedrock outcroppings on project site? ☑ Yes ☐ No
   a. What is depth to bedrock 0-5' (in feet)

5. Approximate percentage of proposed project site with slopes.
   ☐ 0-10% 83 % ☐ 10- 15% 10 % ☐ 15% or greater 7 %

6. Is project substantially contiguous to, or contain a building, site, or district listed on the State or National Registers of Historic Places? ☐ Yes ☑ No

7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks? ☐ Yes ☑ No

8. What is the depth of the water table? 0-5' (in feet)

9. Is site located over a primary, principal or sole source aquifer? ☐ Yes ☑ No

10. Do hunting, fishing or shell fishing opportunities presently exist in the project area? ☐ Yes ☑ No

11. Does project site contain any species of plant or animal life that is identified as threatened or endangered? ☐ Yes ☒ No

According to

site inspection

Identify each species:

12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations)

☐ Yes ☒ No

Describe:

13. Is the project site presently used by the community or neighborhood as an open space or recreation area?

☐ Yes ☒ No

If yes, explain:

14. Does the present site include scenic views known to be important to the community? ☐ Yes ☒ No

15. Streams within or contiguous to project area:

yes

a. Name of Stream and name of River to which it is tributary

Unnamed Tributaries to the Otter Kill

16. Lakes, ponds, wetland areas within or contiguous to project area:

Federally Regulated Wetlands

b. Size (in Acres):

41 Ac.

17. Is the site served by existing public utilities? ☒ Yes ☐ No

a. If YES, does sufficient capacity exist to allow connection? ☒ Yes ☐ No

b. If YES, will improvements be necessary to allow connection? ☒ Yes ☐ No

18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25 AA, Section 303 and 304? ☐ Yes ☒ No

19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617? ☐ Yes ☒ No

20. Has the site ever been used for the disposal of solid or hazardous wastes? ☐ Yes ☒ No _____

**B. Project Description**

1. Physical dimensions and scale of project (fill in dimensions as appropriate)

a. Total contiguous acreage owned or controlled by project sponsor. 95.4 acres.

b. Project acreage to be developed: 45 acres initially; 45 acres ultimately.

c. Project acreage to remain undeveloped: 50.4 acres

d. Length of project, in miles: N/A (if appropriate)

e. If the project is an expansion, indicate percent of expansion proposed. 0 %

f. Number of off street parking spaces existing N/A ; proposed N/A

g. Maximum vehicular trips generated per hour: _____(upon completion of project)?

h. If residential: Number and type of housing units:

| | One Family | Two Family | Multiple Family | Condominium |
|---|---|---|---|---|
| Initially | 173 | | | |
| Ultimately | 173 | | | |

i. Dimensions (in feet) of largest proposed structure. 35 height; 45 width; 45 length.

j. Linear feet of frontage along a public thoroughfare project will occupy is? 2500 ft.

2. How much natural material (i.e. rock, earth, etc.) will be removed from the site? N/A tons/cubic yards.

3. Will disturbed areas be reclaimed ☐ Yes ☒ No ☐ N/A

a. If yes, for what intended purpose is the site being reclaimed?

b. Will topsoil be stockpiled for reclamation? ☒ Yes ☐ No

c. Will upper subsoil be stockpiled for reclamation? ☒ Yes ☐ No

4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? 45 acres

5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?

☐ Yes ☒ No

6. If single phase project: Anticipated period of construction: 24 months. (including demolition)

7. If multi phased

a. Total number of phases anticipated 1 (number)

b. Anticipated date of commencement phase 1: 9 month 2005 year. (including demolition)

c. Approximate completion date of final phase: 9 month 2007 year.

d. Is phase 1 functionally dependent on subsequent phases? ☐ Yes ☒ No

8. Will blasting occur during construction? ☒ Yes ☐ No

9. Number of jobs generated: during construction N/A ; after project is complete N/A

10. Number of jobs eliminated by this project N/A .

11. Will project require relocation of any projects or facilities? ☐ Yes ☒ No

If yes, explain.

12. Is surface liquid waste disposal involved? ☐ Yes ☒ No

a. If yes, indicate type of waste (sewage, industrial, etc) and amount

b. Name of water body into which effluent will be discharged

13. Is subsurface liquid waste disposal involved? ☐ Yes ☒ No Type:

14. Will surface area of an existing water body increase or decrease by proposal? ☐ Yes ☒ No

If yes, explain

15. Is project or any portion of project located in a 100 year flood plain? ☐ Yes ☒ No

16. Will the project generate solid waste? ☒ Yes ☐ No

a. If yes, what is the amount per month? 42 tons

b. If yes, will an existing solid waste facility be used? ☒ Yes ☐ No

c. If yes, give name Orange County Landfill : location Orange County

d. Will any wastes not go into a sewage disposal system or into a sanitary landfill? ☐ Yes ☒ No

c. If yes, explain:

17. Will the project involve the disposal of solid waste? ☐ Yes ☒ No

a. If yes, what is the anticipated rate of disposal? _____ tons/month.

b. If yes, what is the anticipated site life? _____ years.

18. Will project use herbicides or pesticides? ☐ Yes ☒ No

19. Will project routinely produce odors (more than one hour per day)? ☐ Yes ☒ No

20. Will project produce operating noise exceeding the local ambient noise levels? ☐ Yes ☒ No

21. Will project result in an increase in energy use? ☒ Yes ☐ No

If yes, indicate type(s)

Electric and Gas

22. If water supply is from wells, indicate pumping capacity 250 gallons/minute.

23. Total anticipated water usage per day 85,000 gallons/day.

24. Does project involve Local, State or Federal funding? ☐ Yes ☒ No

If yes, explain:

25. Approvals Required:

| | | | Type | Submittal Date |
|---|---|---|---|---|
| City, Town, Village Board | ☒ Yes | ☐ No | Sewer Extension Permit | |
| City, Town, Village Planning Board | ☒ Yes | ☐ No | Site Plan Approval<br>Subdivision Approval | |
| City, Town Zoning Board | ☐ Yes | ☐ No | | |
| City, County Health Department | ☒ Yes | ☐ No | OCHD Realty Subdivision<br>Orange County Planning GML<br>Orange County DPW | |
| Other Local Agencies | ☐ Yes | ☐ No | | |
| Other Regional Agencies | ☐ Yes | ☐ No | | |
| State Agencies | ☒ Yes | ☐ No | NYSDEC NOI<br>NYSDEC Sewer Ext. Permit<br>NYSDEC Water Permit | |
| Federal Agencies | ☒ Yes | ☐ No | ACOE Nationwide Permit No. 39 | |

C. Zoning and Planning Information

1 Does proposed action involve a planning or zoning decision? ☒ Yes ☐ No

If Yes, indicate decision required.

☐ Zoning amendment ☐ Zoning variance ☐ New/revision of master plan ☒ Subdivision
☒ Site plan ☐ Special use permit ☐ Resource management plan ☐ Other

2. What is the zoning classification(s) of the site?

MR - Mobile Residential

3. What is the maximum potential development of the site if developed as permitted by the present zoning?

210 mixed residential units

4. What is the proposed zoning of the site?

N/A

5. What is the maximum potential development of the site if developed as permitted by the proposed zoning?

N/A

6. Is the proposed action consistent with the recommended uses in adopted local land use plans? ☒ Yes ☐ No

7. What are the predominant land use(s) and zoning classifications within a ¼ mile radius of proposed action?

Residential

8. Is the proposed action compatible with adjoining/surrounding land uses within a ¼ mile? ☒ Yes ☐ No

9. If the proposed action is the subdivision of land, how many lots are proposed? 173

a. What is the minimum lot size proposed? _____

10. Will proposed action require any authorization(s) for the formation of sewer or water districts? ☐ Yes ☒ No

11. Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection)?

☒ Yes ☐ No

a. If yes, is existing capacity sufficient to handle projected demand? ☒ Yes ☐ No

12. Will the proposed action result in the generation of traffic significantly above present levels? ☐ Yes ☒ No

a. If yes, is the existing road network adequate to handle the additional traffic ☐ Yes ☐ No

**D. Informational Details**

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them

**E. Verification**

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name Arthur Tully, PE - Lane and Tully Engineers, P.C Date 2/3/05

Signature

Title Professional Engineer

**If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.**

# PART 2 - PROJECT IMPACTS AND THEIR MAGNITUDE

**Responsibility of Lead Agency**

**General Information** (Read Carefully)

- In completing the form the reviewer should be guided by the question: Have my responses and determinations been **reasonable**? The reviewer is not expected to be an expert environmental analyst.
- The **Examples** provided are to assist the reviewer by showing types of impacts and wherever possible the threshold of magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate for a Potential Large Impact response, thus requiring evaluation in Part 3.
- The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question.
- The number of examples per question does not indicate the importance of each question.
- In identifying impacts, consider long term, short term and cumulative effects.

**Instructions** (Read carefully)

a. Answer each of the 20 questions in PART 2. Answer **Yes** if there will be any impact.

b. **Maybe** answers should be considered as **Yes** answers.

c. If answering **Yes** to a question then check the appropriate box (column 1 or 2) to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur but threshold is lower than example, check column 1.

d. Identifying that an impact will be potentially large (column 2) does not mean that it is also necessarily **significant**. Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simply asks that it be looked at further.

e. If reviewer has doubt about size of the impact then consider the impact as potentially large and proceed to PART 3.

f. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the **Yes** box in column 3. A **No** response indicates that such a reduction is not possible. This must be explained in Part 3.

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| **Impact on Land** | | | |
| 1. Will the Proposed Action result in a physical change to the project site? NO ☐ YES ☒ | | | |
| **Examples** that would apply to column 2 | | | |
| • Any construction on slopes of 15% or greater, (15 foot rise per 100 foot of length), or where the general slopes in the project area exceed 10%. | ☒ | ☐ | ☐ Yes ☐ No |
| • Construction on land where the depth to the water table is less than 3 feet. | ☒ | ☐ | ☐ Yes ☐ No |
| • Construction of paved parking area for 1,000 or more vehicles. | ☒ | ☐ | ☐ Yes ☐ No |
| • Construction on land where bedrock is exposed or generally within 3 feet of existing ground surface. | ☒ | ☐ | ☐ Yes ☐ No |
| • Construction that will continue for more than 1 year or involve more than one phase or stage. | ☒ | ☐ | ☐ Yes ☐ No |
| • Excavation for mining purposes that would remove more than 1,000 tons of natural material (i.e., rock or soil) per year. | ☐ | ☐ | ☐ Yes ☐ No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • Construction or expansion of a sanitary landfill. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction in a designated floodway. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

2. Will there be an effect to any unique or unusual land forms found on the site? (i.e., cliffs, dunes, geological formations, etc.)
☒ NO ☐ YES

| | | | |
|---|---|---|---|
| • Specific land forms: | ☐ | ☐ | ☐ Yes ☐ No |

**Impact on Water**

3. Will Proposed Action affect any water body designated as protected? (Under Articles 15, 24, 25 of the Environmental Conservation Law, ECL)
☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Developable area of site contains a protected water body | ☐ | ☐ | ☐ Yes ☐ No |
| • Dredging more than 100 cubic yards of material from channel of a protected stream. | ☐ | ☐ | ☐ Yes ☐ No |
| • Extension of utility distribution facilities through a protected water body. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction in a designated freshwater or tidal wetland | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

4. Will Proposed Action affect any non-protected existing or new body of water?
☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • A 10% increase or decrease in the surface area of any body of water or more than a 10 acre increase or decrease | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction of a body of water that exceeds 10 acres of surface area. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts | ☐ | ☐ | ☐ Yes ☐ No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated By Project Change |
|---|---|---|---|
| 5 Will Proposed Action affect surface or groundwater quality or quantity?<br>☐ NO ☒ YES | | | |
| **Examples** that would apply to column 2 | | | |
| • Proposed Action will require a discharge permit | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action requires use of a source of water that does not have approval to serve proposed (project) action | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action requires water supply from wells with greater than 45 gallons per minute pumping capacity. | ☒ | ☐ | ☐ Yes ☒ No |
| • Construction or operation causing any contamination of a water supply system | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will adversely affect groundwater. | ☐ | ☐ | ☐ Yes ☐ No |
| • Liquid effluent will be conveyed off the site to facilities which presently do not exist or have inadequate capacity | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action would use water in excess of 20,000 gallons per day | ☒ | ☐ | ☐ Yes ☒ No |
| • Proposed Action will likely cause siltation or other discharge into an existing body of water to the extent that there will be an obvious visual contrast to natural conditions. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will require the storage of petroleum or chemical products greater than 1,100 gallons. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will allow residential uses in areas without water and/or sewer services | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action locates commercial and/or industrial uses which may require new or expansion of existing waste treatment and/or storage facilities | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|

6 Will Proposed Act on alter drainage flow or patterns, or surface water run off?

[■] NO [ ] YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Proposed Action would change flood water flows | [ ] | [ ] | [ ] Yes [ ] No |
| • Proposed Action may cause substantial erosion | [ ] | [ ] | [ ] Yes [ ] No |
| • Proposed Action is incompatible with existing drainage patterns. | [ ] | [ ] | [ ] Yes [ ] No |
| • Proposed Action will allow development in a designated floodway. | [ ] | [ ] | [ ] Yes [ ] No |
| • Other impacts: | [ ] | [ ] | [ ] Yes [ ] No |

**IMPACT ON AIR**

7. Will Proposed Action affect air quality?

[■] NO [ ] YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Proposed Action will induce 1,000 or more vehicle trips in any given hour. | [ ] | [ ] | [ ] Yes [ ] No |
| • Proposed Action will result in the incineration of more than 1 ton of refuse per hour | [ ] | [ ] | [ ] Yes [ ] No |
| • Emission rate of total contaminants will exceed 5 lbs. per hour or a heat source producing more than 10 million BTU's per hour | [ ] | [ ] | [ ] Yes [ ] No |
| • Proposed Action will allow an increase in the amount of land committed to industrial use | [ ] | [ ] | [ ] Yes [ ] No |
| • Proposed Action will allow an increase in the density of industrial development within existing industrial areas | [ ] | [ ] | [ ] Yes [ ] No |
| • Other impacts. | [ ] | [ ] | [ ] Yes [ ] No |

**IMPACT ON PLANTS AND ANIMALS**

8. Will Proposed Action affect any threatened or endangered species?

[■] NO [ ] YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Reduction of one or more species listed on the New York or Federal list, using the site, over or near the site, or found on the site | [ ] | [ ] | [ ] Yes [ ] No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • Removal of any portion of a critical or significant wildlife habitat | ☐ | ☐ | ☐ Yes ☐ No |
| • Application of pesticide or herbicide more than twice a year, other than for agricultural purposes | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts | ☐ | ☐ | ☐ Yes ☐ No |

9 Will Proposed Action substantially affect non-threatened or non-endangered species?

☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Proposed Action would substantially interfere with any resident or migratory fish, shellfish or wildlife species. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action requires the removal of more than 10 acres of mature forest (over 100 years of age) or other locally important vegetation | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON AGRICULTURAL LAND RESOURCES**

10. Will Proposed Action affect agricultural land resources?

☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • The Proposed Action would sever, cross or limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.) | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction activity would excavate or compact the soil profile of agricultural land | ☐ | ☐ | ☐ Yes ☐ No |
| • The Proposed Action would irreversibly convert more than 10 acres of agricultural land or, if located in an Agricultural District, more than 2.5 acres of agricultural land. | ☐ | ☐ | ☐ Yes ☐ No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • The Proposed Action would disrupt or prevent installation of agricultural land management systems (e.g., subsurface drain lines, outlet ditches, strip cropping), or create a need for such measures (e.g. cause a farm field to drain poorly due to increased runoff) | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON AESTHETIC RESOURCES**

11 Will Proposed Action affect aesthetic resources? (If necessary, use the Visual EAF Addendum in Section 617.20, Appendix B.)
☒ NO ☐ YES

**Examples that would apply to column 2**

| | | | |
|---|---|---|---|
| • Proposed land uses, or project components obviously different from or in sharp contrast to current surrounding land use patterns, whether man-made or natural | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed land uses, or project components visible to users of aesthetic resources which will eliminate or significantly reduce their enjoyment of the aesthetic qualities of that resource | ☐ | ☐ | ☐ Yes ☐ No |
| • Project components that will result in the elimination or significant screening of scenic views known to be important to the area | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES**

12 Will Proposed Action impact any site or structure of historic, prehistoric or paleontological importance?
☒ NO ☐ YES

**Examples that would apply to column 2**

| | | | |
|---|---|---|---|
| • Proposed Action occurring wholly or partially within or substantially contiguous to any facility or site listed on the State or National Register of historic places | ☐ | ☐ | ☐ Yes ☐ No |
| • Any impact to an archaeological site or fossil bed located within the project site. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will occur in an area designated as sensitive for archaeological sites on the NYS Site Inventory. | ☐ | ☐ | ☐ Yes ☐ No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON OPEN SPACE AND RECREATION**

13 Will proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?
☒ NO ☐ YES

| Examples that would apply to column 2 | | | |
|---|---|---|---|
| • The permanent foreclosure of a future recreational opportunity. | ☐ | ☐ | ☐ Yes ☐ No |
| • A major reduction of an open space important to the community | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts. | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON CRITICAL ENVIRONMENTAL AREAS**

14 Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6NYCRR 617.14(g)?
☒ NO ☐ YES

List the environmental characteristics that caused the designation of the CEA

| Examples that would apply to column 2 | | | |
|---|---|---|---|
| • Proposed Action to locate within the CEA? | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will result in a reduction in the quantity of the resource? | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will result in a reduction in the quality of the resource? | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will impact the use, function or enjoyment of the resource? | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|

**IMPACT ON TRANSPORTATION**

15 Will there be an effect to existing transportation systems?

[•] NO [ ] YES

**Examples** that would apply to column 2

- Alteration of present patterns of movement of people and/or goods — [ ] [ ] [ ] Yes [ ] No
- Proposed Action will result in major traffic problems — [ ] [ ] [ ] Yes [ ] No
- Other impacts: — [ ] [ ] [ ] Yes [ ] No

**IMPACT ON ENERGY**

16 Will Proposed Action affect the community's sources of fuel or energy supply?

[•] NO [ ] YES

**Examples** that would apply to column 2

- Proposed Action will cause a greater than 5% increase in the use of any form of energy in the municipality. — [ ] [ ] [ ] Yes [ ] No
- Proposed Action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two family residences or to serve a major commercial or industrial use — [ ] [ ] [ ] Yes [ ] No
- Other impacts — [ ] [ ] [ ] Yes [ ] No

**NOISE AND ODOR IMPACT**

17 Will there be objectionable odors, noise, or vibration as a result of the Proposed Action?

[•] NO [ ] YES

**Examples that** would apply to column 2

- Blasting within 1,500 feet of a hospital, school or other sensitive facility — [ ] [ ] [ ] Yes [ ] No
- Odors will occur routinely (more than one hour per day) — [ ] [ ] [ ] Yes [ ] No
- Proposed Action will produce operating noise exceeding the local ambient noise levels for noise outside of structures — [ ] [ ] [ ] Yes [ ] No
- Proposed Action will remove natural barriers that would act as a noise screen — [ ] [ ] [ ] Yes [ ] No
- Other impacts: — [ ] [ ] [ ] Yes [ ] No

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|

**IMPACT ON PUBLIC HEALTH**

18 Will Proposed Action affect public health and safety?
☒ NO ☐ YES

| | | | |
|---|---|---|---|
| • Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a chronic low level discharge or emission | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action may result in the burial of "hazardous wastes" in any form (i.e. toxic, poisonous, highly reactive, radioactive, irritating, infectious, etc.) | ☐ | ☐ | ☐ Yes ☐ No |
| • Storage facilities for one million or more gallons of liquefied natural gas or other flammable liquids | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts. | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD**

19 Will Proposed Action affect the character of the existing community?
☐ NO ☒ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • The permanent population of the city, town or village in which the project is located is likely to grow by more than 5%. | ☐ | ☐ | ☐ Yes ☐ No |
| • The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will conflict with officially adopted plans or goals | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will cause a change in the density of land use. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community | ☐ | ☐ | ☐ Yes ☐ No |
| • Development will create a demand for additional community services (e.g. schools, police and fire, etc.) | ☒ | ☐ | ☐ Yes ☒ No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • Proposed Action will set an important precedent for future projects. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will create or eliminate employment | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts | ☐ | ☐ | ☐ Yes ☐ No |

20 Is there, or is there likely to be, public controversy related to potential adverse environment impacts?

☒ NO ☐ YES

**If Any Action in Part 2 is Identified as a Potential Large Impact or If you Cannot Determine the Magnitude of Impact, Proceed to Part 3**

## Part 3 - EVALUATION OF THE IMPORTANCE OF IMPACTS

### Responsibility of Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated

**Instructions** (If you need more space, attach additional sheets)

Discuss the following for each impact identified in Column 2 of Part 2

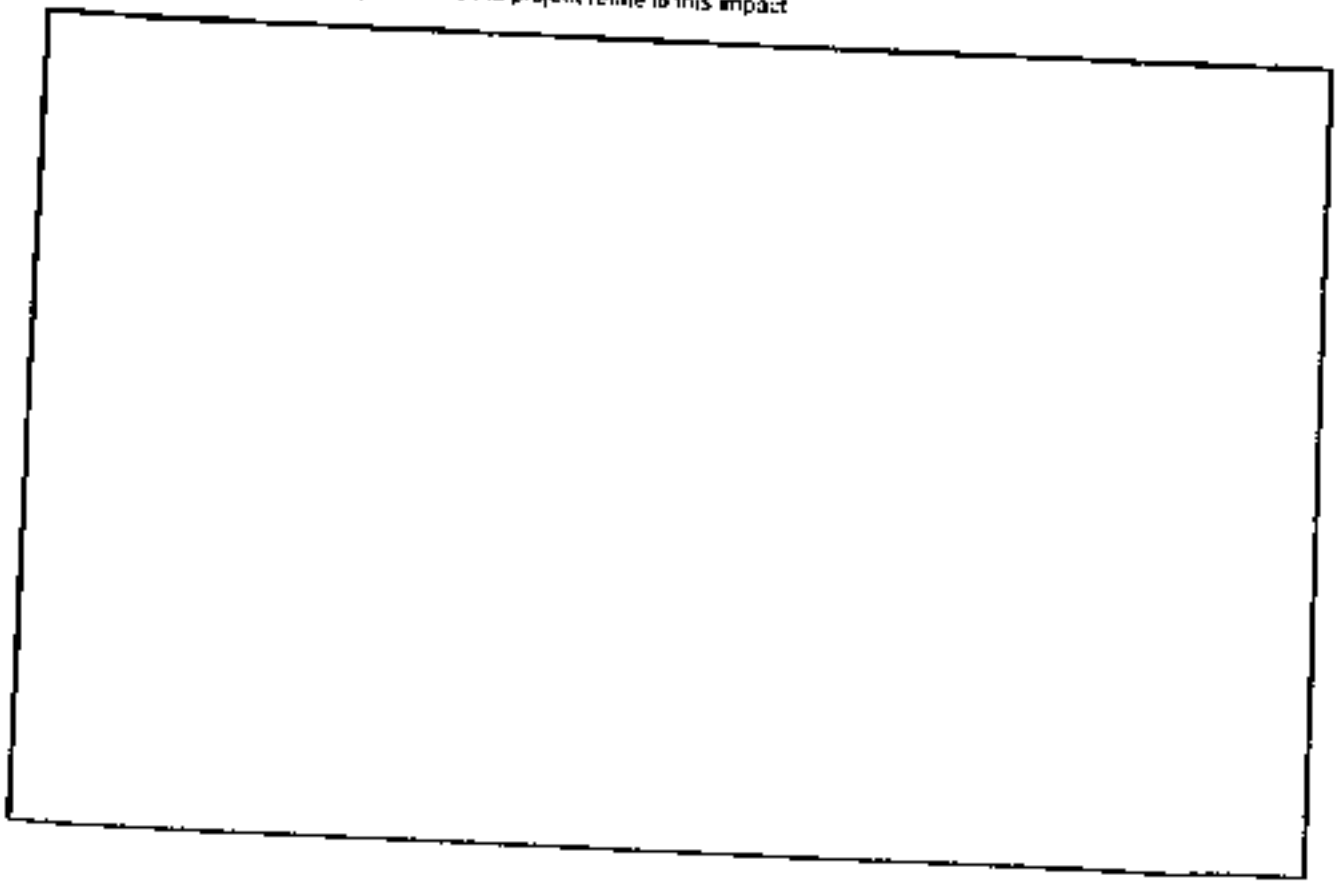
1. Briefly describe the impact

2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).

3. Based on the information available, decide if it is reasonable to conclude that this impact is important.

   To answer the question of importance, consider

   - The probability of the impact occurring
   - The duration of the impact
   - Its reversibility, including permanently lost resources of value
   - Whether the impact can or will be controlled
   - The regional consequence of the impact
   - Its potential divergence from local needs and goals
   - Whether known objections to the project relate to this impact





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# Notice of Intent
# to
# Become Lead Agency

***TOWN OF GOSHEN PLANNING BOARD***
**NOTICE OF INTENT TO BECOME LEAD AGENCY**
**SALESIAN / MAPLEWOOD SUBDIVISION**

***WHEREAS***, an application has been made to the Town of Goshen Planning Board for subdivision approval for a proposed 186 + lot subdivision of a 95 acre tract in the Hamlet Residential Zoning District, located at Coleman Road and Craigville Road, and

***WHEREAS***, said parcels are designated on the Town of Goshen Tax Map as Section 8, Block 1, Lot 1.2, and

***WHEREAS***, this application is a Type I action under SEQR since it is located in an Agriculture District and contains more than 14 lots, and

***WHEREAS***, the anticipated actions of the impact of this action being considered are primarily of local significance, and

***WHEREAS***, the proposed action involves review and approval by other agencies, and

***WHEREAS***, the Planning Board deems it appropriate for this action to receive coordinated SEQR review by all involved agencies, and

***WHEREAS***, the Planning Board intends to declare a Positive Declaration for the application at it's September 15, 2005 meeting and distribute the Positive Declaration together with the proposed Scoping outline from the applicant and conduct a Public Scoping session on October 6, 2005, and

***NOW, THEREFORE, BE IT RESOLVED, that***

1. The Planning Board hereby declares its intention to assume lead agency status for purposes of coordinated SEQR review of the proposed action.

2. The Planning Board directs the applicant to circulate copies of this notice, together with the site plan and Long Form Environmental Assessment Form to all involved and interested agencies.

3. The Planning Board requests that all other agencies identified on the Long Form EAF as involved agencies agree to the Planning Board's designation as lead agency by mailing or faxing a copy of this notice, signed below, to the Planning Board.

4. Failure to respond to this Notice within 30 days of the date of its mailing shall be deemed acquiescence to the designation of the Planning Board as lead agency

**Contact Person:** Hon. Ralph Huddleston, Chair
Town of Goshen Planning Board
P.O. Box 217
Goshen, New York 10924
Tel. (845) 294-6250
Fax (845) 294-6542

**Copies of this Notice sent with EAF and Plans to:**

Regional Administrator, Region III
New York State Department of
Environmental Conservation
Attn: Regional Permit Administrator
21 South Putt Corners Road
New Paltz, New York 12561

Consent to Lead Agency _____ Date _____

Orange County Department of Public Works
Route 17M
Goshen, New York 10924

Consent to Lead Agency _____ Date _____

Orange County Planning Department
124 Main Street
Goshen, New York 10924

Consent to Lead Agency _____ Date _____

Orange County Department of Health
Division of Environmental Health
124 Main Street
Goshen, New York 10924

Consent to Lead Agency _____ Date _____

Town of Goshen Town Board
P.O. Box 217
Goshen, NY 10924

Consent to Lead Agency _____ Date _____

New York State Department of Health
Corning Tower
Empire State Plaza
Albany, New York 12237

Consent to Lead Agency _____ Date _____

**Interested Agencies:**

Town of Goshen Environmental Review Board
124 Main Street
Goshen, New York 10924

U.S. Army Corps of Engineers, RM1937
Regulatory Branch, New York District
26 Federal Plaza
New York, New York 10278-0090

Village of Goshen Board of Trustees
276 Main Street
Goshen, New York 10924

New York State Historic Preservation Office
Peebles Island State Park
PO Box 189
Waterford, New York 12188

Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1010

On a vote of 7 Ayes and 0 Nays, the Chairperson declared the Resolution was adopted

Dated June 2, 2005
Mailed July 20, 2005

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# Positive Declaration

**State Environmental Quality Review (SEQR)**
**POSITIVE DECLARATION**
**Determination of Significance**

Date of Mailing April 21, 2006

This resolution and declaration is made pursuant to Part 617 (State Environmental Quality Review Act) of the implementing regulations pertaining to Article 8 of the Environmental Conservation Law.

The **Planning Board of the Town of Goshen**, as Lead Agency, passed a resolution on **March 16, 2006**, determining that the Proposed Action described below may have a significant adverse environmental impact and a Draft Environmental Impact Statement will be prepared.

**Scoping Public Hearing:** The Board intends to hold a scoping session on the proposed scope was presented to the Board on April 6th, 2006, which has been subsequently reviewed by the Board, its staff and consultants. The latest copy of the revised scope is attached, with all comments incorporated, as received at the April 6th, 2006 Planning Board meeting. This scope may be subject to change. **A public meeting on the scope will be held on May 18th, 2006, and all comments on the scope should be received by this date for consideration by the Board. Copies of the Scope will also be available at the Town Hall Building Department. (See contact information at the end of this notice.)**

**Name of Proposed Action:** Maplewood Hamlet Residential Subdivision

**SEQR Status:** Type I Action

**Description of Proposed Action:**

The project sponsors propose to create a 213-unit Hamlet Residential development on approximately 94 acres off Craigville Road in accordance with Traditional Neighborhood design concepts as described in the Town of Goshen Zoning code for the HR/HM district. Approximately 30,000 square feet of commercial uses, which will focus on providing services and goods to local residents, are also proposed. In addition, the applicant proposes to develop 16 residential lots along Coleman Road in the RU district in accordance with the requirements for an Open Space Development as described in the Town's zoning code. In total, 229 residential units are proposed.

**Location:** Town of Goshen Tax Parcels 29-1-63 and 29-1-65.1 located between Craigville Road and Coleman Road east of the Village of Goshen.

**Reasons Supporting This Determination:**

The Proposed Action may have significant adverse impacts in the following:

Land Use and Community Character, Zoning, and Public Policy: The project will create a new hamlet outside of the Village of Goshen in an area currently developed with single-family homes, a cemetery, and a town park. Construction of the project will continue for more than one year and will involve more than one phase or stage.

Water Supply; Water: The proposed action will introduce new impervious surface areas that could potentially result in stormwater, if unmanaged, having physical, chemical, and biological effects of on the water quality of local stream and water bodies. In addition the site will require the extension or the building of a centralized potable water supply and wastewater collection and treatment systems to serve the needs of the project. Large areas of wetlands are located on the property, which could be subject to degradation from construction and the human activity on site.

Wastewater Treatment: The Proposed Action will generate new wastewater treatment flows into either the Village of Goshen wastewater treatment plant or into an on-site system.

Natural Resources: The Proposed Action will result in a change to a tract of land with diverse habitat types. The Proposed Action will introduce new impervious surface areas that will generate stormwater runoff. Large areas of wetlands are located on the property, which could be subject to degradation from construction and the human activity on site.

Aesthetic Resources. The Proposed Action is located within an area identified as having scenic value. The Proposed Action may result in a change to existing scenic views, and may be visible from various heavily traveled ways

Transportation: The Proposed Action will generate large numbers of vehicles trips that would rely on Craigville Road, Coleman Road, and may further exacerbate existing traffic congestion along nearby collector roads and in the Village of Goshen.

Air Quality. With the generation of additional traffic, there is a potential for degradation of air quality at several intersections nearby the site.

Noise: With the generation of additional traffic, there is a potential for traffic-related noise impacts.

Community Services. The Proposed Action will introduce new school-aged children to the Goshen Central School District. The Proposed Action will increase demand on Town of Goshen emergency services. The Proposed Action will increase demand on Town of Goshen open spaces and recreation programs

**For Further Information:**

| | |
|---|---|
| **Contact Person:** | Neal Halloran, Building Inspector |
| **Address:** | Town Hall<br>41 Webster Street<br>Goshen, NY 10924 |
| **Telephone Number:** | (845) 294-6430 |

**A Copy of this Notice has been sent to:**

Honorable Douglas Bloomfield, Supervisor, Town of Goshen

Town of Goshen Town Clerk

Orange County Department of Planning

Orange County Department of Public Works

Orange County Department of Health

Commissioner, Department of Environmental Conservation
625 Broadway, Albany, NY 12233-1011

Regional Director, Department of Environmental Conservation, Region 3
21 South Putt Corners Road, New Paltz, NY 12561-1696

Honorable Scott Wohl, Mayor, Village of Goshen

Environmental Notice Bulletin

Goshen Central School District

New York State Public Service Commission

New York State Department of Health

U.S. Army Corps of Engineers

New York State Department of Parks, Recreation and Historic Preservation

New York State Attorney General's Office.

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# Scoping Outline

# SCOPING DOCUMENT

# FOR

# MAPLEWOOD VILLAGE AT GOSHEN
# DRAFT ENVIRONEMNTAL IMPACT STATEMENT (DEIS)
# TOWN OF GOSHEN
# ORANGE COUNTY, NEW YORK

**Last Revised June 15, 2006**

**Lead Agency and Contact Person:**


Ralph Huddleston, Jr. – Planning Board Chairman

Town of Goshen Planning Board

41 Webster Avenue

P.O. Box 217

Goshen, New York 10924

(845) 294-6430


**Preparer and Contact Person:**


Steven T. Esposito, R.L.A.

Esposito & Associates

262 Greenwich Avenue

Suite B

Goshen, New York 10924

(845) 294-0558


Date of Acceptance: June 15, 2006

Date of Public Hearing: May 18, 2006

# FINAL SCOPING OUTLINE OF ISSUES TO BE ADDRESSED IN DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) LAST REVISED – JUNE 15, 2006

Classification of Action: Type I Action

Lead Agency: Town of Goshen Planning Board

## GENERAL GUIDELINES

- The DEIS should cover all items in this Scoping Outline. It is suggested that the DEIS also conform to the format outlined in the Scope. If appropriate, impact issues listed separately in this outline may be combined in the DEIS, as long as all issues described in this Scoping Outline are addressed.

- The document should be written in the third person. The Applicant's conclusions and opinions should be identified as those of "the Applicant" or "the Developer."

- Narrative discussions should be accompanied by appropriate charts, graphs, maps and diagrams whenever possible. However graphics should not be used as a substitution for narrative. All plans and maps showing the site should include adjacent homes, other neighboring uses and structures, roads, water bodies and a legend.

- The entire document should be checked carefully to ensure consistency with respect to the information presented in the various sections.

- Environmental impacts should be described in terms which the layperson can readily understand.

- "Worst case" scenario analysis should be provided along with average or expected scenario assessment.

The DEIS is intended to convey general and technical information regarding the potential environmental impacts of the proposed project to the Town of Goshen Planning Board (as Lead Agency), as well as several other agencies involved in the review of the proposed project. The DEIS is also intended to convey the same information to the interested public. The Preparer of the Draft Environmental Impact Statement is encouraged to keep this audience of the DEIS in mind as it prepares the document. Enough detail should be provided in each subject area to ensure that most readers of the document will understand, and be able to make decisions based upon, the information provided.

As the DEIS will become, upon acceptance by the Lead Agency, a document supporting objective findings on approvals requested under the application, the Preparer is requested to avoid subjective statements regarding potential impacts. The EIS should contain objective

statements and conclusions of facts based upon technical analyses. The Town of Goshen Planning Board reserves the right, during review of the document, to request that subjective statements be removed from the document or otherwise modified to indicate that subjective statements are not necessarily representative of the findings of the Board.

## A. PROPOSED ACTION

The project sponsors proposed to create Hamlet Residential complex in accordance with Traditional Neighborhood design concepts as described in the Town of Goshen Zoning code for the HR/HM district. In addition, the applicant proposed to develop 16 residential lots in the RC district in accordance with the requirements for an Open Space Development as described in the Town's zoning code. In total, 229 residential units are proposed, with approximately 30,000 square feet of commercial uses, which will focus on providing services and goods to local residents, and private recreational areas to serve the residents of the development.

The project site is bound by Colman Road on the North and Craigville Road between the Village of Goshen line and the point where Colemian and Craigville Lot is known on tax assessor rolls in the Town of Goshen as Parcels 8-1-1.1 and 8-1-4.8.

The application is a Type I Action under SEQR. The proposed action requires a coordinated review and approval by other agencies since the Board has determined that the proposed project has the potential of having an adverse impact on the environment and requires the preparation of a DEIS

A positive declaration was adopted on March 16, 2006 by the Planning Board and filed in accordance with Sections 617.7 and 617.12 of the State Environmental Quality Review. It was further resolved that the project sponsor will prepare a Draft Environmental Impact Statement (DEIS).

**Table 1: Required Approvals**

| Approval/Permit/Review | Agency |
|---|---|
| **Town of Goshen** | |
| Subdivision Approval | Planning Board |
| Site Plan Approval | Planning Board |
| Special Use Permit | Planning Board |
| Formation of Town Sewer District | Town Board |
| Authorization of Formation of Public Transportation Corporation for Water | Town Board |
| Acceptance of Dedication of Central Sanitary Sewage System on behalf of Town Sewer District. | Town Board |
| Acceptance of Turnover agreement for Water Treatment Facilities | Town Board |
| Acceptance of offer to Dedication of Roadways and Other Improvements. | Town Board |

| | |
|---|---|
| Lands and Easements. | |
| Acceptance of Offer of Dedication of Open Space Land(s). | Town Board |
| Acceptance of Offer of Grant of Open Space. | Town Board |
| Formation of Town Stormwater Management District | Town Board |
| Formation of Town Lighting District | Town Board |
| Recommendation of Acceptance of Offer of Road Dedication by the Town Board | Town Highway |
| Acceptance of Offer of Road Dedication by the Town Board | Town Highway |
| **Village of Goshen** | |
| Approval of Contractual Agreement Accepting Sanitary Sewage Flow for Treatment at STP. | Village Board |
| **Orange County** | |
| Distribution Designs | Department of Health |
| Realty Subdivision | Department of Health |
| Section 239-l, m and n Referral | Department of Planning |
| Curb Cut Highway Work Permit | Department of Public Works |
| **New York State** | |
| Authorization for Incorporation of Homeowners' Association Public Transportation Corporation(s). | Department of State |
| Authorization of Filing of Offering Plan and, as applicable, Concurrence of CPS-7 | Attorney General's Office |
| Public Water Treatment Facility Design | Department of Health |
| Water Supply Application | Department of Environmental Conservation |
| Sewage Treatment Plant and Sewage Collection System Designs | Department of Environmental Conservation |
| SPDES Permit for Waste Water Discharge | Department of Environmental Conservation |
| SPDES coverage under General Permit #GP-02-01 for Stormwater Discharge from Construction Activities | Department of Environmental Conservation |
| Water Quality Certification | Department of Environmental Conservation |
| **Federal Agencies** | |
| Nationwide or Individual Wetlands Permit | US Army Corps of Engineers |

The following is a list of agencies who have ministerial approval authority, advisory roles, or have expressed an interest in this application and will be sent all SEQRA notices:

| Ministerial Approval / Advisory Role | Agency |
|---|---|
| Building Permits | Town Building Department |
| Highway Access and Driveway Permits | Town Highway |
| Highway Work Permit(s) | Town Highway |
| Recommendation of Acceptance of Offer of Dedication by the Town Board | Town Highway |
| Advisory Role | New York State Department of Parks, Recreation and Historic Preservation |
| Curb Cut Highway Work Permit | Orange County Department of Public Works |

## SCOPE OF ENVIRONMENTAL IMPACT STATEMENT

The following items are required elements of the Draft Environmental Impact Statement (DEIS)

### A. COVER SHEET

The Cover Sheet should identify:

1. The Proposed Action;

2. The location of the Proposed Action;

3. The name, address, and telephone number of the Lead Agency and its contact person, the applicant, and the primary person(s) responsible for preparing the DEIS;

4. The date of the DEIS submission, revision date(s), acceptance date (to be inserted later), and the public hearing date and DEIS comment period (to be inserted later).

Following the Cover Sheet, a list of all consultants and parties involved in the preparation of the DEIS should be included.

### B. TABLE OF CONTENTS

A Table of Contents indicating chapters and main subject headings of each chapter and page numbers as well as lists of all figures, tables and appendices of the DEIS shall be required.

## C. CHAPTER I: EXECUTIVE SUMMARY

An executive summary shall be required as part of the DEIS. The following elements will be included as part of the executive summary:

1. Introduction, include the purpose of the DEIS, and relevant history of the SEQRA process that has occurred (i.e., date of adoption of the Positive Declaration, date of the scoping public hearing, date of the acceptance of the scoping document.
2. Project Site Existing Conditions – provide a short description of the subject property and characterize its topographical, water, and natural features as well as provide a brief history of the use of the property and where existing changes to its natural state have occurred, (i.e. locations of buildings and farming activities). Provide a scaled down map of the existing conditions for the convenience of the reader.
3. Project Description (provide sufficient narrative detail to provide an overview of the project design, and methods of completion, including construction time frames). Please include scaled down graphics to illustrate the project concept where necessary. Information on applicable zoning is also helpful in the understanding of the project. At a minimum, this section should also include a location map.
4. Project Purpose and Need.
5. Existing Conditions, Potential Impacts and Proposed Mitigation – this section should be organized by topic areas of discussion, as presented in this scoping document under the heading of Chapter II below. Discussion should be brief and can reference back to the Chapter where more information can be found. Discuss potential impacts as identified by the Planning Board during the process of the Positive Declaration and during the process of the Positive Declaration and as identified by the scoping document.
6. Construction Impact: This should include a brief discussion of phasing plans, as well as provide a summary of potential impact that are likely to occur during the period of construction of the project.
7. Alternatives considered (as required by the scoping document).
8. Potential Growth Inducing Factors.
9. Unavoidable Adverse Impacts.
10. Project Impact on Energy Use and Solid Waste Management.
11. Irreversible and Irretrievable Commitment of Resources.
12. List of Involved and Interested Agencies.

## D. CHAPTER II: PROJECT DESCRIPTION

### 1. LOCATION AND SITE DEFINITION

This section will include a narrative description and graphical representation of the regional and area location of the proposed project. In addition, the tax map designation, abutting streets, utilities, surrounding land uses and existing zoning categories will also be presented.

### 2 PROJECT DESCRIPTION

A narrative description of the proposed project, zoning requirements and construction timing will be provided. A description and graphical presentation of the proposed residential community, addressing general layout of the site, site access and egress, parking configuration, internal roadway system, phasing, amenities, and project related benefits will also be presented. The applicant will also provide information regarding the projected visitor use of recreational amenities provided on site. In addition, the applicant will explore the feasibility of creating an on-site skating rink from an on-site frozen pond. The proposed ownership and maintenance of the project and its components, including onsite wetlands and buildings will be discussed. This will include a discussion of such services as snow removal and refuse disposal (including bulk pick-up).

The proposed grading plan, including proposed limits of site disturbance, and identification of all retaining and stone walls associated with the construction of the proposed project will be presented. Architectural renderings of the proposed project will be presented. The proposed landscape plan and proposed Tree Preservation Plan will be presented. The utility, water supply, sanitary sewage, stormwater management and sediment and erosion control plans will be presented.

### 3. PROJECT PURPOSE AND NEED

### 4. REQUIRED APPROVAL PROCESS

Required project reviews and approvals shall be described, and a description of the Planning Board review / approval process sequence, from the conservation analysis submission, to the final approval process. This section should also refer the reader back to information relating the SEQRA process if it is not repeated in this section.

### 5. AFFORDABLE HOUSING

Affordable housing is a required element of the HR zoning. General requirements of the zoning code, applicable to the provision of affordable housing, and how the plan shall comply with those requirements, shall be presented in this section.

## E. CHAPTER III: EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

The following describes the methodologies that will be used in the EIS to assess the potential Environmental Impacts of the proposed project. The general framework for each section is to: (1) study and describe the existing conditions in the area; (2) project these conditions to a future analysis year without the project; (3) assess potential Environmental Impacts of the proposed project if the project were to occur as proposed (also known as "Potential Impacts"); and (4) present and evaluate potential mitigation measures to mitigate any adverse Environmental Impacts. The future analysis year for the proposed project is 2010, which represents the anticipated first year of full development for the community.

Required elements for each section of Chapter III of the DEIS follow.

### 1. LAND USE, ZONING, AND PUBLIC POLICY

a. Existing Conditions: A narrative and graphical presentation of land uses and zoning districts within a one-half mile radius of the project site will be presented. A discussion of the permitted land uses in the HR and RU zoning districts will be presented and how these uses might be accommodated on the site. This section will also identify current and pending public policy applicable to the subject property and to the general properties within a one-half mile radius of the project site as well as to other proposed projects within a one-half mile radius of the site, based on information provided by the Town and County Planning Departments.

b. Future without the proposed project: This section will analyze how the property could and would likely develop if the proposed project were not built. Potential Environmental Impacts to land use that are likely to occur under this scenario will also be analyzed.

c. Potential Impacts: This section will identify the relationship of the proposed project to the overall land use patterns within the study area. This section will discuss the relationship between the proposed project and policies and recommendations set forth in the regional, County and Town plans and policies, including but not limited to the following plans:

(1) Town of Goshen Comprehensive Plan;
(2) Orange County Comprehensive Plan (2003); and
(3) Orange County Open Space Plan (2004);

This section will also discuss the relationship of the proposed project and nearby sensitive uses, such as agriculture and the public parks. Any adverse Environmental Impacts associated with the proposed project will be identified

The DEIS will discuss the rationale for the proposed density in accordance with the requirements of the Town of Goshen Zoning Law. The mapping included in this section to support the will include verification by the U.S. Army Corp of Engineers and/or the New York State Department of Environmental Conservation, as applicable, for all regulated wetlands on-site.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

2. VISUAL CHARACTER

a. Existing Conditions: This section will document views from public roadways into the project site. Views analyzed will include, but not be limited to, the following locations:

(1) Craigville Road, at front entrance of the development across the road;
(2) Veterans Cemetery;
(3) Craigville Park;
(4) Salesian Park;

Photographs of the site and its environs will be incorporated into this chapter. Prevalent landforms, vegetative cover, stonewalls, etc. within the project site that are visible from public roadways or other public resources, such as parks, will be identified.

b. Future without the proposed project: This section will identify any changes in the visual character of the project site and immediate surrounding area as a result of any other development projects.

c. Potential Impacts: To assess Environmental Impacts, the analysis will first describe the project's physical design (height, bulk, orientation, and facade materials, etc.), proposed water towers (height, size and location), lighting system and plan, buffers (location, size and nature of) relative to adjacent properties, and its landscaping plan. By the use of photographs, cross sections, elevations and/or sketches, the views into the project site from adjacent public roadways or other public areas, including but not limited to the following locations, discussed in item a above.

At a minimum, photographs, and cross sections will be utilized to illustrate the potential visual impact of this project from the vantage points described above.

Any adverse Environmental Impacts to the character of the surrounding area will be identified.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

3. VEGETATION AND WILDLIFE

a. Existing Conditions: Existing vegetative cover and wildlife species use will be described, and any rare or protected plant and animal life will be identified. These discussions will be based upon on-site surveys by trained professionals. The New York State Department of Environmental Conservation (NYSDEC) and U.S. Department of the Interior, Fish and Wildlife will be contacted to identify the presence of rare, threatened, or endangered plants and animals in the vicinity of the project site. Mapping of all significant vegetation will be provided.

b. Future without the proposed project: This section will identify any changes in the vegetative and wildlife communities of the project site as a result of development of other projects that would occur if this project is not constructed as proposed.

c. Potential Impacts: An assessment of the Environmental Impacts to the vegetative and wildlife communities due to the construction of the proposed project will be identified. The potential elimination of wildlife habitat due to the proposed project will be discussed. In addition, the impact on existing trees within the limits of potential site disturbance will be presented. All trees within the development area, with a circumference of 16 inches or larger as measured 4 feet from the base of the tree shall be identified.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

4. WETLANDS AND SURFACE HYDROLOGY

a. Existing Conditions: Both regulated and unregulated wetlands, surface water, and any floodplains existing on the site will be described and delineated, as well as any associated buffers (e.g., NYSDEC 100-foot buffer) based on accepted methodologies (e.g., Army Corp of Engineers, NYSDEC).

b. Future without the proposed project: This section will identify any changes in the wetlands and other surface hydrology on the project site at would occur if this project was not constructed as proposed.

c. Build Conditions: An assessment of the Environmental Impacts to the wetlands and wetland buffers and other surface hydrology due to the construction of the proposed project will be identified. Any potential Environmental Impacts to the wetlands due to the construction of the on-site sewage disposal, stormwater management systems and proposed water-supply sources will be identified.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

5. TOPOGRAPHY AND SOILS

a. Existing Conditions: Underlying bedrock (including a possible fault line running through the site), soil conditions, and topographic features (slopes) of the site will be described, utilizing data provided in the Orange County Soils Survey and supported with information provided by actual borings when necessary. Soils will be described in the following ways:

(1) Depth to groundwater;
(2) Depth to bedrock;
(3) Drainage characteristics;
(4) Septic system suitability;
(5) Erodibility factor; and
(6) Structural stability.

b. Future with the proposed project: This section will identify any changes to soil and topographic conditions on the project site in the future without the proposed project.

c. Potential Impacts: Grading and excavation plans will be described with respect to changes in drainage patterns and potential soil erosion. Measures for controlling erosion and preventing sediments from migrating off site will be identified and described. Discuss likelihood of blasting and, if needed, identify areas that will require blasting and quantity amount/extent.

d. Mitigation: Mitigation would be provided for any significant adverse Environmental Impacts identified, and any unavoidable adverse Environmental Impacts would be identified.

6. GROUND AND SURFACE WATER RESOURCES

a. Existing Conditions: The applicant shall generally characterize the existing water resources in the area, and the availability of those resources to be used

as a water supply for the project. In addition, the applicant shall identify the availability of existing capacity of municipally-controlled water supplies and the feasibility of connecting to those existing sources. Should the applicant utilize onsite water supply, the availability of the existing onsite water supply shall be addressed.

b. Future without the proposed project: This section will identify any changes to the groundwater resources if this project were not constructed.

c. Potential Impacts: This section will address the potential impacts that the proposed project may have on the groundwater resources and address the ability to utilize municipally-controlled groundwater supplies and/or onsite groundwater supplies. Potential Environmental Impacts to and water availability for neighboring properties will also be discussed. The potential for the expansion of the system and the option of Town ownership will be addressed. Analysis should follow the engineers report outline contained in Recommended Standards for Waterworks.

Planned well testing protocol should be summarized in this section. Also provide a map of proposed wells that will be tested, and results if available. If results are not available at the completion of the DEIS, they will be required as part of the FEIS.

d. Mitigation

Should any impacts be found, the applicant should identify:

(1) Modifications to system to minimize any off-site impacts.

(2) Other mitigation, which may include a plan to monitor adjacent wells, mitigation for affected homeowners and irrigation restriction.

(3) Design stormwater drainage system for treatment of runoff prior to recharge of ground water.

7. STORMWATER MANAGEMENT

a. Existing Conditions: Run-off patterns, existing intermittent streams and drainage patterns on-site will be described. Stormwater flow volumes and peaks will be provided as per the *New York State Department of Environmental Conservation Stormwater Management Design Manual*. All underground water sources (e.g., aquifer) on site will be identified and their salient characteristics will be described.

b. Future without the proposed project: This section will identify any potential changes to drainage and watercourses on the project site in the event that his project is not constructed as planned.

c. Potential Impacts: The stormwater management system, drainage facilities, and detention areas will be described. This will include quantification of stormwater flows and peaks, and measures to ensure that stormwater in the post-development condition does not adversely affect downstream properties and drainage basins as a whole, as per the New *York State Department of Environmental Conservation Stormwater Management Design Manual*. In addition, any impact to groundwater resources as result of the proposed project will be described. West Nile virus as it relates to detention and retention basins will be addressed.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

8. INFRASTRUCTURE AND UTILITIES

a. Existing Conditions: Existing available utilities will be described in this section, including stormwater sewers, domestic sewer treatment, and available utilities (electric, gas, phone, cable). The reader will be referred to section on Ground and Surface water resources for a discussion of available water on site.

b. Future without the proposed project: This section will identify any potential changes to sewage, and energy patterns on the site if the project is not constructed as planned.

c. Potential Impacts: The sewage disposal system to be constructed on-site will be described and associated Environmental Impacts identified. The use of an existing or proposed Village or Town sewage treatment plant will be analyzed and discussed. The potential for the expansion of the system and the option of Town ownership will be addressed. Analysis should follow the engineers report outline contained in *Recommended Standards for Wastewater Facilities*.

Potential aesthetic, odor, lighting and other impacts from the sewage disposal system upon neighboring properties will be analyzed and discussed. The potential impact of bio-degradables and thermal loading on adjacent streams and rivers will be analyzed and discussed. Electrical and gas consumption on the site will also be discussed.

A recommended management plan of all infrastructure discussed in this section should be discussed. The fiscal analysis (including the possibility of forming new taxing districts) for the costs of providing maintenance to the proposed

infrastructure shall be provided in the Fiscal Analysis of the DEIS, and incorporated in this section by reference.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

9. TRAFFIC AND TRANSPORTATION

a. Existing Conditions

(1) Existing traffic conditions will be documented for the weekday AM and PM peak hours and summer Saturday midday peak hours by conducting turning movement counts at the following intersections:

a. Old Chester Road and Bridle Lane;
b. Craigville Road and Yankee Maid;
c. Craigville Road and Route 207;
d. Craigville Road and Oakwood Drive;
e. Sarah Wells Trail and Coleman Road;
f. Craigville Road and Coleman Road;
g. Route 17 west bound ramp and Route 17M,west bound turn;
h. Duck Farm Road and Route 17M;
i. Route 17M at South Street Exit;
j. Craigville Road and Brookside Drive;
k. South Street and Old Chester Road;

The traffic counts will be compared with other historical information from the New York State Department of Transportation and from the Orange County Department of Public Works. This information will be used to establish the existing traffic volumes for each of the peak hours.

(2) Roadway Inventory. Roadway characteristics will be described including classifications, general condition, number of lanes by direction, pavement markings, on-street parking, bus stops, percent heavy vehicles, traffic control and pedestrian buttons.

(3) Manual Counts. Manual turning movement counts will be collected during typical weekday morning, weekday afternoon and summertime Saturday peak periods. The data collection effort will include the following:

(a) Data to be collected in 15-minute segments by intersection approach and turning movements.

(b) At a minimum, the data will be collected for the following time periods:

(1) Weekday Morning - 7:00 A.M. to 9:00 A.M.;
(2) Weekday Afternoon - 4:00 P.M. to 6:00 P.M., and
(3) Saturday Midday - 10:00 A.M. to 2:00 P.M.

(c) Data will be collected for typical weekday and weekend conditions and should not follow or precede holidays. Weekday conditions should include dates when local schools are in session.

(d) Data will be summarized in table format and included in the appendix of the document.

(4) Accident History. An analysis of detailed accident data will be included in order to identify accident types, accident patterns, possible causes and safety deficient locations.

(a) A summary of accident history will be prepared for the most recent three-year period of roadways and intersections within the study area.

(b) The accident data should include location, date, day, time, severity, type, manner of collision, road conditions, weather conditions and light conditions.

(c) For those roadway segments and intersections that experience 5 or more incidents over a 12-month period, a calculation of the accident rate will be provided. The accident rate calculations will follow the standards and procedures outlined in the New York State Department of Transportation Highway Design Manual and include a comparison to the state wide average.

(d) Locations with accident rates greater than the state wide average will be addressed and a recommendation provided for improvements.

(5) Sight Distances. The traffic study will include a sight distance evaluation and comparison to New York State Department of Transportation guidelines.

(a) Sight distances will be determined at all site access points in accordance to the Policy and Standards of the New York State Department of Transportation.

(b) Sight distances will be determined for intersection sight distance, stopping sight distance and left turn sight distance. The 85th percentile speed determined as part of the hourly data analysis will be used as part of the sight distance calculations.

(6) Pedestrian Activity. Pedestrian activity levels will be documented at each of the previously identified intersections. The prospect of providing sidewalks internal to the project will also be discussed.

(7) Public Transportation. Public transportation will be identified within the study area by type, location of stops, frequency and routing. Evaluation will include but not limited to public busing and school busing.

(8) Capacity Analysis for Existing Conditions. Capacity analysis at each of the previously identified intersections will be conducted in accordance to procedures identified by the most recent versions of the Highway Capacity Manual Software or Synchro Traffic Signal Coordination Software. In addition to identifying the overall intersection performance level, results will be presented by each approach and movement. The same procedures will be followed in the analysis of the No Build Condition and Build Condition.

b. No Build Conditions

This section will discuss the "No Build" condition, which analyzes projects proposed elsewhere in the Town that may affect the same intersection, as a means for analyzing the traffic impacts of surrounding projects and general background growth, as determined to be appropriate for the Town of Goshen in the vicinity of the project.

(1) Other Developments. Consideration to other proposed or approved traffic-generating developments in the vicinity of the study area will be accounted for as part of the No Build Condition. The traffic study will itemize each development and identify the volume of traffic estimated to be generated.

(2) Background Growth. General background growth will be accounted for as part of the No Build Condition. The traffic study will identify the estimated growth rate and the basis for this estimate.

(3) Planned Roadway Improvements. The traffic study will identify and address the impact of planned roadway improvements within the study area.

(4) Capacity Analysis for No Build Conditions. General background growth and traffic generated by the other developments will be added to the existing traffic volumes to create the No Build Condition

c. Potential Impacts

(1) Site-Generated Traffic Volumes. At a minimum, site-generated traffic will be projected based on the most recent Institute of Transportation (ITE) data and methodology. If available, the traffic study will include a comparison to actual site generated traffic created by similar developments.

(2) Capacity Analysis for Build Conditions. The estimated site-generated volumes will be added to the No Build Condition to create the Build Condition.

d. Mitigation. Where the increased traffic has the potential to significantly affect traffic operations and safety, the traffic study will identify potential mitigation measures to address such conditions. The discussion of mitigation measures will include the following information:

(1) The types of improvements, including traffic control, and the feasibility of using round-a-bouts to control traffic.

(2) An outline of the procedures to implement the improvements; and

(3) The party responsible for implementing the improvements and the method of funding.

e. Construction-Related Traffic. The traffic study will address the projected impact of construction-related traffic activity. The study will include, but not be limited to, the identification of the number and type of construction-related vehicles, arrival and departure patterns, and peak hour volumes.

f. Consideration to Project Timeline. In the event that two or more years should pass from the completion of the traffic study to the submission of the DEIS, the traffic study will include an addendum. The addendum will verify the previous findings and recommendations of the traffic study and include all supporting documentation. Supporting documentation will include a summary of any additional collection efforts. The date of the addendum will be consistent to the date of the DEIS.

g. Regular Vehicular Access. The DEIS will address and quantitatively analyze having primary vehicular access for the project from Craigville Road. The DEIS will also address and quantitatively analyze the following transportation alternatives both singularly and in combination:

1. Regular vehicular access from Craigville Road to Coleman Road

h. Emergency Access.

i. On-Street and Off-Street Parking.

j. Bicycle Paths and Bike Racks.

l. Pedestrian access: The DEIS will analyze the feasibility, and required costs to maintain and responsible party for maintenance for creating the following pedestrian access ways:
1. Creating Pedestrian Access from Craigville Road to Coleman Road
2. Creating a walkway along Craigville Road.

10. NOISE:

a. Existing Conditions: Existing noise levels on and in the vicinity of the project site will be assessed qualitatively.

b. Future without the proposed project: Projected Noise conditions of the project site and immediate environs will be discussed in the event that this project does not occur

c. Potential Impacts: Potential post-development noise Environmental Impacts to the surrounding neighborhood, if any, will be identified using NYSDOT screening criteria. The noise study will determine whether the project would have Environmental Impacts on sensitive land uses as a result of changes in traffic on site. The DEIS will also address noise impacts related to construction, the possible need for blasting, as well as the proposed hours of operation for the construction.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

11. AIR QUALITY

a. Existing Conditions: Existing ambient air quality conditions within the study area based on data obtained from NYSDEC will be described. NYSDEC data will be analyzed and compared to the National Ambient Air Quality Standards in order to characterize the existing air quality at the site.

b Future without the proposed project: This section will examine air quality conditions on the site if the proposed project is not constructed, as related to

the "No Build" traffic condition. In addition, this section will generally address future potential impacts of nearby development that would occur regardless if this project is built.

c. Potential Impacts: A screening analysis to determine the potential impacts of site generated traffic on air quality, will be performed to determine whether any location should undergo a detailed microscale CO analysis. The screening analysis will follow the procedures outlined in NYSDOT's Environmental Procedures Manual, January 2001. The effects of the emissions from stationary sources at the project site will be qualitatively assessed.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

12. COMMUNITY FACILITIES

a. Existing Conditions: Municipal facilities and services currently provided will be discussed, including Town Hall services, police, fire,[1] emergency services, hospital facilities, recreation facilities, schools, libraries the Town Senior Center and solid waste disposal and bulk pick-up. Access to shopping, banking, the post office and other services will also be discussed.

b. Future without the proposed project: This section will assess the future impacts related to the community services that would occur if the project is not constructed, especially as it relates to other proposed developments that would impact individual service districts or community resources and services listed in item a. above.

c. Potential Impacts: Potential Environmental Impacts to community and Town-related municipal facilities and services will be identified and described in terms of ability of the community service to provide adequate service to the projected population of the Maplewood residents. In other words, increased staffing and facility expansion needs will be estimate for service districts.) This section will refer to the Fiscal Impact section for a discussion of the costs associated with providing these community services.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. The DEIS will also

[1] This will involve meeting with the Fire Commissioner and the Goshen Fire Company to elicit their concerns.

address the inclusion of senior programs on-site as well as voting on-site. Unavoidable adverse Environmental Impacts will also be identified.

14. FISCAL IMPACTS

a. Existing Conditions: Current project site taxes provided to each taxing jurisdiction (e.g., Town, County, fire, school district) will be identified and described. Using available data, the economic activity in the study area will be qualitatively described.

b. Future without the proposed project: Changes that may be expected to occur to the taxing districts and local economy if this project does not go forward shall be identified.

c. Potential Impacts: An analysis of the projected real property tax accruing to each taxing jurisdiction compared against the projected cost of providing services will be provided in this section. In addition, this section will provide an analysis of the changes in the local economy that would likely occur as a result of the completion of this project.

d. Mitigation: Proposed and potential mitigation measures for identifying adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

15. CULTURAL RESOURCES

a. Existing Conditions: Historic resources on-site and within a one-half mile radius of the project site will be identified and studied in accordance with the New York State Standards for Cultural Resource Investigation, including:

(1) Phase IA Literature Search and Feasibility Study;
(2) Phase IB Field Investigation if warranted by Phase IA Study; and
(3) Phase II site evaluation, if warranted by Phase I Study.

This will also include contacting the New York State Office of Parks, Recreation and Historic Preservation to determine if there are any properties or potential sensitive historical/archaeological sites on or near the project site that are on or eligible for listing on the State or National Registers of Historic Places.

b. Future without the proposed project: This section will assess projected impacts that would occur to cultural resources if the project were not built as proposed.

c. Potential Impacts: Identify potential Environmental Impacts to archeological, cultural, or historic resources.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

16. AGRICULTURAL RESOURCES

a. Existing Conditions: Agricultural resources within a one-half mile radius of the project site will be identified.

b. The future without the proposed project: This section will assess agricultural resources if the project is not built, and changes within the one-half mile radius that are expected to occur regardless if the project moves forward.

c. Potential Impacts: Identify potential Environmental Impacts to agricultural resources. There are farming operations located in the general vicinity of the project site and the proposed project can have a potential effect on these operations, particularly by introducing additional traffic onto local roads, which are also used for the movement of farm vehicles and equipment, as well as for farm-related deliveries and pick-ups. Based on other analyses conducted for this EIS, the analysis of agriculture and farmland will identify and evaluate the potential effects on existing agricultural uses in the general vicinity of the site with and without the proposed project.

d. Mitigation: Proposed and potential mitigation measures for identified adverse Environmental Impacts will be discussed. Unavoidable adverse Environmental Impacts will also be identified.

## F. CHAPTER IV: CONSTRUCTION IMPACTS

This chapter will outline the construction schedule for this project, including all components of phasing that are expected to occur. Potential Environmental Impacts anticipated due to the construction of the proposed project, hours of construction operations, including noise, traffic, air quality, dust, blasting and its impact on the surrounding area will be described. An off-site pre-blasting inspection program will be described, as well as proposed reconstruction and/or compensation if off-site blasting impacts occur.

This chapter will also describe methods of recycling waste used on site during construction, and other "green" building techniques employed through the construction and building process.

## G. CHAPTER V: ALTERNATIVES

This chapter will describe and evaluate the range of reasonable alternatives to the proposed action that are feasible, considering the objectives and capabilities of the project sponsor. The description and evaluation of each alternative will be at a level of detail sufficient to permit a comparative assessment of the alternatives discussed. The DEIS will analyze the following alternatives:

1. No Action Alternative: This alternative assumes that the site remains vacant.

2. Open space development plan that could be built under the RC zoning, with required open space.

3. Alternative layouts in terms of configuration, specifically addressing:

    1. Bicycle and pedestrian connections to Craigville Park.
    2. Bicycle and pedestrian connections to the Hambletonian Park subdivision.
    3. Pedestrian and bicycle connections to the Salesian Park

## H. CHAPTER VI: POTENTIAL GROWTH-INDUCING ASPECTS

The potential for the proposed project to induce growth is primarily based on anticipated increases in local expenditures that would be made by new residents of the proposed community through the local purchases of goods and services. The analysis of potential growth-inducing aspects of the proposed project will estimate how new expenditures might affect the local economy in terms of potential new off-site development (e.g., residential and commercial development).

## I. CHAPTER VII: UNAVOIDABLE ADVERSE IMPACTS

This chapter will summarize adverse Environmental Impacts that cannot be avoided, with or without possible mitigation measures.

## J. CHAPTER VIII: PROJECT IMPACTS ON ENERGY USE AND SOLID WASTE MANAGEMENT

This chapter will summarize the proposed project and its Environmental Impacts in terms of the use of energy and the management of solid waste produced by the proposed project.

## K. CHAPTER IX: IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This chapter will summarize the proposed project and its Environmental Impacts in terms of the loss of environmental resources, both in the immediate future and in the long term.

## TECHNICAL APPENDICES

1. Stormwater Pollution Prevention Plan and supporting technical data.
2. Water Supply data and supporting technical reports.
3. Sewage Disposal design and technical data.
4. Natural Resources Reports (including wetlands, vegetation, and wildlife).
5. Traffic Report.
6. Correspondences (e.g., NYSDEC, NYSDOT, OPRHP, etc.).
7. SEQRA Documentation (e.g., Scoping Outline).
8. List of all Interested and Involved Agencies and their mailing addresses.
9. Supporting data regarding soils types (soil boring analysis).

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# Appendix A

# Site Plan
# &
# Subdivision
# Drawings

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# Appendix B

# Agency Correspondence

**From:** "Chris Viebrock" <crv@planctully.com>
**To:** "Steve Esposito" <espositoassoc@hvc.rr.com>
**Sent:** Thursday, March 16, 2006 12:38 PM
**Subject:** FW: Maplewood Village - Town of Goshen

-----Original Message-----
From: Joel Russell [mailto:joelrusl@aol.com]
Sent: Wednesday, February 08, 2006 10:52 AM
To: 'nhalloran@townofgoshen.org'; Graham Trelstad (Graham_Trelstad@AKRF.com); Joe Henry (jhenry@dufresne-henry.com); Susan_Roth@akrf.com; Ralph E. Huddleston Jr. (re.huddleston@eca-enviro.com); Rick Golden (rbgolden@msn.com)
Subject: FW: Maplewood Village - Revised

I have reviewed the latest Maplewood Plan and I think that it has come as far as we can expect in meeting the TND design objectives given the constraints of this particular site. I especially appreciate the high level of cooperation in recent weeks from the developer and his consultant.

Joel Russell

Joel Russell
25 Kensington Ave.
Northampton, MA 01060
off: (413) 584-7228
cell: (413) 537-5942
fax: (413) 584-9451
www.joelrussell.com

# Orange County

## Federally Listed Endangered and Threatened Species and Candidate Species

This list represents the best available information regarding known or likely County occurrences of Federally-listed and candidate species and is subject to change as new information becomes available

| Common Name | Scientific Name | Status |
|---|---|---|
| Atlantic Sturgeon[2] | *Acipenser oxyrinchus oxyrinchus* | C |
| Bald eagle[1] | *Haliaeetus leucocephalus* | D |
| Bog turtle | *Clemmys muhlenbergii* | T |
| Indiana bat (S) | *Myotis sodalis* | E |
| Dwarf wedge mussel | *Alasmidonta heterodon* | E |
| Shortnose sturgeon[2] | *Acipenser brevirostrum* | E |

Status Codes: E=Endangered T=Threatened P=Proposed C=Candidate D=Delisted

W=Winter S=Summer

[1] The bald eagle was delisted on August 8, 2007. While there are no ESA requirements for bald eagles after this date, the eagles continue to receive protection under the Bald and Golden Eagle Protection Act (BGEPA). Please follow the Service's May 2007 Bald Eagle Management Guidelines to determine whether you can avoid impacts under the BGEPA for your projects. If you have any questions, please contact the endangered species branch in our office

[2] Primarily occurs in Hudson River. Principal responsibility for this species is vested with the National Oceanic and Atmospheric Administration/Fisheries

Information current as of 2/26/108

Print Species List

**New York State Department of Environmental Conservation**
**Division of Fish, Wildlife & Marine Resources**
**New York Natural Heritage Program**
625 Broadway, Albany, New York 12233-4757
Phone: (518) 402-8935 • FAX: (518) 402-8925
www.dec.state.ny.us

March 19, 2008

Michael Nowicki
Ecological Solutions
1248 Southford Road
Southbury, CT 06488

Dear Mr. Nowicki:

In response to your request received March 19, 2008, we have reviewed the New York Natural Heritage Program database with respect to an Eastern Massasauga Assessment for the proposed Residential Development - 98 Acres area located on the map you provided, Located on Craigville Road, Town of Goshen, Orange County.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats that our database indicates occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered sensitive and should not be released to the general public without permission from the New York Natural Heritage Program.

The presence of the plants and animals mentioned in the enclosed report may require that you undertake additional review or permit conditions. For further guidance and for information regarding other parts of the state (e.g., regulated wetlands), please contact the appropriate NYSDEC Regional Office, Division of Environmental Permits, at the enclosed address.

For most sites, comprehensive field surveys have not been conducted. The enclosed report only includes records from our databases. We can not provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Lara Shane
Data Services Coordinator
New York Natural Heritage Program

ENCS

cc: Peter Nye, Endangered Species Unit, Albany

## Natural Heritage Report on Rare Species

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor
Albany, NY 12233-4757
(518) 402-8935

- This report contains SENSITIVE information that should not be released to the public (see section 4 of the NY Natural Heritage Program
- Refer to the User's Guide for explanations of codes, terms and methods
- We do not provide maps for species vulnerable to disturbance

## Natural Heritage Report on Rare Species and Ecological Communities

### MAMMALS

*Myotis sodalis*
**Indiana Bat**

| | | | | Observed |
|---|---|---|---|---|
| NY Legal Status: | Endangered | NYS Rank: | S1 - Critically imperiled | 1998 |
| Federal Listing: | Endangered | Global Rank: | G2 - Imperiled | Est |
| County: | Orange* | | | Historic |
| Town: | Crawford, Wallkill, Montgomery, Warwick, Monroe, Hamptonburgh, Blooming Grove, New Windsor* | | | |
| Location: | Documented within 2 miles of project site. Records cumulative 2 miles or more from documented location. For information on the population or the species and management considerations, please contact the NYS DEC Region 3 Wildlife Manager for the Region where the project is located or the NYS DEC Endangered Species Unit at 518-402-8935. | | | |

* Records Protected

More detailed information about many of the rare and listed animals in New York, including biology, habitat, conservation and management, is available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, Fish Species of Special Concern at http://www.dec.ny.gov/animals/7494.html

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
ALBANY FIELD OFFICE
1 BOND STREET
TROY, NEW YORK 12180

DEC 08 2004

REPLY TO ATTENTION OF
Regulatory Branch

SUBJECT: Permit Application Number 2004 00921-29
by ADC Orange, Inc

Robert G. Torgersen, LA, CPESC
Landscape Architecture and Environmental Sciences
Three Main Drive
Nanuet, New York 10954

Dear Mr. Torgersen:

On February 27, 2004, the New York District of the U.S. Army Corps of Engineers received a request for a Department of the Army jurisdictional determination for a 95.4 acre site. This request was made by Landscape Architecture and Environmental Sciences, as consultant for ADC Orange, Inc. The site is located in the Hudson River basin, between Coleman Road and Craigsville Road in the Town of Goshen, Orange County, New York.

In the letter received on February 27, 2004, your office submitted a proposed delineation of the extent of waters of the United States within the project boundary. A site inspection was conducted by representatives of this office on August 24, 2004, in which it was agreed that changes would be made to the delineation and that the modified delineation would be submitted to this office. On November 1, 2004, this office received the modified delineation.

Based on the material submitted and the observations of the representatives of this office during the site visit, this site has been determined to contain jurisdictional waters of the United States based on: the presence of wetlands determined by the occurrence of hydrophytic vegetation, hydric soils and wetland hydrology according to criteria established in the 1987 "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1 that are part of a tributary system; the presence of a defined water body (e.g. stream channel, lake, pond, river, etc.) which is part of a tributary system; and the fact that the location includes property below the ordinary high water mark of a water body as determined by the presence of physical markings including, but not limited to, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter or debris or other characteristics of the surrounding area.

These jurisdictional waters of the United States are shown on the drawing entitled "Wetlands Plan Prepared for Salesian Property", prepared by Lenc and Tully Engineering and Surveying, P.C., dated January 2, 2001, and last revised October 8, 2004.

This drawing indicates that there are 41.1 acres of waters of the United States, including 6,568 linear feet of intermittent stream channel on the project site. These waters are considered to be part of a tributary system to the Hudson River, and are considered to be waters of the United States.

This determination regarding the delineation shall be considered valid for a period of five years from the date of this letter unless new information warrants revision of the determination before the expiration date. Enclosed is a Notification of Administrative Appeal Options which provides information on your acceptance of this approved jurisdictional determination.

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

It is strongly recommended that the development of the site be carried out in such a manner as to avoid as much as possible the discharge of dredged or fill material into the delineated waters of the United States. If the activities proposed for the site involve such discharges, authorization from this office may be necessary prior to the initiation of the proposed work. The extent of such discharge of fill will determine the level of authorization that would be required.

If any questions should arise concerning this matter, please contact Brad Sherwood, of my staff, at (516) 270-0086.

Sincerely,

George Nieves
Chief, Western Permits Section

Enclosures

cf: NYSDEC - Region 3
Town of Goshen
ADC Orange, Inc.