# Draft Generic Environmental Impact Statement (DGEIS)

# Hampton Ridge Center 4320 West Ridge Road

# Town of Greece Monroe County New York State

October 2007

**Project Sponsor** 

4320 West Ridge LLC 1950 Brighton-Henrietta Town Line Road Rochester, New York 14623



**Prepared By** 

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# DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT

# PROPOSED HAMPTON RIDGE CENTER 4320 WEST RIDGE ROAD MONROE COUNTY GREECE, NY October 2007

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Introduction

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# INTRODUCTION

The State Environmental Quality Review (SEQR) Act was adopted in 1975 to incorporate the consideration of environmental factors in the early stages of actions that are undertaken, funded or approved by local, regional or state agencies. By incorporating a systematic interdisciplinary environmental review in the early planning stages, projects can be modified as needed, to avoid adverse impacts on the environment. It is the intention of SEQR that the protection and enhancement of the environment, human and community resources be given the appropriate weight with social and economic considerations in determining public policy, and in considering and reaching decisions on proposed actions.

To accomplish this interdisciplinary review of an action, government agencies are required to determine whether a proposed action may have a significant impact on the environment, and if so, can request a Generic Draft Environmental Impact Statement (DGEIS). A DGEIS identifies any relevant adverse environmental impacts so identified, and assesses reasonable alternatives to the proposed action. To coordinate the environmental review process a Lead Agency is designated. In the case of an action being proposed by a public agency, the agency itself may be the Lead Agency. However, when a private applicant is proposing an action, the Lead Agency is identified from involved local, regional or state agencies. For this project, the Town of Greece Town Board is acting as SEQR Lead Agency.

Under SEQR, there are numerous opportunities for the public and governmental agencies to evaluate the proposed action, request additional information, or comment on the action. The first of these opportunities is scoping. The purpose of scoping, which is optional in the discretion of the lead agency, is both to identify the important environmental issues, which are to be considered in the DGEIS, and to rule out extraneous or irrelevant issues. Scoping may be conducted through meetings, exchanges of written material, or other suitable methods. A copy of the Scoping Outline, dated August 2, 2007 can be found in Appendix G.

This Draft Generic Environmental Impact Statement (DGEIS) is set up to review the potential for environmental impacts identified by the Lead Agency as potentially significant including, traffic impacts, air emissions, storm water drainage, and the identification of state or federal wetland areas, if any. The document also includes support data, information and reports in the References & Consultations, List of Preparers, and the Appendices sections. The DGEIS is structured in a manner whereby issues are addressed in various sections of the document, with each section being integral to the total understanding of the respective topic.

According to the SEQR handbook, a Draft Generic EIS should contain a general discussion of significant impacts, alternatives and mitigation measures requested by the lead agency in a reasonable level of detail. The purpose of the public comment period is to allow all involved

agencies and the public to review the DGEIS and comment on its content, so that the Lead Agency can determine if a Negative Declaration or a Final EIS would be appropriate.

The public review period is an opportunity to review the proposed action. Commenting on the DGEIS allows the public and agencies to have direct input into the decision-making process. The public comment period on the DGEIS must be a minimum of 30 days, with public review time frames to be established by the Lead Agency, provided no changes are made to the SEQR mandated timeframes.

Upon completion of the public review period, the Lead Agency must determine whether to issue a Negative Declaration where areas of concern have been addressed and/or mitigation measures are adequate, or to prepare a Final EIS, if necessary, to respond to public comment. The Final EIS includes the DGEIS, the substantive comments received, response to these comments, revisions to the DGEIS, and reasons for these revisions. Once the Final EIS is completed, the Lead Agency may make a SEQR determination by issuing a Findings Statement after a minimum 10 day public review period.

The Negative Declaration, or Findings Statement if required, would demonstrate that the proposed action minimizes or avoids adverse environmental effects to the maximum extent practicable, and that the proposed action incorporates practical mitigation measures identified in the SEQR process. These demonstrations must be based on facts and conclusions that are derived from the Draft EIS, public and agency comments, and any hearing records. The considerations that have been weighed and the reasoning behind a decision to approve or not to approve an action would be provided at this time.

Chapter 1

**Executive Summary** 

Draft Generic Environmental Impact Statement

Hampton Ridge Center Rezoning

# CHAPTER 1 - EXECUTIVE SUMMARY

# Overview

This Draft Generic Environmental Impact Statement (DGEIS) for the Hampton Ridge Center commercial development was prepared in accordance with Article 8 of the New York State Environmental Conservation Law – the State Environmental Quality Review Act (SEQRA) and the implementing regulations of the New York State Department of Environmental Conservation (6 NYCRR Part 617) on behalf of the Town of Greece for acceptance by the Town Board as lead agency pursuant to SEQRA.

4320 West Ridge, LLC, (the "Applicant") proposes to rezone 67 acres of real property (the "Premises") from R1-12 (Single-Family Residential) to BG (General Business) on the north side of West Ridge Road. An adjacent property to the east, The Shops at Hampton Ridge, was previously rezoned from residential to general business in 2004.

The Applicant's proposal is for commercial development, with related paved parking, utilities, grading, landscaping/buffering, and other site modifications (the "Project"). More specifically, 4320 West Ridge, LLC proposes to develop approximately 390,000 square feet of retail and other commercial floor space. The proposed Master Plan provided is conceptual in nature, but depicts the maximum anticipated development density. There is a potential to subdivide land per individual tenant requirements. The Premises currently consist of undeveloped land and vacant houses on residential lots. The Applicant proposes access to the Project via West Ridge Road (US Route 104), a five-lane highway. Existing land uses in the vicinity consist of single/multi-family housing and various commercial uses.

A full environmental assessment form (6 NYCRR Part 617, Appendix A) was prepared by the applicant and submitted to the Town Board on April 3, 2007 in support of the rezoning application. (A copy of that documentation is hereby incorporated in Appendix G of this DGEIS.) On May 14, 2007 the Town Board held a public hearing to accept public comment on the application. After the hearing was closed, the Town Board accepted the rezoning application, declared their intent to become lead agency and ordered the distribution of the application to involved agencies. On July 17, 2007, the Town Board made a positive declaration and directed the applicant to prepare a DGEIS. A scoping document was prepared for the Town's review. The scoping document was circulated for staff comment. At the August 21, 2007 Town Board meeting, the scoping document was adopted (as included in Appendix G) and made available for public comment. As of September 14, 2007, no public comments were received. The Applicant has therefore completed this DGEIS in conformance with the scoping document adopted by the Town Board.

#### **Beneficial and Adverse Impacts and Proposed Mitigation Measures**

The proposed development will result in several beneficial impacts which include the creation of additional employment opportunities, increased property and sales tax revenues for the Town of Greece and Monroe County, along with a high quality retail center that will strengthen the existing commercial corridor in the Town of Greece in accordance with the 2001 Community Master Plan. Potential adverse impacts, for which appropriate mitigation measures are proposed, are described below categorically as covered in the main text of the DGEIS.

#### 1. ADDITIONAL EMPLOYMENT OPPORTUNITIES

It is anticipated that approximately 100 or more employment opportunities will be created during the site and building construction of this project. In addition, approximately 500 to 600 permanent employment opportunities, including full and part time workers, will also be generated once the shopping center is fully operational.

#### 2. INCREASED PROPERTY AND SALES TAX REVENUES

It is estimated that when fully developed, the proposed development will generate about \$850,000 annually in tax revenue. This tax revenue is a substantial contribution to the development and maintenance costs of the public services provided by the town and considerably more than might be generated from other land uses. A break-down of there revenues is presented in Chapter 3, Section 12, Fiscal Impacts. In addition, the proposed shopping center will generate an additional \$2 million sales tax for the State of New York, Town of Greece and Monroe County.

# 3. HIGH QUALITY RETAIL CENTER

The proposed development is consistent with the 2001 Greece Community Master Plan which defines the West Ridge Corridor as Greece's primary commercial area. The proposed development will comply with the recommendations from the Master Plan by incorporating the use of quality materials for the aesthetic enhancements of the site. In addition, the proposed development will benefit the neighboring residential areas by providing services in closer proximity than existing services in the community.

# 4. VISUAL AESTHETICS

Hampton Ridge Center will be designed to create an aesthetically pleasing, comfortable, high quality shopping atmosphere.

The developer will use high quality landscape materials throughout the site in order to create an aesthetically appealing environment. Buffer areas between the Project and adjacent residentially zoned property will be maintained. The use of conifers and broadleaf trees will aid in visual buffers into the site from adjacent residential land uses. Larger buildings will generally be further from West Ridge Road and oriented to reduce their apparent scale as much as practicable. The use of ornamental landscape material within the parking islands and surrounding the retail stores will contribute to an enhanced image and valuable development for the community at large.

In addition, the proposed development will evaluate the architectural and pedestrian scale elements for the contribution they can make to visual quality along the West Ridge Road commercial corridor. The proposed buildings will be designed at appropriate height, scale, style and using materials that are consistent with adjacent developments. These design considerations will allow the surrounding community and visitors to enjoy this commercial addition to the Town.

#### 5. LOSS OF VEGETATION AND WILDLIFE HABITAT

The proposed development will include disturbance to the existing forested portion of the site. These forested areas are new growth and are of generally low quality. Disturbance to vegetative buffers along the site boundary will be limited in efforts to retain the visual buffer between the proposed development and the existing residential development to the north and east. In addition, the Town of Greece Tree Council has been contacted and will be consulted throughout the design process in order to limit and mitigate disturbance to vegetation on site.

With the loss of vegetation will be a loss of some wildlife habitat. However, buffer areas are proposed which can remain as a reduced habitat area for native wildlife.

# 6. DISTURBANCE TO CULTURAL RESOURCES

Powers & Teremy, LLC conducted a Phase 1A/B site investigation for evaluation of cultural resources. The study, included as Appendix E concluded that there was nothing of significance on the site except for an area of about 2 acres in the southwest corner. This area contains a cobblestone house and was the location of a number of objects found during the field study. The Phase 1 A/B report has been submitted to the New York State Historic Preservation Office for concurrence on the recommendation to conduct a Phase 2/3 study on the 2 acre site.

The cobblestone house is eligible for listing on the National Register but the current owner is not interested in applying for the listing. The cobblestone is recognized by the Greece Historic Preservation Commission as a unique structure. The Applicant met with the Commission to discuss options and made it very clear that the goal is not to simply demolish the house. All resources will be employed at this time to find a way to preserve the building.

To date, all have agreed that the house is not located in an economically viable location for reuse within the development. The Applicant is willing to allocate an alternative location on site if grant funding can be secured to finance the relocation costs. A highly recommended house mover (Matthews) has been consulted and agreed to provide an estimate for the relocation costs. The house is in relatively poor condition and will be difficult to move in tact.

#### 7. TRAFFIC AND TRANSPORTATION

Bergmann Associates prepared a traffic analysis for this project. In order to accommodate the long review periods associated with traffic analysis, the report was submitted to the NYSDOT in December 2004. Several exchanges of comment and review have occurred between the applicant and the NYSDOT. Correspondence is included in Appendix D.

The traffic analysis indicates the amount of traffic which could potentially be generated by the proposed development and the impact on the various intersections with close proximity to the projects site. As indicated, in the traffic section (Chapter 3 Section 8), good levels of service will be maintained at the intersections analyzed. The traffic analysis also identifies the following improvements which may be required and should be further studied during the site plan design stage:

- Install a new traffic signal for the proposed intersection of Hampton Ridge Center Driveway and NYS Route 104. This signal should be coordinated with the signal at the intersection of NYS Route 104 with Manitou Road and the signal expected to be installed at the intersection of NYS Route 104 and the Shops at Hampton Ridge Driveway.
- Widen NYS Route 104 to include a 500 ft eastbound left turn lane at the proposed site driveway. Construct a 300 foot long westbound right turn lane along NYS Route 104 at the proposed Hampton Ridge Center Driveway. The turn lane would operate as a free-flow slip lane and not be controlled by the traffic signal.
- Install pedestrian crossing provisions at the signalized intersection of the Hampton Ridge Center site driveway and NYS Route 104 based upon the Pedestrian Generator Checklist shown in Appendix F of the Traffic Report. Extend the sidewalk located on the north side of NYS Route 104 (constructed for the Shops at Hampton Ridge) to the western frontage limit of the Hampton Ridge Center.
- Re-stripe the North Greece Road and Elmgrove Road approaches to NYS Route 104. The new lane configuration on the North Greece Road would consist of two left turn lanes, one through lane and one right turn lane. The same lane configuration is recommended for the Elmgrove Road approach. Operate this intersection as an independent fully actuated traffic signal with a

cycle length of 125 seconds during the weekday evening and Saturday midday peak hour (retail peak) periods.

• Continue to operate the traffic signal at the intersection of NYS Route 104 and Elmridge Plaza in coordination with those to the east.

The intersection of Manitou Road and NYS Route 104 currently has poor levels of service during the PM peak period. Physical changes at this intersection are impractical without adequate right-of-way although there are significant impediments that affect available options. The NYSDOT has asked that the applicant look at whatever possible actions can be taken to accommodate north/south through traffic.

#### 8. <u>Noise</u>

The proposed commercial development makes allowance to buffer the residential properties on the east, south and west by a buffer strip. Assuming a 3 db increase in sound levels within the proposed site improvement area the residential areas will not detect a difference from the current ambient noise level. It is expected that the proposed development will result in no significant operational noise impacts therefore; no mitigation measures are required or recommended.

There are expected short term noise impacts due to construction activities for the proposed development. Mitigation of these short term construction noise impacts shall be achieved through several techniques. These include the use of construction equipment with properly maintained mufflers, the use of newer equipment having lower noise levels, the selection of equipment having lower operating noise levels and limiting the hours of operation of construction equipment. In addition, a developer's representative will be available during construction to address any noise related complaints, and to make minor adjustments to construction procedures or equipment to reduce noise levels.

# 9. <u>Wetlands</u>

Terrestrial Environmental Specialists prepared a wetland delineation study. About a 0.4 acre area of wetlands were identified, most of which is in a strip of land that must remain undeveloped as part of the coverage limitation for the Shops at Hampton Ridge. A jurisdictional determination request was submitted to USACE and they are expected to visit the site in late October 2007. Their determination should follow soon thereafter. It is possible that these wetlands are considered isolated and non-jurisdictional.

# 10. <u>TOPOGRAPHY AND SOILS</u>

The Monroe County Soil Survey was consulted for information on subsurface soil conditions. The soils are very similar to those encountered at the Shops at Hampton Ridge development to the east. The County Soil Survey does indicate that bedrock

could be shallow. However, only limited encounters occurred on the adjacent site during construction and were found to be fractured enough in the upper layer to remove with conventional equipment. If blasting is necessary for utility work or other deep subsurface excavation, proper procedures for pre-blast evaluations and other precautions will be included as a construction specification for the work.

#### 11. STORMWATER MANAGEMENT

Bergmann Associates prepared a Stormwater Management Plan included as Appendix C. The site is within the drainage basin of Smith Creek. The plan provides for the construction of two stormwater detention ponds to mitigate peak runoff to less than existing conditions. Peak discharges further consider 30% reductions in both the Hampton Ridge Center and the Shops at Hampton Ridge development projects. Plans for Images Way, the residential subdivision north of the Project, made provisions in their computations to allow drainage from 4320 W. Ridge Road to pass through to Smith Creek.

There are no mapped flood plains according to Town and FEMA records. An older version of the flood maps showing part of the site in the Larkin Creek flood plain was modified by a letter of map revision. Bergmann Associates, at the Town's request, analyzed the flood plain of Smith Creek to determine impacts this Project would have. A portion of the flood plain may impact the northwest corner of the Project site but this is in an area that would remain undeveloped. Therefore, there are no impacts to the flood plain of Smith Creek.

#### 12. INFRASTRUCTURE AND UTILITIES

The Project has access to all public utilities and all have adequate capacity to service the project. In order to permit Inflow and Infiltration (I&I) by an amount equivalent to the proposed flows. The Town DPW has started discussions with Pure Waters on this subject.

# 13. Community Facilities

Fire, Police, and Emergency services are adequate and within reasonable distances to the Project. There are no impacts to recreation facilities or schools. Solid waste facilities have adequate capacity. On-site tenants will recycle cardboard and wood pallets.

# 14.<u>Air</u>

The primary source of air impacts are mobile sources and construction activity. By maintaining levels of service at new intersections at level D or better, impacts to air from mobile sources will be minimized. Construction impacts will be temporary. Keeping equipment in good working order and using updated equipment will minimize air impacts. Dust control will be managed by practices acceptable to the NYSDEC.

#### Alternatives to the proposed action

Four alternatives were considered to the proposed action: No-Build, Develop as R1-12 Zoning, Alternative Layouts, and Alternative Locations.

No-Build: The site would remain as vacant land. No changes to existing conditions. No beneficial use of the land per zoning or the Community Master Plan.

Develop as R1-12 Zoning: Code presently allows construction of residential single family units on roughly 12,000 sf lot size. This area along West Ridge Road is recognized as inappropriate for residential use. Many of the impacts (construction, air, noise, loss of vegetation, etc.) would be similar to commercial development. However, no net gain in tax revenues or jobs will be realized.

Alternative Layouts: Other layouts have been conceived however the final version is substantially driven by tenant requirements. The Applicant will work closely with the Development Services Staff, DPW and the Planning Board to adjust the proposed master plan during site plan approval in keeping with the goals and objectives of the DGEIS.

Alternative Locations: The Applicant does not own any other property in an area designated by the Community Master Plan as suitable for this type of development.

#### Potentially required reviews and approvals

There are a number of approvals and permits which may be required from a range of local, regional, state, and national agencies. All involved agencies will be involved in as the project evolves. The Town Planning Board will review in detail, the relevant issues of site design and rezoning. The New York State and Monroe County Department of Transportation will review and must approve the traffic analysis and transportation system improvements. The New York State Department of Health (NYSDOH), Monroe County Water Authority, and the New York State Department of Environmental Conservation (NYSDEC) will review the water distribution and sanitary disposal systems in detail and must approve and issue the appropriate permits prior to construction. The New York State Office of Parks, Recreation, and Historic Preservation will review the site plans and issue the appropriate approvals prior to site plan approval. The U.S. Army Corps of Engineers must also be involved to review the site plans and issue the necessary determinations and/or approvals associated with the any jurisdictional wetlands on site.

This approval procedure ensures that all aspects of the project design are thoroughly reviewed and approved by the appropriate agencies prior to construction. A list of the potential required approvals can be found below.

Approval/Permit/Review	Agency			
Town of	Greece			
Rezoning Approval	Town Board			
Site Plan Approval	Planning Board			
Subdivision Approval	Planning Board			
Special Use Permit Approval	Town Board			
Special Use Permit Approval	Board of Zoning Appeals			
Monroe	County			
Water Supply and Distribution Designs	Water Authority			
Section 239-m Referral	Department of Planning			
Highway Work Permit	Department of Transportation			
Water Supply & Sanitary Sewer Extension	Department of Public Health			
Approval of Sanitary Sewer Plans	Department of Environmental Services,			
	Pure Waters Division			
New York State				
SPDES Permit(s) for Storm Water	Department of Environmental			
Discharges	Conservation			
Historic, Cultural and Archeological	Office of Parks, Recreation, and Historic			
Review	Preservation			
Highway Work Permit and Possible Road	Department of Transportation			
Entrance Permit				
Water Quality Certification*	Department of Environmental			
	Conservation			
Federal /	Agencies			
Nationwide or Individual Wetland	U.S. Army Corps of Engineers			
Permits*				

# **Potential Required Approvals**

\*Anticipate on-site wetlands to be declared isolated, will eliminate these approvals.

Chapter 2

**Project Description** 

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Hampton Ridge Center Rezoning

# CHAPTER 2 - PROJECT DESCRIPTION

#### **2.1 LOCATION AND SITE DESCRIPTION**

The property is located on the north side of West Ridge Road (US Route 104) between North Greece Road and Manitou Road, in Greece, New York. See Figure 1 - Site Location Map. The overall parcel of 67.045 acres is comprised of ten (10) separate tax accounts, listed below:

Tax Account Number: 73.01-1-2.1 73.01-1-3 73.01-1-4 73.01-1-5 73.01-1-5 73.01-1-6 73.01-1-7 73.01-2-63 73.01-2-64.111 73.01-2-64.12 73.01-2-64.2 73.01-2-68 (PORTION)

See Tax Map - Figure 7.

Most existing utilities are located along West Ridge Road (US Route 104) corridor. These utilities include electric, telephone, 6" gas main and a 12" water main. A 15" sanitary sewer is located approximately 2,200 feet to the north, at the intersection of Daffodil Trail and Images Way.

Surrounding land uses include Vanderstyne Toyota to the west, The Shops at Hampton Ridge to the east, wooded areas to the north and vacant houses to the south.

Current zoning for this parcel is R1-12 – Single-Family Residential, 12,000 sf. Refer to Figure 3 – Town of Greece Zoning Map.

# 2.2 **PROJECT DESCRIPTION**

4320 West Ridge, LLC proposes to develop approximately 390,000 square feet of retail and other commercial floor space. The maximum building coverage allowed by code in the BG District is 15%. The proposed Master Plan provided (see Figure 2) is conceptual in nature, but depicts the maximum anticipated 15% development density. Uses range from small/mid/large format retail to restaurants, banks, movie theater or other similar but allowed uses within the BG District. The Applicant proposes access to the Premises via West Ridge

Road (US Route 104), a five-lane highway. It is proposed that this development, Hampton Ridge Center be interconnected with The Shops at Hampton Ridge, to allow cross access between the plazas.

The layout of this plaza, although conceptual in nature, is to provide buildings around the perimeter of the property with parking located in the center of the development. Parking quantity is based on a minimum ratio of 5.0 spaces per 1000 sf gross building area. A five lane driveway is proposed leading into the site, reducing to three lanes towards the rear of the site. A raised island with landscaping is proposed as a visual enhancement for the entrance into this development. Further enhancements are discussed in Chapter 3.2. The developer has made a provision in the design to allow the development of out parcels adjacent to West Ridge Road but access would be from the internal road system.

An application has been submitted to the Town of Greece to change the zoning of the parcel to BG-General Business. Assuming that the rezoning application is approved and site plan applications can follow, target dates for the review/approval process are as follows:

Submit DGEIS	October 2007
Completion of DGEIS	December 2007
Rezoning Approval	December 2007
Site Plan Application, Phase 1	January 2008 (As yet undefined but expected to be some
	portion of site dependent on tenant interest)
Site Plan Approval, Phase 1	April 2008
Permitting Complete	June 2008
Construction, Phase 1	Summer 2008
Final Phase	2009
Full Build-Out Complete	Fall 2009

Upon completion of construction and occupancy of leased spaces, common space maintenance will be managed by a third party contracted to perform services. Such services will include: building maintenance and repair, parking and pedestrian snow removal, private utility system maintenance and testing, landscape care (trees, shrubs and lawn areas), site lighting upkeep, etc. Trash will be consolidated in designated screened dumpster areas and pick-up will be contracted through a local service hauler.

Chapter 3

Existing Conditions, Anticipated Impacts and Proposed Mitigation

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#### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### 3.1 LAND USE, ZONING, AND PUBLIC POLICY

# 3.1a Existing Conditions

The proposed site is located on the north side of West Ridge Road in the southwest quadrant of the Town of Greece. The site slopes downward to the north and the elevation of the site is generally lower than the elevation of the geological ridge paralleling "Ridge Road". The site for the proposed development is currently zoned R1-12, Single Family Residential 12,000SF. The property immediately north of the site is zoned residential. The land south of the site is predominately zoned as residential and public land. The land located to the east and west of the site, adjacent to West Ridge Road, are predominately zoned General Business (Figure 3). The current development pattern consists of commercial development on the east and west sides of the project site immediately north and south of West Ridge Road with single and multi-family residential units occupying the properties located behind the commercial development along West Ridge road.

There are presently no known public use plans applicable to the subject property.

# 3.1b No Build Conditions

A "No Build" scenario could result in the loss of economic development and potential tax revenue generated from the proposed commercial development. Residential property owners have sold their properties along W. Ridge Road as the transportation corridor is not conducive to residential use. Current vacant properties would remain unless the incentive was provided to utilize the property. As a residential use, the property could support 190+ units at the density of 12,000 sf per lot. Said residential housing is not suitable immediately adjacent to W. Ridge Road.

During the rezoning and site plan approval of 4110 W. Ridge Road, a strip of land, about 150 feet wide and running north/south the entire length of the east side of the project site was appended to tax parcel 73.01-2-68 to satisfy newly adopted coverage requirements. This strip of land is to be left green and cannot be developed under the current code for either residential or commercial purposes. This strip provides a "one-lot deep" buffer strip along the existing residential development to the east.

# 3.1c Potential Impacts

The proposed commercial development is consistent with the current land use patterns along West Ridge Road and also consistent with the Greece Master Plan which defines the West Ridge Corridor as Greece's primary commercial area and recommends vacant large parcels (in the corridor) be zoned for big box retail development. The site is located in the West Ridge Corridor Overlay District. Relevant recommendations from the 2001 Plan include:

- Need to develop economic, land use, and physical enhancement plan for the corridor, including:
  - Streetscape improvements
  - Façade improvements
  - Mitigate Land use conflicts with recommendations for transition
  - Market plan
  - Access management standards
  - Consider establishment of a Business Improvement District.
- Allow for "Big Box" retail in the western section of the corridor.
- Include greenspace transition between uses.

The proposed development will comply with the recommendations from the Master Plan by incorporating the use of quality materials for the aesthetic enhancements of the site. The site will also preserve existing greenspace and limit clearing of vegetation on site where possible. In addition, the proposed development will benefit the neighboring residential units by providing services in closer proximity than existing services in the community.

Although residential uses are allowed along the northwest, north and northeast fringes of the property, no housing units are presently built within several hundred feet of the site.

# 3.1d Mitigation

In an effort to mitigate the proposed developments impacts on the land use and zoning of the surrounding area, the site design will offer design solutions that will improve the frontage along this segment of West Ridge Road. The Developer is considering attracting tenants into a "Life Style Center" which is a collection of uses that share common shopping themes and cater to targeted demographics. This type of design reduces outside trips and encourages on-site shopping. Also being considered is a Town Square component with tighter arrangement of buildings that convey a small town look and feel. The proposed commercial development will incorporate the physical enhancement strategies suggested by the Town of Greece Master Plan and strengthen the Town's plans for West Ridge Road to become the commercial corridor of Greece.

The proposed development will also provide the maximum 15% building coverage and minimum parking required by the town. The remaining portions of the site will be greenspace that is either undisturbed or landscaped. The current propose site plan illustrates approximately thirty-five percent (35%) greenspace and depending on the final tenant selection, this percentage may increase if parking requirements decrease.

The project will comply with bulk requirements of the BG District so that no variances are anticipated at this time. Uses on site are predominantly expected to be retail uses. There may be some office as allowed under the BP2 list of permitted uses and some services as listed under the BR list of permitted uses. Accessory uses may include outdoor storage and display in accordance with section 211-25 of the code. Outdoor display areas, if desired,

will be designated on a site plan. Special Permit uses, subject to Town Board approval, that are likely or may potentially be requested include: Restaurants, Building Supply Centers, and Commercial Recreation (indoor theater). Uses permitted by application to the Zoning board of Appeals which may be included in the project are: gasoline dispensing and motor vehicle service.

#### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### 3.10 AIR QUALITY

#### 3.10.a Existing Conditions

The proposed development is located on the north side of West Ridge Road (US Route 104) between North Greece Road and Manitou Road. Immediately west of the site is Vanderstyne Toyota car dealership, and to the east is the Shops of Hampton Ridge. The Shops consist of a Kohl's store and a new office building under construction. On the south side of West Ridge Road there are a number of vacant houses, woods and a creek which is in the process of being rezoned by others for retail/commercial use. Vacant houses, fields and woods currently occupy the proposed site.

Air pollutants are emitted into the atmosphere from a variety of sources, usually categorized as either fixed or mobile source. Fixed sources include power generation and industrial facilities, home heating units, and other stationary combustion units; predominantly emissions from such units are sulfur dioxide and particulates. Mobil sources are generally defined as motor vehicles powered by internal combustion engines; the major emissions from these sources are carbon monoxide, nitrogen oxide and hydrocarbons. Vehicular emissions are influenced predominately by operating speed, idling mode and operating time. Vehicular emissions are also influenced by the age of the vehicle and the condition of the emission system.

#### 3.10.b No Build Conditions

Without this proposed development, there will be no immediate noticeable change in the air quality on site. Over time, if traffic levels-of-service decline along West Ridge Road, mobile air pollution sources may increase accordingly depending on advances in automotive technology and vehicle emissions.

#### **3.10.c Potential Impacts**

Air Quality of the NYSDOT Environmental Procedures Manual (EPM) prepared by the NYSDOT Environmental Analysis Bureau (EAB) was used to determine if a microscale air quality study is required. Microscale analyses are performed to predict concentrations of carbon monoxide (CO) and PM<sub>2.5/10</sub> on a localized or microscale basis.

During the screening process, it was determined that the Level of Service (LOS) will not be worse than LOS D for either the Build or No Build Alternative for any intersection within the study area during the Estimated Time of Completion (ETC) peak hour volumes. An air quality analysis is not required since this project will not increase traffic volumes, reduce source-receptor distances, or change other existing conditions to such a degree as to jeopardize attainment of the National Ambient Air Quality Standards (NAAQS). The proposed development will use roof mounted HVAC and air exhaust units. These units do not involve any regulated air emissions from fixed sources, and will not release any direct air pollutant discharges.

The largest impacts to air quality would result from increased amounts of vehicular traffic on US Route 104, and the parking areas of the Project Site. Roadway improvements are expected to accommodate any volume increases on the road network serving the Project Site. The internal circulation system has been designed as efficiently as possible to ensure the smooth flow of traffic and minimize unsafe conflicts between vehicles and pedestrians. The amount of pollutants the motor vehicles emit into the atmosphere is influenced by many factors including the speed of the vehicle, its operating mode, and the presence of emissions controls. It is a function of the internal combustion engine that, as vehicle speed increases, carbon monoxide and hydrocarbon emissions decrease, while nitrogen oxide emissions increase. Upon completion of the development, it is expected that all of the intersections impacted by the development will be functioning at satisfactory Levels of Service. This means that there is minimal time in which vehicles will be idling and most subject to incomplete combustion.

Airborne particulates will occur during the construction phase of the Project. Steps such as wetting soil surfaces and covering of trucks and other dust sources will be included as part of the specifications of the construction contract.

# 3.10.d Mitigation

There will be temporary impacts to air quality during the construction of the proposed development as discussed above in Section 3.10.c. The contractor will be required to follow requirements set forth by the New York State Department of Environmental Conservation (NYSDEC). Mitigation measures will include, applying water, as required to limit air borne dust particles, the re-establishment of ground cover, turf and pavement as soon as construction activities allow. All construction vehicles will conform to State and Federal vehicle standards with all appropriate inspections. Therefore, the effect of emissions from construction vehicles will be within the allowable levels. In addition, construction vehicles are only in use for short durations within the total timeframe to complete construction activities for the development. No open burning on the proposed site will be allowed.

#### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### 3.11 COMMUNITY FACILITIES

#### 3.11.a Existing Conditions

Town Hall Services: The Town of Greece presently services community needs from facilities located North of Latta Road along the West side of Long Pond Road. The Town Clerk, Development Services, Building Department, Department of Public Works amongst other administrative offices and community services are provided at this location.

Police: The Town of Greece maintains its own police department. Offices closest to the site are on Island Cottage Road and Maiden Lane. The project site is within a 5 to 10 minute driving time of either office. The Town would also receive police services from the Monroe County Sheriff's Office and the New York State Police. Local police services are provided in this area to other retail and commercial uses of similar nature to this project.

Fire: The project site is located within the North Greece Fire District. Three fire departments are relatively equidistant from the site and include: Greece Ridge Fire Department, North Greece Fire Department and Spencerport Fire Department. Similar retail and commercial uses in the area, with similar building construction and heights, already exist. New construction can be serviced by existing equipment. Sufficient water supply is available on West Ridge Road from the Monroe County Water Authority and can be extended into the site.

Emergency Services and Hospital: The Greece Volunteer Ambulance dispatches from two nearby locations at Long Pond Road and Latta Road. The site is within 5 minutes driving time of either location. To the southwest, the Spencerport Ambulance is also within a similar distance. Hospital services are located at Park Ridge Hospital on Long Pond Road and via satellite offices of Highland Hospital.

Recreation: Greece Canal Park is the closest recreational facility to the project site. It is not within view of the project. No areas in or around the project site are targeted for future recreational public uses. Private hunting opportunities exist on site.

Schools: The project site is located half in the Spencerport School District and half in Greece Central School District No. 1. Several homes along West Ridge Road, that are now vacant, may have had children in the school districts. Current properties have contributed to school taxes and will continue to do so.

Solid Waste: Presently, no solid waste is generated by the project. The site contained a construction debris landfill that was cleaned up by the previous land owner and closed out by the NYSDEC.

# 3.11.b No Build Conditions

Without this development, the site will generally remain as a vacant lot. The applicant plans to demolish the existing vacant homes. The cobblestone house is discussed in Chapter 3.13. No human activity requiring services would occur on the site. No increase or decrease in community facilities would be required or expected. Property taxes would continue to be paid to the municipality, county, school and fire district.

# 3.11.c Potential Impacts

Town Hall Services: Since the development does not increase population, there is no need to increase services offered by the community to its residents. The number of existing parcels will be consolidated. Future tenants may request separate tax bills thus necessitating multiple mailings and collections. Services on site will be private and managed by the developer or a management company.

Police: The Greece Police Department provided input into their expectations once the project is completed. See Gary T.

Fire: The North Greece Fire District provided input into their expectations once the project is completed. See Gary T.

Emergency Services and Hospital: The Greece Volunteer Ambulance provided their input into their expectations once the project is completed. See Gary T.

Recreation: No increase in population, therefore no increased need for recreation facilities. The Town Master Plan addresses future goals for recreation. This project does not hinder the realization of those goals.

Schools: The project does not generate any increase in services required by either School District. However, significant school tax revenues will be generated.

Solid Waste: The project upon completion is expected to generate 6 tons of solid waste per month. To reduce the amount of solid waste generated, tenants will be expected to recycle items such as cardboard and wood pallets. Solid waste will otherwise be collected and transported by private hauler to the Mill Seat landfill or other approved landfill facility. Dumpsters on site will be placed out of public view as much as practicable and screened.

# 3.11.d Mitigation

The existing community facilities are adequate for this development. Recycling and screened dumpsters will be employed. No other mitigation is necessary or proposed.

# CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

# 3.12 Fiscal Impacts

#### **3.12.a Existing Conditions**

The following table shows the existing assessed value of the project site:

	<u> </u>	Total	
Parcel ID#	Land Assessment	Assessment	Acres
073.01-2.1	\$263,000.00	\$263,000.00	16.70
073.01-1-3	\$28,500.00	\$84,200.00	0.38
073.01-1-4	\$28,500.00	\$92,700.00	0.75
073.01-1-5	\$28,500.00	\$231,800.00	1.07
073.01-1-6	\$28,500.00	\$92,700.00	0.90
073.01-1-7	\$62,300.00	\$128,800.00	9.20
073.01-2-63	\$25,800.00	\$25,800.00	2.40
073.01-2-64.111	\$358,100.00	\$358,100.00	22.75
073.01-2-64.12	\$41,500.00	\$41,500.00	3.90
073.01-2-64.2	\$73,500.00	\$73,500.00	2.00
*073.01-2-68	\$110,180.00	\$110,180.00	*7.00

Table 3.12-1 Existing Property Assessment

Total Assessment = \$1,502,280.00

\* The proposed site will occupy approximately 7-acres of this parcel. Based on the per acre land assessment for the adjoining property (073.01-2-64.111), the assessed value of this portion of land was determined to be \$110,180.00.

See Figure 6 for the Tax Parcel Map. Table 3.12-2 shows the estimated tax revenue generated from the existing site.

Estimated Total Assessment	\$1,502,280.00	
	Taxes	
Combined County and Town	\$20, 701.42	
School District	\$34,852.90	
Special District Services (sewer, water etc)	\$9,764.82	
Total	\$65,319.13	

Table 3.12-2	Existing	Taxes	Generated	from	the	Proj	ject

Tax Rates per \$1000 AV			
County &	<b>County &amp;</b> \$13.78		
Town			
School	\$23.20		
Special	\$6.50		
District			
Services			
Total	\$43.48		

# 3.12.b No Build Conditions

The no-build alternative would deny the benefit of increased jobs and tax revenue from the development to the residents of Greece. If the project is not constructed, there may be an initial decline in assessed valuation as the condition of vacant homes declines and once they are demolished.

# **3.12.c Potential Impacts**

The proposed retail development on the, when complete, will represent a significant investment in the Town of Greece. This would equate to an estimated total assessed value of approximately \$19.5 million. The combined real property tax of \$43.48 per \$1,000.00 of assessed value applicable to the project site will generate approximately \$850,000 in real property taxes on an annual basis.

The proposed retail development will greatly improve the finances of jurisdictional taxing authorities for the County, Town, and local school district. The anticipated difference in assessed value is approximately \$17,997,500 based on a rough per square foot assessment for the completed project of \$50.00 The anticipated assessment will generate approximately \$782,540.87 in additional revenue for the Town of Greece, County and School district.

Table 3.12-3 shows the existing and proposed post-development assessed value of the project site and the difference in the existing and proposed post-development County, Town, and school taxes resulting from the proposed project.

	Existing	Proposed	Difference
Estimated Assessment	\$1,502,280	\$19,500,000	\$17,997,720
Combined County and Town	\$20, 701.42	\$268,710.00	\$257,169.25
School	\$34,852.90	\$452,400.00	\$432,970.00
Special District Services (sewer, water etc)	\$9764.82	\$126,750.00	\$121,306.25
Total	\$65,319.13	\$847,860.00	\$782,540.87

 Table <u>3.12-3</u> Existing and Proposed Taxes Generated from the Project

In addition to the property tax, New York State sales tax, estimated at \$2 million annually would also be generated by the project. Sales taxes generated would then be distributed in accordance with Town of Greece, Monroe County, and New York State fiscal policies.

In addition to the economic benefits of the proposed retail development from the generation of sales and real property tax revenue, the investments will generate approximately 200 jobs during the construction and approximately 500 to 600 jobs at full build-out. Indirect economic impacts, including increased disposable income and trickle down impacts can also be expected.

It is the goal of this commercial retail development to provide opportunities to new tenants, not already located in the Town of Greece. However, some existing businesses in the Town of Greece may seek additional business locations that can be accommodated at this site. In this case, business growth is accomplished through multiple locations. Also, some businesses, who are unable to grow their businesses or expand at their existing location, may seek opportunities at this site that are not available at their existing location.

It is understood that the Town of Greece does not seek to regulate free enterprise, rather to encourage practices that maintain full occupancy and use of existing buildings. It is not unreasonable to expect that some buildings can be vacated as tenants move to more appropriate facilities and that some time may elapse before new tenants are identified. Retenanting is a logical process in the marketplace which continually fits the needs of the user with the available supply of buildings.

#### 3.12.d Mitigation

The proposed commercial/retail development will greatly improve the finances of jurisdictional taxing authorities for the County, Town, fire and local school district. The anticipated difference in assessed value is approximately \$17,997,720, based on a rough per square foot assessment. This Project will result in a positive fiscal impact on the Town of Greece in that the additional tax revenue will far exceed the need for municipal services. Therefore, mitigation is unnecessary.

#### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### **3.13 CULTURAL RESOURCES**

#### 3.13.a Existing Conditions

As part of the preliminary planning for the proposed development, Powers & Teremy, LLC performed a cultural resource reconnaissance survey in compliance with existing state and federal regulations regarding the location, evaluation, and preservation of cultural resources that may suffer adverse impacts from permitted construction projects. In accordance with the New York State Education Department's Revised Work Scope Descriptions (March 2005) and the National Park Service's Criteria and Procedures for the Identification of Historic Properties (1990), all areas within the proposed project site limits are considered to be the Area of Impact for the purpose of conducting the survey. The boundaries of the proposed project as identified in the report, therefore, constitute the Area of Potential Effect (APE). The Phase I Cultural Resource Investigations were conducted in July through October 2007. The full report is located in Appendix E.

The Phase 1 investigations found that several potentially significant cultural resources were identified in the proposed APE subjected to Phase I field investigations. The report identifies three archaeological sites within the APE. The sites identified include the Westfall-Mercier Cobblestone, and two domestic refuse scatters. A lithic flake was also recovered from within the vicinity of the Westfall- Mercier Cobblestone, indicating a Native American presence within the area.

It was reported that no further archaeological investigations are warranted for the domestic refuse scatters. These sites are surface scatters that contain a considerable amount of modern debris and do not have an undisturbed subsurface component. In additions, there were no positive shovel tests surrounding the domestic scatter. Powers & Teremy, LLC do not believe further excavation of these areas would yield any future research potential or information of historical value.

The cobblestone house and it's associated artifacts, located in the southeast portion of the site on approximately one acre, was found to have historical relevance. Therefore, Powers & Teremy, LLC Cultural Resource Management Company recommends that additional archaeological investigations are warranted for one specific location within the APE. Phase II / Phase III cultural resource investigations are warranted only for the Westfall-Mercier Cobblestone site, unless construction plans are altered to exclude this area. The applicant has commissioned Powers & Teremy to begin the Phase II/Phase III investigation and expect to have results within the next 30 to 60 days. Results and mitigation measures will be submitted to the New York State Historic Preservation Office (NYSHPO) for concurrence on mitigation.

# 3.13.b No Build Conditions

In a 'no build' scenario it is likely that the portion of the property where the historic resources are located would become overgrown with vegetation. The cobblestone house is located on private property and is not currently an available historic resource for the public. It is eligible for listing as a historic property but has not been submitted. By not developing the site, the house will remain unavailable to the public and likely deteriorate over time. The floor joists are currently rotting and are beyond repair. The roof structure appears to be sagging and it is not known how long it will retain any integrity. The interior of the home is not in a livable condition.

In addition, as stated by the Landmark Society, the cobblestone house is currently regarded as particularly vulnerable due to the size of its lot and proximity to the commercial corridor of West Ridge Road. This suggests that the current location is not ideal for preservation as is. In a 'no build' situation, the house could potentially collapse without significant investment in restoration. The applicant is willing to assist in relocating the cobblestone at any time that grant funding can finance the process.

# 3.13.c Potential Impacts

There are potential impacts created by displacing or demolishing the Cobblestone house and its surrounding artifacts. The house is one of four Cobblestone houses that remain in the Town of Greece. The Town of Greece Historic Preservation Commission has expressed a desire to retain the structure. There is no interest in the modern addition on the North side of the cobblestone house. There are no other cultural resources on or near the site that may be impacted.

# 3.13.d Mitigation

The developer has proposed various mitigation efforts to resolve the status regarding the historic cobblestone house. The developer is aware of the potential impact that his decision regarding the cobblestone house will have on the surrounding community. The developer is not interested in merely demolishing the house and its associated artifacts.

The developer has met with interested parties in attempts to devise a plan for the cobblestone house. On September 19<sup>th</sup>, 2007 the developer met with the Town of Greece Historic Preservation Commission to investigate potential solutions for the Cobblestone House located on the project site (See meeting minutes in Appendix E). The discussion at this meeting revealed that the cobblestone house is one of four remaining in the town of Greece and of the remaining cobblestone houses in the United States 90% of them are located within seventy-five miles of Rochester, New York. It was also determined that the house has been nominated and is eligible for listing on the State and Federal Historic

Registry. Various alternatives have been determined for the future of the house, and are under consideration by the developer.

Notably, the current master plan does not accommodate the cobblestone house at its current location. It is not economically feasible to invest in restoration, make the property accessible to the public and then lease it at a suitable rate to cover the expenses involved. The floor space is not large enough to accommodate public rest rooms and leave enough space for significant business operations. If a suitable alternate location cannot be found and relocation efforts funded, one option is for the house to be demolished.

At present, however, there is time to search for funds to avoid this alternative. The developer has no desire to demolish the building if funds to preserve the house, are made available or if someone expresses the commitment to relocate the house to an offsite location. Within the time frames available now, should a business entertain the ability and desire to utilize the existing building at its current location and otherwise overcome the economic deficit such re-development would entail, then the developer will try to preserve the current location.

An alternative to eliminating the house from the site would be to relocate it to a location on site. The developer has contacted Matthews Housing Movers, Inc. to get a quote for an onsite relocation. While meeting with MHM to discuss the feasibility of moving the structure, it was expressed that this would be a very difficult and costly building to move. Some parts of the existing basement would be left in place and cannot be moved. The Greece Historic Preservation Commission expressed that the minimum goal sought is to preserve the structure on site. There is no expectation to convert the relocated building to public use. Whether it can then be turned into a viable commercial enterprise is an economic decision and one the developer will not discard if the right tenant is willing and able.

#### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### 3.2 VISUAL CHARACTER

#### 3.2a Existing Conditions

The site is located on the north side of West Ridge Road; consistent with other properties along the north side of Ridge Road, it is located below the grade level of the ridge of the road. Currently, the site is primarily undeveloped open space with the exception of several vacant residential buildings on the south portion of the site along West Ridge Road. The site is comprised of an ecological community that includes new-growth forested uplands and brush/meadow. Approximately seventy five percent (75%) of the site is new-growth tree and shrub cover. No significant mature trees have been identified. A photo along the West Ridge Road frontage and a typical view into the interior of the site is shown as Figure 4. A small isolated wetland is present along the eastern boundary. Approximately thirteen percent (13%) of the site is a reclaimed construction debris landfill which was cleaned by the prior property owner and capped/closed out with the New York State Department of Environmental Conservation in concurrence.

The proposed development includes nearly 2,328 feet of frontage along the south property line adjacent to West Ridge Road. The site perimeter consists of approximately 1,780 lineal feet that faces commercial development to the southwest and southeast, approximately 2,565 feet that faces undeveloped lands zoned as Residential to the north and northwest, and approximately 1,670 feet facing existing residential developments to the northeast. Represented another way, about 80% of property perimeter faces either existing commercial use or vacant residential property. The remaining 20% of property perimeter is already a 150 foot wide greenspace buffer to existing residential development.

The topography of the site is gently sloped from the south down to the north of the site. The surrounding parcels have similar topographic form. For the most part, views in the south are prevalent, both on-site and off-site.

Along West Ridge Road, there is a clearing where the former construction debris landfill was located. This clearing permits views into the site; however the site slopes downward to the north and becomes vegetated which limits direct visibility into the site. In addition, adjacent to the former construction debris landfill, there are several abandoned houses which are visible from West Ridge Road.

Views from the existing residential development to the east are limited due to the dense undergrowth within the site. The dominant tree and shrub species on the site are primarily deciduous, and restricts views from the west, north, and east. Illustrations of existing views are shown in the line of site drawings, see Figure 5.
There are no views of this site from any public parks or designated park lands.

# 3.2b No Build Conditions

A "No Build" scenario would likely result in a slow transformation of the visual character of the site. The existing wooded portion of the site would likely mature and natural selection of predominant species would continue. The former construction debris landfill would eventually become vegetated and the existing vacant buildings on the site would become dilapidated over time, likely resulting in demolition.

It is unlikely that the property will develop for residential use again.

# 3.2c Potential Impacts

The visual character of the proposed development was given thoughtful consideration in the conceptual site plan. The conceptual site design illustrates the location of approximately 18-23 stores, which includes a couple large tenant spaces and a mixture of smaller tenant spaces. Onsite customer parking at the rate of approximately five spaces per 1,000 SF of total gross floor area is proposed for the development. The proposed buildings and pavement will reduce the vegetative cover from about ninety-five (95%) to about thirty-five percent (35%). The proposed site plan will strategically preserve portions of the existing wooded site as a natural buffer to the existing residentially zoned property to the west, north and east. There is already a substantial wooded/brush area beyond the site boundaries.

Building facades will be designed to have relief but share common themes within their particular setting. Where feasible, the longest dimensions of building groups may be set perpendicular to W. Ridge Road so as to reduce the building mass. A building side facing W. Ridge Road will be treated with similar architectural materials as the building's front entrance. Bulk requirements of the code for height will be satisfied.

The proposed development may have an impact on the existing visual character along the southern boundary along West Ridge Road. The site plan proposes to remove the abandon houses located along West Ridge Road and replace them with tenant spaces and the associated parking. The site plan proposes that the majority of new buildings will maintain a further significant set back from the road. This will create a greater separation of buildings and traffic than exists today. The site plan also utilizes the natural slope of the site and locates the storm water basins to the north, the lowest elevation of the site.

The design aesthetic of the proposed development will be consistent with the existing Kohls development adjacent and to the east of the site. The architectural style and materials used will be of similar quality as the Kohl's and newly, under construction, office building at 4110/4050 W. Ridge Road. The landscape treatments will be a continuation of the quality landscape improvements at Kohls. The use of high quality materials and consistency of the proposed development will ease the visual impact to the surrounding community.

The lighting design will follow Dark-Sky Associations design standards which advocate designed lighting levels based on type and intensity of activity. The seven illumination categories, as categorized by the Illuminating Engineering Society of North America (IESNA) will be used to determine the appropriate illumination levels throughout the site (See table 3.1). In addition, the photometry design will limit the light trespass on adjacent properties in accordance with the Town of Greece Code. The primary light fixtures used in the design will be shoe box style, which face downward. However, at location with close proximity to neighboring residential development, directional optics will be employed to limit light trespass into adjacent properties. For security purposes, the lighting design will include building mounted lights which face downward and illuminate the perimeter of the buildings when natural lighting levels are low. The style of the luminaires will be uniform throughout the development.

#### **Determination of Illuminance Categories**

Orientation and Simple Visual tasks - Visual performance is largely unimportant. These tasks are found in public spaces where reading and visual inspection are only occasionally performed. Higher levels are recommended for tasks where visual performance is occasionally important.

А.	Public spaces	30 lx (3 fc)
Β.	Simple orientation for short visits	50 lx (5 fc)
C.	Working spaces where simple visual tasks are performed	100 lx (10 fc)

Common visual tasks - Visual performance is important. These tasks are found in commercial, industrial and residential applications. Recommended illuminance levels differ because of the

characteristics of the visual task being illuminated. Higher levels are recommended for visual tasks with critical elements of low contrast or small size.

D. Performance of visual tasks of high contrast and large size.	300 lx (30 fc)
E. Performance of visual tasks of high contrast and small size. or visual tasks of low contrast and large size.	500 lx (50 fc)
F. Performance of visual tasks of low contrast and small size .	1000 lx (100 fc)

Special visual tasks - Visual performance is of critical importance. These tasks are very specialized, including those with very small or very low contrast critical elements. Recommended illuminance levels should be achieved with supplementary task lighting. Higher recommended levels are often achieved by moving the light source closer to the task.

G Performance of visual tasks near threshold	3000 to 10.000 lx
	(300 to 1000 lc)
	· · · · · · · · · · · · · · · · · · ·

Taken from The IESNA Lighting Handbook Reference and Application, Ninth Edition

In conjunction with appropriate lighting levels throughout the site design, site furnishings and amenities will be provided throughout the site. The use of quality materials throughout the

design will be representative of the experience offered to pedestrians using the commercial development.

Universal accessibility and pedestrian focused design will welcome consumers and encourage pedestrians to walk between stores. Pedestrian scale amenities, such as landscaping, spontaneous seating, textured walkways, and focal elements will be provided throughout the development (See Figure 6 for conceptual ideas used in other locations). Providing pedestrian furnishings will create a welcoming environment and positively contribute to the community's image.

# 3.2d Mitigation

The proposed site layout employs several strategies to mitigate potential negative visual impacts to the site. The natural geological formation and topography of the site lends the site to decrease perceived size and scale naturally due to the lower elevation and sloping topography of the site. This is presently evident in existing developments along West Ridge Road, where the developments that are above the grade of West Ridge Road, to the south, have a greater presence than the proposed developments to the north. In addition, the overall distribution of buildings, most set further away from, with long axis perpendicular to, West Ridge Road, will reduce the perceived scale of the development.

Preservation of the wooded area to the east provides a natural screen for the adjacent residential use at the eastern perimeter of the site. Interior landscaped open space provides spatial definition and separation between buildings within the project area. Nearly forty percent (~40%) of the overall site area will be left as open space. Wetland disturbance has been minimized, helping to conserve the existing visual quality and spatial structure of the site that faces the residential development. (Note: The wetland area may be determined as isolated and not subject to permit should disturbance occur.)

The organization of the proposed buildings will preserve green space and allows for landscape treatments that will break up the asphalt surface. The landscape interventions will consist of large linear landscaped islands to bind the parking lots and more naturalized plantings in the open spaces between the buildings. These larger planting islands will provide larger planting areas and suggest a more comfortable and inviting shopping experience.

The proposed buildings will be oriented to provide visual focal points along the proposed drive aisle within the site. New storm water management areas will be designed to blend visually with the existing and undeveloped landscape adjacent to the north and west of the site.

The proposed development will evaluate the architectural and pedestrian scale elements for the contribution they can make to visual quality along the West Ridge Road commercial corridor. The proposed buildings will be designed at appropriate height, scale, style and using materials that are consistent with adjacent developments. These design considerations will allow the surrounding community and visitors to enjoy the commercial addition to the Town.

### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

### 3.3 VEGETATION AND WILDLIFE

#### 3.3.a Existing Conditions

A survey of the ecological communities was conducted by the Terrestrial Environmental Specialists, inc. (TES) in 2004 and documented in the report entitled, *Wetland Delineation Report* (Appendix A).

The report recognized that the developed portion of the site consists of several abandon residential units, located in the southwest area of the site, is primarily mowed lawn and ornamental landscape materials. The undeveloped portion of the site consists of open field, deciduous forest upland, and one small isolated wetland.

The open field area is approximately thirteen percent (13%) percent of the site and has young growth comprised primarily of grey dogwood and blackberry shrubs. The herbaceous material found in this area included narrow-leafed goldenrod, rough goldenrod, wild carrot, and black swallowwort.

Approximately seventy five percent (75%) of the site is covered by forested uplands. The young deciduous upland forest is dominated by green ash, American elm, white ash, black cherry, and sweet cherry. The dominant shrubs found in the forest were gray dogwood, buckthorn, and hawthorn. The shrub layer of the forest was noted as very dense.

The wetland area, approximately 0.38 Acres of the site, contains silver maple, American elm, and green ash. Canary grass and sedge were found in the herbaceous layer in the wetland.

The New York State Department of Environmental Conservation (NYSDEC) was contacted in 2003 by TES to obtain any information on records of known occurrences of rare or statelisted animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of the project. The NYNHP listed sweet-scented Indian plantain as an endangered species common in the surrounding area. The on site investigation performed by TES found no signs of the species. The NYSDEC was contacted a second time in 2007 to obtain the most current information available. The NYSDEC listed Richardson's Sedge as a rare species. A site survey conducted by TES in 2007 found no presence of the RIchardson's sedge or its prescribed habitat on the site.

The forested areas of the site include several habitat elements that make them attractive to various wildlife species. As noted in the TES report, in a letter from the NYS Department of the Interior, Fish and Wildlife Service,

"except for the transient individuals, no Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project area."

None of the species found within the project limits were identified by TES as federally or state-listed as endangered, threatened, or rare. The ecological communities found on the site are described in detail (including wetland and soils maps) in the (TES) report in Appendix A.

### 3.3.b No Build Conditions

A 'no build' condition would likely result in the succession of the forest and open field. The habitats that exist would most likely continue to function as habitats for the wildlife that lives on the site. Absent natural predators, certain populations will ebb and flow based on resource availability. Some deer and rodent populations may infiltrate neighboring residential properties to search for food and/or shelter.

# **3.3.c Potential Impacts**

The potential impacts of the proposed development may include disturbance to the existing forest. The Town of Greece Tree Council has been contacted and requested that they be consulted throughout the design process in order to limit and mitigate disturbance on site. Disturbance to vegetative buffers along the site boundary will be limited where possible in efforts to retain the visual buffer between the proposed development and the residential development to the east. In addition, buffers will be developed in large blocks so as to retain some natural habitat for native wildlife.

The proposed development may reduce the wildlife communities inhabiting the upland forests on the site. The wildlife will likely relocate to the upland and wetland forests that are being preserved along the western and eastern boundary of the site or they may migrate north or west to the adjacent, undeveloped forested lots.

# 3.3.d Mitigation

In attempts to mitigate the potential impacts of the proposed development, the site plan has been designed to preserve the forested portion of the site along the eastern boundary of the site. This will maintain a visual buffer for the residential units and preserve some wildlife habitat that exists in the forest. In addition, the proposed site design incorporates landscape planning that will mitigate some of the vegetative loss from the proposed development. As field verified, the non existence of any federally or state-listed species, will ensure that the proposed development will not impact any endangered, threatened, or rare wildlife species.

### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### 3.4 WETLANDS

### 3.4.a Existing Conditions

The project site was surveyed by Terrestrial Environmental Specialists (TES) in May 2004 and identified Wetland A, a .38 acre deciduous forest wetland. The wetland is not known to be under federal jurisdiction and was identified as isolated by TES. Although TES identified the wetland as isolated, it was stated that federal jurisdictional determination is required by the Army Corp of Engineers (ACOE). On August 15, 2007, a jurisdictional request was submitted to the ACOE and is included as correspondence in Appendix F.

Distribution of buildings and infrastructure in the concept plan was arranged to minimize disturbance to the existing wetland. Nearly all of the delineated wetland will remain in the green space preserved with the development of the Kohl's project. Although expected to be determined as isolated, any disturbance could be covered by a Nationwide Permit.

There were no streams or other bodies of water located on the site during the survey conducted by TES. In addition, according to the most current FEMA Issued Flood Maps, the project location is not located in a flood plain. The Larkin Creek Flood Plain is further east. The site drains entirely into Smith Creek.

The delineated wetland community found on the site is described in detail (including mapped wetland locations) in Appendix A.

### 3.4.b No Build Conditions

A 'no build' condition would likely result in little or no changes in the nature of the wetland, mainly because there will be minimal, if any disturbance to the wetland directly.

### 3.4.c Potential Impacts

The proposed development will generally maintain the hydrology of the site upstream of the wetland. Some reduction in stormwater flows may result in minimal impacts. Some portions of the wetland may be eliminated. Mitigation/replacement will be provided if required by ACOE.

### 3.4.d Mitigation

The proposed site design mitigates any potential impacts by minimizing development in the location of the wetland and preserving the ecological community surrounding the wetland area that would remain.

### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### 3.5 TOPOGRAPHY AND SOILS

### 3.5.a Existing Conditions

A full presentation of soil types and characteristics are illustrated in Appendix B. According to the Monroe County Soil Survey, there are three mapped soil units identified on the subject property. Lairdsville Silt Loam, or LaB, the dominant soil type, is located on approximately 48 percent of the property. This soil type is generally gently sloping from 2 to 6 percent. The depth to the water table is generally greater than 26 inches below existing surface. According to the Monroe County Soils Survey, bedrock could be encountered 1 ½ to 3 ½ feet below existing grade. During the construction of the adjacent project, The Shops at Hampton Ridge, and from test pit data on the southern end of the site, bedrock was encountered at elevations greater than 8 feet below grade. The upper layer was a weathered condition which allowed removal with conventional excavation equipment. This soil type has a drainage classification of moderately well drained.

The erodibility factor, or K factor, is a value which indicates potential for erosion. The K value ranges from 0.02 to 0.69. The higher the K value, the more susceptible the soil is to sheet and rill by erosion. The K value for Lairdsville Silt Loam is 0.37, about in the middle range.

The structural stability and suitability for development (roads, parking lots, building foundations, etc.) for this soil type is classified as somewhat limited. The reasons for this rating include low strength, shrink-swell, frost action and the depth to the saturated zone.

Lockport Silt Loam, or Lp, covers approximately 46 percent of the property. This soil is in large, flat, or slightly depressed areas. Slopes generally range between 0 to 2 percent. Commonly included with this soil in mapping are spots of the better drained Lairdvilles soils on slight rises or knolls. The depth to the water table is generally greater than 12 inches below existing surface. According to the Monroe County Soils Survey, bedrock should be encountered 1 ½ to 3 ½ feet below existing grade. However, as noted above, bedrock conditions were found to be deeper in the field. This soil type has a drainage classification of somewhat poorly drained.

The erodibility factor, or K factor, is a value which indicates a soils potential for erosion. The K value ranges from 0.02 to 0.69. The higher the K value, the more susceptible the soil is to sheet and rill by erosion. The K value for Lockport Silt Loam is 0.37 about in the middle range.

The structural stability and suitability for development (roads, parking lots, building foundations, etc.) for this soil type is classified as somewhat limited. The reasons for this rating include low strength, shrink-swell, frost action and the depth to the saturated zone.

Elnora Loamy fine sands, or EIA, cover approximately 6 percent of the property. Slopes generally range between 0 to 6 percent. Permeability is rapid throughout the soils. The depth to the water table is generally greater than 21 inches below existing surface. According to the Monroe County Soils Survey, bedrock should be encountered 1  $\frac{1}{2}$  to 3  $\frac{1}{2}$  feet below existing grade. However, as noted above, bedrock conditions were found to be deeper in the field. This soil type has a drainage classification of moderately well drained.

The erodibility factor, or K factor, is a value which indicates a soils potential for erosion. The K value ranges from 0.02 to 0.69. The higher the K value, the more susceptible the soil is to sheet and rill by erosion. The K value for Elnora Loamy Fine Sand is 0.20.

The structural stability and suitability for development (roads, parking lots, building foundations, etc.) for this soil type is classified as somewhat limited. The reasons for this rating include frost action and the depth to the saturated zone.

# 3.5.b No Build Conditions

Without the proposed development, there will be no changes to the existing soils or the topographic conditions.

# 3.5.c Potential Impacts

Potential impacts from this development include an increase in storm water run-off. Erosion control will also need to be addressed during construction with Best Management Practices. A SPDES permit will be required from the New York State Department of Environmental Conservation. The existing topography and drainage patterns will be altered. There is a possibility of either importing or exporting material from the site based upon final design although the goal is to limit imported fill to about 50,000 cy.

Since building construction is slab on grade, deep excavations are limited to foundations and utilities. Where isolated occurrences of bedrock are encountered, heavy construction equipment will be used to remove as much of the fractured/weathered rock as feasible. If additional rock removal is required, blasting may be necessary. All NFPA and OSHA requirements will be followed. Blasting plans will be prepared and submitted to the project engineer. Pre-blast surveys will be conducted. Charges will be kept to a minimum. Blasting mats will be used. Records will be kept and monitoring of blasting activity will be conducted.

# 3.5.d Mitigation

The proposed grading will retain the existing drainage patterns leaving the site. Storm water basins will be designed and constructed to limit proposed storm water run-off rates to below existing conditions. The Town requirement to discharge less than 70% of the existing conditions run-off will be incorporated in the design. Erosion and sediment control will conform to practices recommended in the New York State Standards and Specifications for Sediment and Erosion Control manual. Construction of the storm water management basin

will include excavation of soil. This material, to the extent possible, will be redeposited on the site in locations that will not impact the structural integrity of the planned building areas. It is the intent of the design to "balance" the earthwork but imported earth may be needed. Import of material will require a construction entrance into the site off W. Ridge Road. Dust control, typical of best management practices, will be used. Applicant will need to file for a GP-02-01 General Permit for Construction disturbance greater than 1 acre. Weekly inspections will be required under the permit and made available to the Town DPW staff. Assuming some rock removal is required, implementation procedures to be followed will be outlined in the construction specifications.

### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### 3.6 STORM WATER MANAGEMENT

### 3.6.a \_Existing Conditions

Appendix C contains the full text of the Storm water Management Report for the project. The project site is located in the southern end of the Buck Pond Watershed. The overall watershed is broken up into smaller sections and this site is considered a part of the Smith Creek tributary area. The Town has two documented storm water resources: Buck Pond Watershed Detailed Drainage Study, July 1978 and Flood Plain Information Flood Hazard Report, Town of Greece, July 1975. These documents outline watersheds and tributaries and illustrate the overall storm water conveyance mechanisms in this area of the Town. Both resources were consulted for the analysis conducted for the project site.

In an effort to determine any possible effect from Smith Creek, which lies west of the site, a Hydraulic analysis of the creek was conducted. The floodway characteristics of the creek were based on the aforementioned Buck Pond Watershed Detailed Drainage Study by Erdman, Anthony, Associates, July 1978. Based on this study the 100 year discharge for Smith Creek at Ridge Road, the closest analysis point for Smith Creek to the site, was assumed to be 169 cfs. Cross sectional characteristics of the channel were examined during several field visits documented in the Appendix E of the Storm Water Management Report. The assumed flow from the previous drainage study was input into FlowMaster a Haested Methods computer program. The results showed a maximum impact of the Smith Creek 100 year flood plain crossing the northwest corner of the site by 100 feet. No site improvements are proposed for this area of the site; therefore the site will have no impact on Smith Creek.

According to FEMA Flood Maps, the site is located in a portion of the Larkin Creek Flood Plain. However, in response to a Letter of Map Revision (LOMR) request on October 24<sup>th</sup>, 1996, the flood plain was studied and revised. Effective August 13<sup>th</sup>, 1997 FEMA made a final determination as to the modified Base Flood Elevation's for the town of Greece, NY. (The letter of request for the LOMR and a letter regarding the revised Flood Insurance Rate Map (FIRM) map from the Federal Emergency Management Agency received on February 17<sup>TH</sup>, 1998 is included in Appendix C of the attached Storm Water Management Report). The re-mapped flood plain shows that no part of the site is located within a flood plain.

The site is relatively flat and can be likened to a tilted table top. Drainage flows from south to north. There are no adjacent streams, storm sewers, or drainage ditches. Storm water tends to sheet flow northward until being intercepted in shallow linear depressions that create somewhat concentrated discharge points at the north end of the property. As runoff leaves the site, the topography indicates that some shallow ponding occurs in various depressions before overflowing and moving on to discharge into Smith Creek. The Images Way

Subdivision project made allowances to convey existing conditions run-off from the project site onto and/or through their development, ultimately discharging to Smith Creek.

The linear depressions were used as analysis points for the hydrologic calculations. The Soil Conservation Service Technical Release 20 methodology was used to compute existing runoff. Although the site comprises about 67 acres, the downstream analysis area contributing to the analysis point is about 76 acres. DR-1, the Existing Conditions Drainage Map of the Storm Water Management Report, illustrates the existing watershed. The existing discharges computed for various storm recurrence intervals are shown in the following table as follows:

3.6-1 Existing Conditions		
Year Storm	ear Storm Flow Rate	
	Off-Site (cfs)	
1	37.60	
2	49.80	
10	99.50	
25	188.82	
50	148.61	
100	163.75	

No underground water sources such as springs or aquifers were reported on this site.

# 3.6.b No Build Conditions

Drainage on site as described under existing conditions would not change. Storm water will still flow out the north end of the site and into Smith Creek via the Images West Subdivision.

# 3.6.c Potential Impacts

This project will impact existing drainage because a large amount of impervious area will be added to the site. The increase in impervious area will cause an increase in storm water runoff after rain events. This runoff water also may contain pollutants that are often found on impervious surfaces such as rooftops and parking lots.

It is proposed that storm water is captured and conveyed by means of a closed storm sewer system of pipes and catch basins. Storm water will then be directed to one of two proposed detention ponds at the north of the site. Final design may combine the ponds together depending on considerations for earthwork and outfalls. The ponds will be landscaped and designed for safety and will meet the water quality and quantity requirements of the New York State Department of Environmental Conservation SPDES General Permit for Storm water Discharges, GP-02-01.

The Town of Greece has recently adopted a requirement that proposed discharges be equal to or less than 70% of existing discharge; a 30% reduction. In addition, the developer has agreed to bring the existing storm water system at 4110 W. Ridge Road into compliance with

the 30% reduction by overdetaining the equivalent difference in the proposed storm water ponds at 4320 W. Ridge Road. It is the intent of the proposed design to maintain a similar hydrologic condition north of the site as exists today.

DR-2, the Proposed Conditions Drainage Map of the Storm Water Management Report illustrates the proposed watershed for the hydrologic computations. Based on the analysis criteria required by the Town, the resulting discharges from the site are computed and shown in the table below as follows:

	3.6-2 Propos	sed Conditions	Compared to Exis	ting Conditions	
Designed	Existing	Reduction*	Maximum	Proposed	Total
Storm	Ū		Disch. Allowed	•	Reduction
Event	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)
1 Year	31.15	9.35	21.81	2.16	28.99
2- Year	43.13	12.94	30.19	2.44	40.69
10- Year	93.61	33.73	59.88	21.52	72.09
25- Year	118.82	35.65	83.17	24.43	94.39
50- Year	145.09	44.58	101.56	27.02	118.07
100-Year	161.12	72.95	88.17	28.46	132.66

\* Reduction taken to accommodate the neighboring Kohl's Site to the east based on storm runoff data from that site.

During final design, an alternative approach to storm water might be considered. According to the design maps filed with the Town, the Images Way Subdivision shows a 30" pipe discharging "pass through" drainage from the proposed project site into Smith Creek. If the storm sewers in Images Way are constructed per the maps, a hard piped connection to this discharge point may be evaluated.

# 3.6.d <u>Mitigation</u>

The two proposed detention ponds will mitigate the amount of storm water runoff that leaves the site. The ponds have the capacity to manage two successive 100 year storm events. Using the Emergency spillways in conjunction with the outlet structures in each pond, the discharge rate from two successive 100 year storms is lower than existing 100 year runoff rates. All discharge from the site is directed towards the north property line. The property to the north is reported to be wetlands which would likely remain undeveloped. Overflows would route through the wetlands and into Smith Creek. By following the storm water design guidelines published by New York State DEC, the design of the ponds will mitigate the adverse effects of water quality issues.

### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### **3.7 INFRASTRUCTURE AND UTILITIES**

### 3.7.a Existing Conditions

Sanitary Service: There is an existing 15" sanitary sewer, owned by the Town of Greece, approximately 2,000 feet north of the proposed development. The existing sanitary sewer ends at the west side of the intersection of Images Way and Daffodil Trail. The sanitary main continues north, eventually terminating at the Northwest Quadrant Treatment facility.

Water Service: There is an existing 12" ductile iron water main located along the south side of West Ridge Road (US Route 104), owned by the Monroe County Water Authority. This system is pressurized by a pump/tank at Lee Road. Available pressures depend on local demand and tank levels. According to MCWA, a reasonable design condition for water supply is roughly 1583 gpm at 95 psi in the vicinity of the project site.

Electric Service: Rochester Gas and Electric (RG&E) owns and maintains overhead electric lines that run along the north and south sides West Ridge Road (US Route 104). In preliminary discussions with RG&E, electrical service is available for this project.

Telephone: Frontier Communication owns and maintains overhead telephone lines that run along the north and south sides West Ridge Road (US Route 104). In preliminary discussions with the Frontier Communications, telephone service is available for this project.

Gas Service: Rochester Gas and Electric (RG&E) owns and maintains an existing 6" high pressure gas service which runs along the south side West Ridge Road (US Route 104) and a 2" high pressure gas main which runs along the north side of West Ridge Road, which terminates approximates 320 feet east of the proposed property. In preliminary discussions with RG&E, gas service is available for this project.

### **3.7.b** No Build Conditions

Without the proposed development, there will be no changes to the existing utilities infrastructure or usage.

### 3.7.c Potential Impacts

Potential impacts from this development include an increase in usage for electric, telephone and gas. Utility companies indicate the service will be available to this development.

There will be an increase in water consumption and sanitary discharge. Appendix F includes documented demand calculations for water and sewer presented to MCWA and Monroe County Pure Waters. The request to Pure Waters included the flow to be generated from the proposed Benderson/Farash development on the south side of W. Ridge Road opposite this project.

MCWA asked that the hydraulic analysis be modified slightly and resubmitted for review. The modified analysis is included in Appendix F. The analysis demonstrates that sufficient water supply is available to the development at sufficient pressures. Isolated cases may require the addition of fire pumps to boost sprinkler system pressure depending on occupant requirements and NFPA sprinkler requirements at the time of final design.

Monroe County Pure Waters has expressed that the Town of Greece acknowledge an effort to reduce Inflow and Infiltration (I&I) of the existing sanitary sewers by an amount equivalent to the proposed flows of both developments. The Town and Monroe County Pure Waters are currently discussing the inflow & infiltration concerns and how to address this issue. The Town of Greece DPW has otherwise stated that as long as a 15" sewer is constructed, this will provide adequate capacity for both developments and other undeveloped lands that it would service.

# 3.7.d Mitigation

To facilitate this project and future development in this area, a 15" sanitary sewer will be extended south from Images Way/Daffodil Trail, through the project and terminated at the West Ridge Road right of way. The construction of this extension will follow the Town of Greece requirements and be dedicated to the Town. In discussions with the Town of Greece, there is capacity within the existing 15" sanitary sewer to the north for this development although Pure Waters as asked for I&I reduction.

A water main extension will be required to service this project. A 12" water service will need to be bored under West Ridge Road. A backflow preventor will be placed at the property. The developer is responsible for the extension of the water service within the proposed development. Fire pumps may be added on a case by case basis. This service is assumed to be private, but could be dedicated to the Monroe County Water Authority if any of the proposed roadway networks becomes dedicated. All water main extensions are to meet all requirements of the Monroe County Department of Health, Monroe County Water Authority and the Town of Greece.

Typically RG&E will upgrade the distribution system to provide adequate electrical service to tenants of the development. The developer is responsible to provide on-site infrastructure through underground conduits.

Frontier Communications will provide service to the property line. The developer is responsible to extend the service internally within the property to the tenants.

RG&E typically will extend gas mains to all new customers. However, RG&E will not typically extend the infrastructure through a development with no specific end user. If a developer would like to extend the service in advance of a user, a shared construction cost arrangement could be negotiated.

Frontier Communications will provide service to the property line. The developer is responsible to extend the service internally within the property to the tenants.

### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### **3.8** TRAFFIC AND TRANSPORTATION

The full body of the traffic impact study is contained within Appendix D of the DGEIS. References to figures, tables and appendices in the following text refer to the figures, tables and appendices in the traffic impact study.

#### 3.8.a Existing Conditions

NYS Route 104 (West Ridge Road)

NYS Route 104 is classified as an Urban Principal Arterial. The roadway has two 11 foot (ft) wide travel lanes in each direction and a 12 ft center two-way left-turn lane (TWLTL) from the eastern study limits to approximately 1/2 mile (mi) east of Manitou Road. At this point, NYS Route 104 transitions to a four-lane roadway (11 ft lanes) with a 4 ft striped median. Paved shoulder widths range from 0 ft to 3 ft throughout this section. NYS Route 104 has a posted speed limit of 40 mph between Elmgrove Road and Manitou Road. Land use in the area is primarily commercial and residential.

Traffic counts by NYSDOT indicate that NYS Route 104 carries an estimated Average Annual Daily Traffic (AADT) of 22,400 vehicles per day (vpd). Much of this volume consists of commuter travel between the City of Rochester and its western suburbs.

The West Ridge Road Improvement Project (PIN 4045.51) included reconstruction of NYS Route 104 from east of the study area to Larkin Creek. The reconstruction widened NYS Route 104 to a 7-lane section with three 12 ft through lanes in each direction, a 4 ft curb offset, and a 16 ft median. No median barrier was installed in the study area. Additional improvements (lane additions) were made at the North Greece Road and Elmgrove Road intersection. No improvements other than routine maintenance are planned for the section of NYS Route 104 west of Larkin Creek.

### TRAFFIC VOLUMES

Manual turning movement counts were performed at 3 study area intersections in March of 2002 for the Shops at Hampton Ridge (SHR) project. This count data is used as a base for Hampton Ridge Center Traffic Impact Study.

- 1. NYS Route 104 (West Ridge Road) and Manitou Road (NYS Route 261)
- 2. NYS Route 104, Elmgrove Road (NYS Route 386), and North Greece Road
- 3. NYS Route 104 and the Elmridge Plaza Entrance

Weekday evening counts were taken on Friday, March 15, 2002 from 3:30 PM to 6:30 PM. The weekday evening peak hour was determined to occur from 4:30 PM to 5:30 PM.

Saturday mid-day peak period counts were performed on March 16, 2002 between 11:00 AM and 3:00 PM. The mid-day peak period occurred from 11:30 AM to 12:30 PM.

An annually compounded growth rate of 1.5% per year was applied to the 2002 turning movements to estimate existing traffic volumes in 2004. This rate is based upon historic growth trends and forecasts for the area. This growth rate is also referenced in the NYSDOT <u>Design Report and Environmental Assessment for Ridge Road, Part 1</u>, (Rochester to West Greece, PIN 4045.51). The existing 2004 weekday evening and Saturday mid-day peak hour traffic volumes are shown in Figure 5.

### TRAFFIC OPERATIONS ANALYSIS

### General Discussion

A level of service analysis was conducted for the existing, background and build conditions based on traffic volumes, traffic peaking characteristics, and intersection geometry. The analysis is necessary to obtain a measure of how well the roadway network accommodates traffic. Level of service (LOS) is a qualitative measure that describes motorist satisfaction with various factors influencing the degree of traffic congestion. These factors include travel time, speed, maneuverability, and delay.

The level of service analysis methodology for analyzing signalized and unsignalized intersections is documented in the <u>Highway Capacity Manual</u> (HCM) (Transportation Research Board, Washington D.C., 2000). Levels of service range from A to F. LOS A describes operations with little or no delay while LOS F describes highly congested conditions with substantial delays. LOS D or better is generally considered acceptable for peak hours of traffic under urban peak hour conditions. A complete description of levels of service may be found in Appendix A.

Signalized intersections were analyzed using Synchro (Version 5) software. Synchro was also utilized to evaluate coordination along the NYS Route 104 corridor. A base model covering the study area signal network was obtained from the MCDOT. This model was refined with signal timing data provided by the NYSDOT Region 4 Traffic and Safety Group. Field signal timings were also taken at the signalized intersections to verify the signal timing information provided by NYSDOT. Detailed LOS calculations are included in Appendix B.

### Study Area Conditions

As shown in Table 5, most intersection approaches are currently operating with acceptable levels of service. The southbound Manitou Road shared through and left turn lane at West

Ridge Road currently operates at LOS F during the weekday evening peak hour. According to the NYSDOT, the Department has considered what it would take to improve operations at this intersection. Limited right-of-way on Manitou Road, the proximity of a neighboring cemetery, and steep grades on the north side of the intersection have been constraints to implementing any proposed changes.

Two lane groups at the intersection of NYS Route 104, Elmgrove Road, and North Greece Road operate at LOS E and F during the evening peak hour based upon the Synchro analysis. The lane groups are the northbound through lane and the southbound shared through and right-turn lane, respectively.

# 3.8.b No Build Conditions

# TRAFFIC VOLUMES

Onto the existing traffic volumes, the annually compounded growth rate of 1.5% per year was applied to estimate background traffic volumes. The projected study area 2006 background traffic volumes are shown in Figure 6. Expected traffic generated by the following approved developments was also included in the 2006 background traffic: Bramhall Office Park, Creek House Commons, Fairfield Place and the Shops at Hampton Ridge (SHR). Estimated traffic to be generated by each development was obtained using their respective traffic impact studies.

Conversations with the Town of Greece indicate that there are two currently approved developments due for completion in the area by 2006. They are the Bramhall Office Park to be located off of Bramhall Road and Creek House Commons to be located on Creek House Drive. In addition, a residential development is slated for construction in the Town of Parma. Fairfield Place is a 550+/- mixed residential development (single family homes, apartments and townhouses) that will be built about 700 ft north of West Ridge Road. It will have two access drives to Manitou Road. The entire development may not be complete by 2006, but in an effort to be conservative, this study assumes the development will be completely finished at this time.

Also included in the 2006 background traffic estimate for the Hampton Ridge Center are peak hour trips generated by the SHR found immediately to the east. The proposed SHR development includes a 108,248 square foot Kohl's (allowing for a 20,000 square foot expansion), 64,700 square feet of retail space, a 10,800 square foot office building, a 2,200 square foot bank and a 2,800 square foot fast food restaurant with drive through window. A list of proposed land uses within the SHR and size of each are shown in Table 1. The SHR will have one driveway accessing NYS Route 104 for all land uses except the office building, which will have one access driveway to Creek House Drive.

Based upon the ITE <u>Trip Generation</u> the proposed SHR development would generate 948 and 1788 total trip ends during the weekday evening and Saturday mid-day peak hours, respectively. A trip end is equal to one entering trip or one exiting trip.

It was assumed that during each peak period, 15% of the total trips would be shared among the various components of the development. The number of shared trips is based upon past experience and professional judgment.

The remaining trips (external trips) are comprised of pass-by and primary trips. Pass-by trips are intermediate stops on the way to another destination. These trips are diverted from the traffic passing on an adjacent street.

Based upon data for each proposed land use contained in the Trip Generation Handbook (ITE, Washington, D.C., 2001), a 34% and 26% pass-by credit was assumed for the SHR during the weekday evening and Saturday mid-day peak periods, respectively. Table 2 summarizes the total trips by land use, shared trips, pass-by trips and primary trips during the peak hours.

# TRAFFIC OPERATIONS ANALYSIS

Table 6 summarizes the level of service analysis for the study area intersections at the estimated time of completion (2006) assuming the Hampton Ridge Center is not built. Modifications to be made as part of NYSDOT's West Ridge Road Improvement Project (construction planned for 2005) are included in the analysis. Results are shown for each lane group. Overall levels of service are given for each of the signalized intersections. Corresponding values of control delay in seconds per vehicle (s/veh) are also summarized in this table.

As part of the NYSDOT West Ridge Road improvement project, NYS Route 104 will receive 3 through lanes in each direction at the Elmgrove Road (NYS Route 386) and North Greece Road intersection. Exclusive left-turn lanes would be provided in each direction as well as a westbound right turn lane. It is assumed for the purposes of this analysis that due to the number of opposing lanes and to promote safety, eastbound and westbound left turns would be restricted to protected only operation both at Elmgrove Road and Elmridge Plaza. Northbound and southbound left turns are assumed to run protected first and then permitted during each cycle of the traffic signal at the intersection of NYS Route 104, North Greece Road and Elmgrove Road. The future no-build analysis also assumes traffic signal coordination on a common 110 second cycle along NYS Route 104 from Elmridge Plaza to the Shops at Hampton Ridge (SHR) driveway.

Inclusion of pedestrian phases (and their associated minimum green times) produces significant vehicle delay and poor levels of service within the Synchro model under background conditions. This is due to the length of the pedestrian "walk" and "don't walk"

phases that would be required for individuals to cross the wide approaches proposed under the West Ridge Road Improvement project. Little to no pedestrian activity was observed at the Route 104, North Greece Road, and Elmgrove Road intersection during field visits. Therefore, it is assumed that pedestrian phases would be activated infrequently, with the needs of motorized vehicles controlling the traffic signal operation over the majority of each peak hour.

To model this "typical" condition, pedestrian phases were removed from the Synchro model at this intersection. This does not imply that pedestrian accommodations such as crosswalks, push buttons, and dedicated signal heads are unnecessary. They are indeed required to accommodate occasional pedestrians. Any delays caused by a pedestrian actuation would likely dissipate after several successive vehicle controlled cycles.

Based upon the analysis, the intersection of NYS Route 104, North Greece Road and Elmgrove Road is projected to operate at LOS C overall during both peak hours as planned under the West Ridge Road Improvement Project. Northbound, southbound and eastbound left turns are projected to operate at LOS D during the weekday evening peak hour.

As shown in Table 6, the remaining study area intersections are projected to operate with acceptable levels of service (LOS D or better) during each peak period in 2006 except the intersection of NYS Route 104 with Manitou Road. Both the northbound and southbound shared through/left lanes are projected to operate with a poor level of service (LOS E or F) during the weekday evening peak hour prior to construction of the Hampton Ridge Center. One additional lane would be necessary on both the north and south approaches to achieve acceptable levels of service during the weekday evening peak at that location (see Table 7). This improvement strategy would require three approach lanes, one exclusive to each movement (left, through and right turns) on the northbound and southbound approaches. Construction of any additional lanes on Manitou Road would be subject to the right-of-way, cemetery, and grade constraints discussed in Section IV.A.1.

The applicant has made repeated requests to the Farash/Benderson development team preparing designs for a significant project on the south side of West Ridge Road. As of the writing of this report, the applicant has agreed to work with Farash/Benderson on locations of driveways within the corridor. However, further analysis of combined impacts was not available as of this writing. The applicant is still interested in working with Farash/Benderson and their development team on a traffic plan that addresses the two projects combined. This DGEIS continues to focus on the impacts and mitigation for 4320 W. Ridge Road until more information is available.

# 3.8.c Potential Impacts

TRIP GENERATION

The trip generation estimate for the proposed Hampton Ridge Center is based on the 7<sup>th</sup> edition <u>Trip Generation</u> (Institute of Transportation Engineers (ITE), Washington, D.C., 2003).

The site would include 390,000 square feet of multi-use building space. While the exact tenant of each building and outparcel is unknown at this time, likely uses were assumed. The gross floor space and assumed use of each parcel are summarized in Table 3.

The proposed development is projected to generate approximately 1863 and 3146 total trip ends during the weekday evening and Saturday mid-day peak hours, respectively. The trip generation estimate for each land use is summarized in Table 4.

It was assumed that during each peak period, 15% of the total trips would be shared among the various components of the development. The number of shared trips is based upon past experience and professional judgment. The number of trips assumed to be shared by the SHR and the Hampton Ridge Center via the cross-access roadway shown on the concept site plan are 90 and 179 (10% of the total trips generated by the SHR minus the SHR office building) during the weekday evening and Saturday mid-day peak hours, respectively.

### TRIP DISTRIBUTION AND ASSIGNMENT

The projected trips generated by the proposed development were assigned to the transportation system based on existing traffic patterns, locations of population centers, the local roadway network, proposed access points, and professional judgment. In addition, the trip distribution is influenced by the existing pattern found at the Elmridge Plaza driveway to NYS Route 104.

### BUILD TRAFFIC VOLUMES

The full build traffic volumes are the sum of the 2006 background traffic volumes and the estimated new site-generated trips shown in Figures 9 and 10. The Hampton Ridge Center is expected to be complete in 2006. Projected turning movement volumes during the weekday evening and Saturday mid-day peak hours upon completion of the project are shown in Figure 11.

# TRAFFIC OPERATIONS ANALYSIS WITH DEVELOPMENT

Table 6 also summarizes level of service for study area intersections at the estimated time of completion (2006) assuming full build out of the proposed development. Once again, modifications to be made as part of NYSDOT's West Ridge Road Improvement (WRRI) Project are included in the analysis.

Additional traffic generated by the proposed development is <u>not</u> projected to result in a need for highway improvements at the following intersections.

NYS Route 104 and Manitou Road (See TIS Section 2) NYS Route 104 and the SHR driveway NYS Route 104 and the Elmridge Plaza Driveway

In each case, all lane groups are projected to operate with acceptable levels of service during both the weekday evening and Saturday mid-day peak periods. The future build analysis assumes coordinated traffic signals operating on a 110 second cycle length along NYS Route 104 at Manitou Road, the Hampton Ridge Center driveway, and the SHR driveway. To achieve acceptable operations, the signal at NYS Route 104, North Greece Road and Elmgrove Road is dropped from the coordination plan and allowed to operate under actuated-uncoordinated control during the weekday evening and Saturday mid-day peak hours. It is assumed the Elmridge Plaza signal would remain coordinated with those to the east on NYS Route 104.

According to the results, the intersection of NYS Route 104 and the Elmridge Plaza Driveway is projected to operate with slightly less delay under the build condition when compared to the no-build condition. The overall level of service does not change. An apparent delay reduction occurs because the intersection is no longer coordinated with traffic signals to the west within the Synchro model. In reality, the Elmridge Plaza traffic signal would remain coordinated with signals to the east along NYS Route 104 and no measurable change in the level of service should occur.

NYS Route 104, Elmgrove Road and North Greece Road

Due to the high retail peak hour turning volumes, a 125 second cycle length is recommended in conjunction with the uncoordinated signal operation. The intersection of NYS Route 104, North Greece Road and Elmgrove Road is projected to operate overall at LOS D during both peak hours given the build condition with mitigation. As under no-build conditions, this intersection was analyzed in the absence of an activated pedestrian phase. It is assumed that pedestrian "walk" and "don't walk" indications would be called infrequently. Throughout the majority of the peak hour, the signal would be allowed to respond principally to the needs of vehicular traffic.

Dual left turn lanes would be required on the northbound and southbound approaches to provide acceptable levels of service in all lane groups. The projected volume of northbound left turning vehicles drives the need for this improvement. In addition, the analysis indicates that one northbound through lane would provide adequate capacity as opposed to the two proposed under the WRRI Project.

To accommodate the need for dual northbound and southbound left turn lanes, it is proposed to re-stripe (replace) the inside northbound through lane with a second northbound left turn lane. Likewise, a second southbound left turn lane would be created by re-striping the second (inside) northbound receiving lane. Crosswalks, push buttons, and pedestrian signal heads would remain in place. Based on conceptual review of the WRRI plans, these changes can be made with pavement marking and traffic signal modifications only.

NYS Route 104 and the Hampton Ridge Center Driveway

The proposed location of Hampton Ridge Center Driveway is approximately 3,390 ft west of the NYS Route 104, Elmgrove Road, and North Greece Road intersection, approximately 1,050 ft west of the SHR Driveway and approximately 2,290 ft east of Manitou Road. This places it outside the section to be improved as part of the West Ridge Road Improvement Project, and outside the limits of the existing two way left turn lane. Widening of NYS Route 104 to include a 500 ft eastbound left turn lane at the proposed site driveway is recommended based upon the capacity analysis.

In addition, a 300 foot long free-flowing westbound right turn lane along NYS Route 104 at the proposed Hampton Ridge Center Driveway is recommended. This configuration will provide an area for deceleration and an unblocked path for the estimated 821 vehicles entering the site from the east during the Saturday mid-day peak hour. Without this feature, average queues would extend beyond the SHR driveway during the Saturday mid-day peak according to the Synchro/SimTraffic analysis. Based upon Figure 5-19 of the NYSDOT Highway Design Manual "Deceleration Distances for Passenger Cars Approaching Intersections (Braking at a Comfortable Rate)", 260 feet is required for a vehicle traveling at 43.5 mph to decelerate comfortably to 15 mph and 300 feet is required to decelerate to a stop. Therefore, the 300 foot long right turn lane will provide adequate area for deceleration of vehicles entering the Hampton Ridge Center from the east.

Three exiting lanes including two left turn lanes and one right turn lane would be required for southbound traffic leaving the Hampton Ridge Center. Two entrance lanes would be required, one for vehicles entering from the east via the signal and one for vehicles entering from the west in the free-flow right turn lane.

An unsignalized analysis of the proposed intersection indicates that traffic exiting via a left turn would experience extensive delay, queuing, and LOS F. Therefore, the following warrants as described in the New York State <u>Manual of Uniform Traffic Control Devices</u> (MUTCD) were reviewed to study the need for traffic signal control at the site driveway under 2006 full build out conditions:

Warrant 1, minimum vehicular volume Warrant 2, interruption of continuous traffic Warrant 8, combination of warrants (Warrants 1 and 2)

A traffic signal is recommended because all three warrants are met. Table 8 contains the results for each of the three warrants for the intersection of NYS Route 104 and the Hampton Ridge Center driveway under 2006 full build-out conditions. Detailed results, broken down by hour, are located in Appendix C.

As part of this study, an analysis of location of the site driveway along NYS Route 104 was performed. The basis of the analysis is the width of the green band along NYS Route 104 between Manitou Road and the SHR driveway. The green band along a roadway is dependent upon several factors including vehicular speeds, spacing of signalized intersections and signal timing. No significant improvement in the width of the green band on NYS Route 104 was realized when moving the proposed site driveway location to the west or east. See Appendix E for Synchro output containing green band results for various driveway locations.

It is projected that the proposed development can be accommodated by the surrounding transportation system given the proposed NYS Route 104 improvements by NYSDOT and some additional roadway improvements.

### SIGHT DISTANCE EVALUATION

Sight distance is an important consideration at intersections. According to <u>A Policy on</u> <u>Geometric Design of Highways and Streets 2001</u> (Green Book) (American Association of State Highway and Transportation Officials (AASHTO), Washington D.C.), "Sight distance is provided at intersections to allow drivers to perceive the presence of potentially conflicting vehicles. This should occur in sufficient space for a motorist to stop or adjust their speed, as appropriate, to avoid colliding in the intersection." It also allows drivers of stopped vehicles an opportunity to decide when it is safe to enter or cross the intersecting highway. Sufficient sight distance is provided when it is at least equal to the AASHTO requirement. Intersection sight distances that exceed the required stopping sight distances are desirable. The AASHTO Green Book was used as a reference to establish required stopping sight distances and desirable intersection sight distances for the Hampton Ridge Center's driveways to NYS Route 104.

As noted in Section IV.A.3, traffic signal warrants 1, 2 and 8 are met at the proposed intersection of NYS Route 104 and Hampton Ridge Center Driveway. The AASHTO Green Book states "At signalized intersections, the first vehicle stopped on one approach should be visible to the driver of the first vehicle stopped on each of the other approaches. Left turning vehicles should have sufficient sight distance to select gaps in oncoming traffic and complete left turns. Apart from these sight conditions, there are generally no other approach or departure sight triangles needed for signalized intersections.

Field observations of sight distance were made on NYS Route 104. The posted speed limit on NYS Route 104 is 40 miles per hour. According to the AASHTO Green Book, the required stopping sight distance is 305 ft and the desirable intersection sight distance is 500 feet for a vehicle making a left turn from the minor approach crossing 3 lanes onto the 5lane major roadway. The alignment of NYS Route 104 at the location of proposed Hampton Ridge Center Driveway is generally straight. There is one vertical crest curve adjacent to a sag curve located in the vicinity of the Hampton Ridge Center site. Based upon the field observations, the available sight distances at the proposed location of the site driveway (approximately 700 feet from the western boundary of the site) exceed the AASHTO requirements.

# ON-SITE TRAFFIC CIRCULATION

The on-site circulation consists of several layers of traffic distribution. Two points of ingress/egress are provided to W. Ridge Road. These points are internally connected by an internal roadway that runs somewhat parallel to W. Ridge Road. Such cross access has proven beneficial to reducing the impacts on public roads by containing cross trips within the development. Trips can be made between the Shops at Hampton Ridge and Hampton Ridge Center without having to access W. Ridge Road.

At each primary ingress/egress significant storage is provided to hold vehicles awaiting access to W. Ridge Road without blocking internal circulation. Incoming traffic is allowed to free flow into the site without causing any backups through the intersections at W. Ridge Road. Traffic is allowed, upon entering to split into several directions to access appropriate shopping destinations. Centralized roadways in Hampton Ridge Center also convey traffic deep into the site before dividing off into various parking fields. This gives a variety of opportunities to reach the point of destination without funnels that cause delay and safety concerns. Delivery traffic is also separated out to utilize areas other than customer parking fields for delivery activity.

# 3.8.d Mitigation

The following highway improvements are recommended to accommodate the proposed development as a result of this study.

Construct a new full access Hampton Ridge Center Driveway to NYS Route 104 with two exiting lanes for left turns, one exiting lane for right turns, and two entering lanes.

Install a new traffic signal for the proposed intersection of Hampton Ridge Center Driveway and NYS Route 104. This signal should be coordinated with the signal at the intersection of NYS Route 104 with Manitou Road and the signal expected to be installed at the intersection of NYS Route 104 and the Shops at Hampton Ridge Driveway.

Widen NYS Route 104 to include a 500 ft eastbound left turn lane at the proposed site driveway.

Construct a 300 foot long westbound right turn lane along NYS Route 104 at the proposed Hampton Ridge Center Driveway. The turn lane would operate as a free-flow slip lane and not be controlled by the traffic signal.

Install pedestrian crossing provisions at the signalized intersection of the Hampton Ridge Center site driveway and NYS Route 104 based upon the Pedestrian Generator Checklist shown in Appendix F. Extend the sidewalk located on the north side of NYS Route 104 (constructed for the Shops at Hampton Ridge) to the western frontage limit of the Hampton Ridge Center.

Re-stripe the North Greece Road and Elmgrove Road approaches to NYS Route 104. The new lane configuration on the North Greece Road would consist of two left turn lanes, one through lane and one right turn lane. The same lane configuration is recommended for the Elmgrove Road approach. Operate this intersection as an independent fully actuated traffic signal with a cycle length of 125 seconds during the weekday evening and Saturday mid-day peak hour (retail peak) periods.

Continue to operate the traffic signal at the intersection of NYS Route 104 and Elmridge Plaza in coordination with those to the east.

All curb radii should be designed to accommodate the appropriate design vehicle.

Ensure adequate site distance will be provided at NYS Route 104 during design of the Hampton Ridge Center driveway.

### PROCESS WITH NYSDOT

This mitigation plan has been submitted and reviewed by the NYSDOT. Correspondence exchanged between the applicant and the NYSDOT is included in Appendix D of this DGEIS. The applicant has been asked to furnish additional review of the Manitou/Route 104 intersection to determine if possibly an additional lane could be carried northbound past the intersection. The NYSDOT has also acknowledged that they would prefer to avoid double left turns for northbound traffic on Elmgrove Road until triggered by a corresponding amount of development on the site. The applicant is studying at what point the double lefts would be needed given the data available today. The applicant would then agree to conduct an analysis at said future date to determine if conditions developed as expected, thus requiring consideration of the double left turns. The NYSDOT has also asked that analysis be done to evaluate the progression of traffic through this corridor given the changes proposed to the

Elmgrove/North Greece/Route 104 signal. The applicant is continuing to pursue mitigation with the expectation of receiving approval of the mitigation plan from the NYSDOT.

The applicant also requested and is awaiting data for three intersections on the New York State Priority Investigation Location (PIL) List. Once that data is received, it will be analyzed in relation to the mitigation proposed herein.

#### IMPLEMENTATION

The applicant will fund and construct those improvements which are allocated as mitigation for the development of 4320 W. Ridge Road. It is anticipated that all mitigation would be implemented with the first site plan application with the exception of double lefts at Elmgrove Road. The applicant would complete a traffic analysis once initial development is constructed and operating to determine what impacts may require mitigation with the next phase of development.

Once the applicant receives additional reports from the Farash/Benderson development team, further phasing of improvements can be determined, if necessary.

The applicant will work with the Planning Board, Town of Greece Traffic and Safety, Town Staff and the NYSDOT during site plan review to maximize traffic flow on site.

# 3.8.e Construction Traffic

The number and type of construction vehicles and the precise timing of arrival and departure is difficult to predict with any accuracy. During each step of construction the following is expected:

Earthwork: Construction equipment will include bulldozers, pans, excavators, rollers and 10wheel trucks. Arrival of equipment is expected to occur during non-peak hours. Entrance to the site will be over crushed stone surface to minimize tracking of soils off-site. Flag men will be utilized to direct traffic during mobilization. NYSDOT will be asked to allow signage that alerts motorists to construction entrance ahead. Once construction equipment is on site, it is expected to remain for the duration of its need. Initial earthwork may extend 2 to 3 months. Imported material will be delivered to site where fill is required using 10-Wheel trucks. Truck activity will pick up for short time frames and decline again. Delivery will occur during work hours and will not impact peak hour traffic. Departure of equipment will be random as the need declines.

Utility Construction: Equipment to include excavators, 10-wheel trucks, bulldozers, bobcats, material delivery trucks and backhoes. Arrival of equipment is expected to occur during non-peak hours. Entrance control and signage will be the same as for earthwork. Utility work may

extend 3 to 6 months and overlap the earthwork and building construction step. Departure of equipment will be random as the need declines.

Building Construction: Equipment to include small cranes, high lifts, excavators, backhoes, bulldozers, material delivery trucks and bobcats. Arrival of equipment and entrance control is expected to be similar to earlier steps. Building construction may extend 9 to 12 months and start as soon as building pads are completed. Activity will overlap utility work. Departure of equipment is expected to be random as the need declines.

Site Construction: Equipment to include bulldozers, excavators, 10-wheel trucks, rollers, backhoes, bobcats, paving machines, and material delivery trucks. Arrival and departure of equipment is expected to be similar to earlier steps. Activity will overlap building construction and mostly occur during the final months of the project.

Construction Workers: During the peak of construction, it is expected that about 100 workers will be on site at any given time. Arrival on site is typically before rush hour and departure is typically random through the end of the work day. No significant impact is anticipated during peak hour traffic conditions. Parking for construction workers will be onsite. Temporary parking areas will have crushed stone surfaces to minimize dust and tracking of soil off-site.

### CHAPTER 3 – EXISTING CONDITIONS, ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### 3.9 NOISE

### 3.9.a Existing Conditions

The proposed development is located on the north side of West Ridge Road (US Route 104) between North Greece Road and Manitou Road. Immediately west of the site is Vanderstyne Toyota car dealership, and to the east is the Shops of Hampton Ridge. The Shops consist of a Kohl's store and a new office building under construction. On the south side of West Ridge Road there are a number of vacant houses, woods and a creek which is in the process of being rezoned by others for retail/commercial use. Vacant houses, fields and woods currently occupy the proposed site.

The principal noise source is traffic along West Ridge Road. There are no industrial activities proposed or in the area that generate noise of any significance. Several types of prospective retail tenants could have refrigeration needs. Compressors would be needed and could generate low level intermittent background noise. Rooftop units could also be a source of noise.

### 3.9.b No Build Conditions

Without the proposed development, there will be no immediate noticeable change in noise on site. Over time, as traffic loads increase along West Ridge Road, noise levels could increase depending on traffic speed and whether the level of service of the highway changes. If the Benderson-Farrish development across West Ridge Road occurs, noise levels will increase with the addition of construction equipment, vehicular and truck traffic, refrigeration equipment, and rooftop HVAC units.

### **3.9.c Potential Impacts**

Numerous environmental factors determine the level or perceptibility of sound at a given point of reception. These factors include: distance from the source of sound to receptor; surrounding terrain; ambient sound level; time of day; wind direction; temperature gradient; and relative humidity. The characteristics of a sound are also important determining factors for considering it as noise. The amplitude (loudness), frequency (pitch), impulse patterns and duration of sound all affect the potential for a sound to be a noise. The combination of sound characteristics, environmental factors and the physical and mental sensitivity of a receptor to a sound determine whether or not a sound will be perceived as a noise.

Potential impacts from this development include an increase in noise levels in the areas. The generators of this noise increase will be the increase of vehicular and truck traffic, refrigeration and HVAC units. Short term noise levels will be increased due to construction. The anticipated hours of operation for construction activities are 7:00 am - 7:00 pm daily.

# 3.9.d Mitigation

As per the New York State Department of Environmental Conservation (NYSDEC) Assessing and Mitigating Noise Impacts, February 2001: Noise decreases with distance. The decrease in sound level from any single noise source normally follows the "inverse square law." That is, sound pressure level (SPL) changes in inverse proportion to the square of the distance from the sound source. At distances greater than 50 feet from a sound source, every doubling of the distance produces a 6 dB reduction in the sound. Therefore, a sound level of 70 dB at 50 feet would have a sound level of approximately 64 dB at 100 feet. At 200 feet sound from the same source would be perceived at a level of approximately 58 dB. See Table 3.9-1 below:



Sound energy is also absorbed in the air as a function of temperature, humidity and the frequency of the sound. This attenuation can be up to 2 dB over 1,000 feet. Wind can

further reduce the sound audible at a distance if the receptor is upwind of the sound. The action of the wind disperses the sound waves reducing the SPLs upwind.

There are many aspects of the environmental setting that can influence noise potential. Sound levels can impacted be topography, vegetation, structures and the relative location of noise receptors and sources to these features. Natural land features or manmade features serve as a noise barriers or can provide noise attenuation.

The following Table represents typical noise levels from sources that may be found on the site:

STAT	IONARY EQUIP	MENT NOISE EMIS	SION DATA
Feature	Noise Level (dBA)	Reference Distance (ft)	(*)Elevation of Noise Source (feet, MSL)
Idling Tractor/ Trailer	65	75	417
Idling Garbage Truck	77	50	417
Rooftop AHU (3 Ton)	49	50	445
Rooftop AHU (20 Ton)	61	50	445
Refrigeration Unit	65	75	417

### Table 3.9-2 Sources of Sound/Noise

(\*) – Based on assumption that the retail floor slab is at elevation 405 ft avg and the roof-top elevation is 440 ft avg. Traffic Noise Model assumes a heavy truck noise source to be located 12 feet above ground level. The AHU noise source is assumed to be 5 feet above the roof-top elevation.

The level of human reaction to noise level increases is provided in the NYSDEC report entitled *Assessing and Mitigating Noise Impacts*, and summarized in Table 3.9-3. The total sound pressure created by multiple sound sources does not create a mathematical additive effect. The proposed commercial site will have similar sound levels as the adjacent commercial property. Assuming current sound levels are in the 50 db range and the project will generate 50 db then the combined noise level of 53 db would be expected.

HUMAN REACT P	TION TO INCREASES IN SOUND RESSURE LEVEL
Increase In Sound Pressure (dBA)	Human Reaction
Under 5	Unnoticed to tolerable
5-10	Intrusive
10-15	Very noticeable
15-20	Objectionable
Over 20	Very objectionable to intolerable

Table 3.9-3 Sources of Sound/Noise
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The proposed commercial development will be buffered from the residential properties on the east, south and west by a 100-foot buffer strip. Assuming a 3 db increase in sound levels within the proposed site improvement area the residential areas will not detect a difference from the current ambient noise level.

Since there are no significant operational noise impacts from the proposed development, no mitigation measures are required or recommended. Mitigation of short term construction noise impacts from equipment may be achieved through several means. These include the use of construction equipment with properly maintained mufflers, the use of newer equipment having lower noise levels, the selection of equipment having lower operating noise levels and limiting the hours of operation of construction equipment. In addition, a developer's representative will be available during construction to address any noise related complaints, and to make minor adjustments to construction procedures or equipment to reduce noise levels.

Chapter 4

**Construction Impacts** 

Draft Generic Environmental Impact Statement

Hampton Ridge Center Rezoning

### CHAPTER 4.0 CONSTRUCTION IMPACTS

### Potential Impacts

During construction of this site, certain temporary impacts will occur. These temporary impacts are primarily related to the use of construction equipment to construct the site improvements. Impacts can be classified in four categories: Traffic Flow, Vibration, Noise, and Air.

Traffic Flow: During mobilization large equipment will arrive at the site. This may cause some minor traffic delays as equipment is moved off the highway. As construction proceeds, materials will be transported onto the site for construction and construction workers will be arriving and departing.

Vibration: Vibration can come from heavy construction equipment and localized blasting of bedrock. Presently, the only potential sensitive receptors of vibration would be adjacent residential homes north and northwest of the project site. The closest residential neighbor is Creek House Apartments. They would be within 200 feet of the closest construction activity. Residential properties to the north are over 500 feet from the closest anticipated construction activity.

Noise: Construction equipment will generate noise above ambient conditions. Although construction activity has also been ongoing in the Images Way Subdivision and that would have a greater impact on residential properties to the north than the project site. On-site noise will occur during the normal work day of roughly 7 am to 7 pm. Some noise will be generated by trucks slowing down and speeding up on W. Ridge Road.

Air: Impacts on air quality can be from odors, emissions and dust. Most construction equipment is diesel based and there is a noticeable odor at close encounters with diesel exhaust. Idiling equipment and start/stop actions also generate the most particulate matter from construction equipment emissions. While earthwork operations are ongoing, dry conditions can generate dust. Wind can also stir up dust.

Mitigation

Traffic Flow: Signs depicting the construction entrance and warning traveling public of approaching construction will be erected if allowed by NYSDOT. Flagman will be used to temporarily direct traffic during brief encounters with construction equipment on W. Ridge Road. Typical construction day starts at 7 a.m. which will allow workers to arrive prior to peak morning rush hour periods. Departure of workers at the end of the day can be staggered if conflicts occur. If the NYSDOT gives the approval, the traffic signal at the Kohl's driveway could be installed and used for worker traffic (non-construction equipment) entering and exiting W. Ridge Road.

Vibration: Location of homes is sufficiently removed from construction activity as to experience little if any vibration. Vibration reduces with the distance traveled and from objects interfering with sound waves. The developers intend to maximize retention of trees between the project and adjacent neighboring properties, to minimize vibration affects. Trees will buffer vibration caused by sound waves as well. If rock removal is necessary, NFPA and OSHA requirements will be followed including preparation of blasting plans, pre-blast surveys and general public notifications. The on-site project superintendent will also be available to address any complaints on an as needed basis.

Noise: Construction noise will occur during daylight hours when most people are at their jobs. Retention of existing native vegetation buffers between residential neighbors and construction activity will reduce the affects of noise. Objects physically between the noise generator and receptor result in the best reduction in noise impacts. Noise impacts from onsite construction equipment will be minimized by assuring properly maintained equipment with functioning muffler/exhaust systems. Newer equipment has better technology so to the extent that newer equipment can be used, the noise affects will be diminished. Provided that trucks are kept in good repair, the noise generated by arriving and departing trucks should be minimized but not eliminated. Almost anyone that could be affected by noise on W. Ridge Road is so far away as to hear no appreciable impact above the level of noise experienced locally.

Air: Mitigation comes in a variety of forms. Properly maintained equipment will minimize odors and particulate emissions. Also, keeping construction equipment moving and minimizing idling times will allow diesel engines to run most efficiently, generating less impacts. It is not feasible to completely eliminate construction equipment emissions although the large separation distances to sensitive receptors and wide open areas allow for significant dilution of particulates and odors. Dust control on site can be minimized by the use of dust palliatives such as calcium chloride, and other dust control provisions as indicated in the New York State Department of Transportation Standard Specifications for Construction Materials, Latest Edition. Dust control is also necessary to be in compliance with the SPDES General Permit GP-02-01 and the Storm Water Pollution Prevention Plan (SWPPP) that will be prepared for the project.

Summary: Some impacts of construction activity are unavoidable but can be significantly mitigated by a variety of means. These include: separation distance, retention of buffers, properly maintained and operated equipment, work hours, traffic control, compliance with the SWPPP and other techniques mentioned herein.
Alternatives

Draft Generic Environmental Impact Statement

# CHAPTER 5.0 ALTERNATIVES

# 5.1 No Action Alternative

Considering the "no-action" alternative, the existing use of the project site would remain as it is today. Presently the site is vacant, fairly flat, early growth wooded areas and some grass/brush areas. Several houses are also located along West Ridge Road but are currently vacant and boarded up. All are owned by the applicant. The adjoining area continues to evolve into the premier commercial district in the Town of Greece, which further discourages the maintenance of long term residential uses along this heavily traveled corridor.

The alternative of no action would result in continuing the non-use of a large parcel of land which provides little scenic, historical, ecological, or recreational benefits to the community, and virtually no economic or other benefit to the developer. The existing houses along the West Ridge Road frontage will remain vacant and/or be demolished. Miscellaneous, unauthorized refuse disposal on the property could continue. Thus, the no action alternative for the Project Site will not provide any economic benefit to the Town of Greece and will not create additional retail choices or options for the consumer.

The 2001 update to the Community Master Plan recognizes that the property is in a district which is increasingly commercial and in which future commercial development would be most appropriate. Therefore, no-action would seem to postpone the ultimate development of this site. Given the commercial nature of the surrounding corridor of West Ridge Road, the no-action alternative is not one that is in the best interests of the Town. Moreover, all of the projected fiscal benefits to the Town and school district would be lost and the applicant is denied best use of the property.

# 5.2 Alternate Use Under R1-12 Zoning

The project site is currently zoned as R1-12, Single-Family Residential 12,000 sf. Development under this zoning would prohibit the development of restaurants and retail use. If development under current zoning was feasible, the project would likely have similar hydrologic, topographical, visual impacts, yet lower tax revenue and job creation. Homes located along and near West Ridge Road would be significantly impacted by traffic noise. Residential development, because of the permanent population base it encourages, has a greater impact on Community Facilities including Town Facilities, schools, recreation and others. Typically, the tax revenues from residential development do not offset the costs to the community.

# 5.3 Alternative Layouts

Although the site could potentially be developed as currently zoned, the Town of Greece's Master Plan has designated this parcel for commercial development. Various concept plans have been developed by the client to meet the needs of potential tenants, yet balance the

economic considerations of the development. All concept plans, similar to the current master plan, net a 15% building coverage with associated parking fields. Regardless of the ultimate plan chosen, the magnitude of the project environmental impact is the same. Once tenant interest is established, a site plan application will be made to the Greece Planning Board to review and determine that the objectives and mitigation proposed in this DGEIS are satisfied.

# 5.4 Alternative Locations

The project sponsor does not own nor have under option any other parcels within the immediate or nearby area which could serve as an alternate location for a development of this magnitude. The project site location is ideally situated with frontage along West Ridge Road for the development of restaurant and retail use, and is within the Town's Master Plan recommendations for usage.

Potential Growth-Inducing Aspects

Draft Generic Environmental Impact Statement

# CHAPTER 6.0 POTENTIAL GROWTH-INDUCING ASPECTS

The 2001 Community Master Plan lays out an expectation and desire that this property, within the West Ridge Road Corridor, is suitable for and expected to be developed as commercial use. As with any other individual project that should develop in this corridor, the individual impacts should be assessed and appropriate mitigation determined. This project, in and of itself, does not cause growth beyond what is immediately proposed. Other projects may be considered by the Town, as the case may be with the Benderson/Farash development on the south side of West Ridge Road, but that development has not been caused or induced by this application to rezone 4320 West Ridge Road to commercial use.

Actions that may cause growth-inducing impacts might include the construction of sanitary sewer service along West Ridge Road. If a sewer were constructed that could provide access to service by currently undeveloped or under-developed property, that may be a factor that stimulates other projects to develop on a faster time scale. However, no sewer service exists along West Ridge Road at this time. The applicant has access to sanitary sewer to the north to accommodate this development and its construction does not directly service any other undeveloped or under-developed property. Possibly the Benderson/Farash project may have an interest to extend the sewer to their development and any extension that provides access to other property may have growth inducing impacts that they may have to assess.

The applicant previously came before the Town of Greece to rezone 4110 West Ridge Road, consistent with the goals and objectives of the 2001 Community Master Plan. The applicant has since steadily made progress toward completing the build-out of that project. Impacts related to that project were assessed and mitigation constructed. It is easily seen that mitigation proposed has not precluded or inhibited the mitigation for 4320 West Ridge Road. In fact, the current application builds upon the work that was previously done and may accelerate the highly desirable construction of the traffic signal at the driveway to 4110. So, it can be seen that as projects develop in the corridor, mitigation can be accommodated in a logical and progressive manner.

To the extent that other projects in the area need to be assessed, this had been done at the time the traffic study was completed for this application. All known projects at that time were considered. It is still feasible, if other projects advance and follow the same timeline as this project, to develop joint mitigation plans. As more information is provided by the Benderson/Farash team, mitigation and construction activity can still be determined as site plan review progresses.

It is the applicant's proposal that this project be the premier location for new commercial development to take place allowing growth in the tax base of the Town to occur within the area of this development proposal.

Unavoidable Adverse Impacts

Draft Generic Environmental Impact Statement

# CHAPTER 7.0 UNAVOIDABLE ADVERSE IMPACTS

Considerable thought and effort has gone into the planning and layout of Hampton Ridge Center and will continue to go into the project during the detailed site design phase. Every effort will be made to avoid or mitigate potential adverse impacts. The type of impacts that might be expected were discussed and analyzed in Chapter 3.

During the development of any project, regardless of its magnitude, certain adverse impacts on the environment will result despite all measures implemented to mitigate these impacts. SEQRA contemplates the balancing of these impacts against social, economic and other relevant considerations (6 NYCRR 617.12 (d)(2)). The unavoidable impacts anticipated to occur due to the development of the project site include:

## A. Unavoidable Short-Term Impacts

Unavoidable short-term impacts are all related to the construction phases of the Project. They are temporary, localized and relatively minor in nature. These short-term impacts include:

- Temporary traffic delays due to construction of proposed highway improvements;
- Increased traffic levels due to construction workers' vehicles and off-site equipment movement;
- Temporary but non-harmful increases in noise levels in the immediate vicinity of construction;
- Dusty conditions generated by construction activity which will be controlled by conventional methods; and,
- Localized increases in air emissions from construction equipment.
- B. Unavoidable Long-Term Impacts

Certain long-term impacts will result from the construction and operation of the retail and commercial establishments and include:

- Removal of existing vegetation and reduction in wildlife habitat;
- Conversion of 67 acres of land from residential to commercial use that will allow construction of 25 acres of buildings and parking areas with the remainder being left in a natural condition, converted to storm water management facilities or landscaped;
- Elimination of vacant boarded-up residential properties along West Ridge Road;
- Consolidation and reduction in the number of driveway entrances onto West Ridge Road;
- Commitment of economic resources for the cost of land construction materials, labor, equipment and fuel during construction;

- Long term commitment of electric and gas energy sources for heating, cooling and lighting;
- Commitment of a portion of available system capacity in water supply, wastewater collection and treatment, and solid waste handling and disposal facilities;
- Commitment of police, fire and emergency services which are funded through additional property taxes; and
- Traffic volumes near the site will increase as a result of the Project and normal growth in the area. Some existing levels of service that are currently poor (specifically the Manitou/West Ridge Road intersection) will not be appreciably improved because of physical constraints to the right-of-way. However, West Ridge Road will have sufficient capacity as a result of planned NYSDOT roadway improvements and mitigation proposed here-in. Proposed mitigation, in the form of turning lanes, new traffic signals and signal modifications will re-establish levels of service at appropriate intersections.

Project Impacts on Energy Use and Solid Waste Management

Draft Environmental Impact Statement

## CHAPTER 8.0 PROJECT IMPACTS ON ENERGY USE AND SOLID WASTE MANAGEMENT

## **Project Impacts on Energy Usage**

The energy consumption associated with the development and operation of the project can be divided into three major areas: 1) Energy required for the operation of the buildings; 2) energy for transporting employees, customers and freight to and from the development; 3) energy consumed in the construction of the project.

1) Commercial and Office Facilities

The energy required for the operation of the proposed buildings will vary depending on (among other things) the type of the service being served, the layout of the building and the type of construction for the buildings. Major uses of energy will include heating, ventilation, air conditioning and miscellaneous electrical loads. Power demand is expected to be equal for the summer and winter periods. This balance should permit an efficient allocation by the utility companies.

2) Transportation

The energy consumed in transportation to and from the proposed site by automobiles and delivery trucks will be gasoline and diesel fuel. Although this is extremely difficulty to quantify, the net result of increased and decreased fuel consumption is not anticipated to be significant. Short distance travel for employees, customers and patrons should not be expected to drastically alter the amount of annual vehicle miles currently traveled.

3) Energy required to construct the proposed development encompasses energy extraction of raw materials, manufacturing of equipment and materials, delivery, construction and installation. The major energy consumption is anticipated to be in raw material extraction and manufacturing. The great variety of materials required for this project, and the lack of detailed data on specific types, quantities and energy requirements preclude a rational attempt to quantify BTU's of energy consumed. For purposes of general magnitude, roughly 10% of the nation's overall energy consumption is for construction, including materials extraction and manufacture.

On site energy consumption will primarily take the form of fuel consumption for equipment. The amount which will be consumed is very small when compared with the total amount consumed in construction activities in the metropolitan Rochester area.

No unique site conditions are known to exist that will produce highly unusual or intensive energy construction requirements.

# Potential Impacts on Solid Waste Management

Paper and cardboard will constitute the majority of solid waste generated by Hampton Ridge Center. Refuse containers (dumpsters) will be placed in visually screened areas along the rear of buildings. Litter containers will also be placed at strategic locations along the center's front sidewalk for convenience of shoppers. This will reduce maintenance and enhance the appearance of the facility.

It is anticipated that 6 tons per month of solid waste will be generated at the center and handled by one of several private refuse collectors in the area. All solid waste goes to the Mill Seat Landfill in Riga, New York. This landfill's life span is anticipated to the year 2018. There is currently ample capacity to accommodate this development. There are recycling programs in place within Monroe County to minimize debris entering the landfill and to reuse solid waste thereby saving existing natural resources.

Irreversible and Irretrievable Commitment of Resources

Draft Generic Environmental Impact Statement

## CHAPTER 9.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT ON RESOURCES

Although the development of this parcel will bring benefits to the Town of Greece and surrounding communities, some non-renewable, natural or man-made resources will be consumed or committed to other uses during the construction and lifetime of the proposed Project. The resources are considered to be irretrievably committed since their reuse for purposes other than the proposed development is either impossible or highly impractical.

The development of vacant or under utilized land would irretrievably commit those parcels to other uses. All materials and energy consumed in the anticipated construction are irreversible and irretrievable commitments. Included in this category are the steel, concrete, asphalt, brick, glass and other construction materials used to build the development and related site improvements for this project. The fossil fuel used by the construction equipment will also be a resource loss as well as the energy consumed by the different land uses and operation maintenance of the individual businesses and projects. The public utilities and services which will be furnished are opportunity costs to the various agencies and governments providing those utilities and services in that their use for individual projects precludes their use for other programs and projects.

The human effort involved in constructing and maintaining the proposed project, along with the capital expended are also irreversible and irretrievable commitments of resources.

Figures

Draft Generic Environmental Impact Statement





# CONCEPT SITE PLAN

SCALE: NONE





View Into Site From Ridge Road



Typical View Into Site

PREPARED BY:

R Bergmann HAMPTON RIDGE AND THE SHOPS AT HAMPTON RIDGE TOWN OF GREECE MONROE COUNTY, NEW YORK **EXISTING CONDITIONS PHOTOS** 

FIGURE 4



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		HAMPTON RIDGE AND THE	RIDGE
		SHOPS AT HAMPTON RIDGE	
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<u>FIGURE</u>	

= 40'





**Technical Appendices** 

Draft Generic Environmental Impact Statement

Appendix A:

Wetland Delineation Report and Endangered Species Survey

Generic Draft Environmental Impact Statement



## Re: Richardson's Sedge, 4320 W. Ridge Road, Town of Greece, Monroe County, New York TES File No. 2739

Dear Mark:

Terrestrial Environmental Specialists, Inc. (TES) conducted a field investigation for Richardson's sedge (*Carex richardsonii*) based on a letter received by Bergmann Associates from the New York State Department of Environmental Conservation (NYSDEC) Region 8 office. The site investigated is approximately 60-acres in size and is located at 4320 Ridge Road in the Town of Greece, Monroe County, New York (Figure 1).

Richardson's sedge is listed as uncommon in NYS by the New York Natural Heritage Program and is not listed in the New York State Endangered Species list. This species is considered state extirpated (S.Y. Young 2007). TES reviewed available background information and conducted a site visit on August 29, 2007 to determine whether Richardson's sedge was present.

#### **BACKGROUND INFORMATION**

Richardson's sedge was once collected in Parma, Monroe County. The locality of a specimen in the NY State Museum collected by Bradley was listed as "Greece, New York (Mathews and White 1963).

This species is within the section *Clandestinae* of the Cyperaceae family. It is rhizomatous and the leaves are distinctive brown or red-tinged at the base. Leaf blades are narrow with a width of 1.5 - 4 mm wide. Fruiting period is from late spring to summer (FNA 2002, Rhoads & Block 2000).

This species is common on the Canadian prairies and in mountain woodlands east of the Cascades. "Further east, it is a rare plant of alvars, tall grass prairie remnants and post-glacial shorelines" (such as Lake Iroquois in New York State) (FNA 2002). As previously noted, this species is considered by the New York State Natural Heritage Program as being extirpated.

Mr. Mark Petroski October 4, 2007 Page 2

#### **FIELD REVIEW**

TES botanists examined the site for the presence of Richardson's sedge on August 29, 2007. This field review examined the forested and open portions of the site where there was potential for this species to occur. Immediately next to Ridge Road, there is a residential area and a disturbed area where the vegetation has been scraped, cleared, and piles of material have been placed on the site. Due to the disturbance of these areas, this portion of the site was considered inappropriate habitat for Richardson's sedge.

TES examined the wooded portions of the site. TES found extensive stone walls and indications that this area had been cleared for agricultural purposes. The woods consisted of second-growth hardwoods, a mix of young deciduous trees such as green ash (*Fraxinus pennsylvanica*) with a dense understory of buckthorn (*Rhamnus cathartica*) and pale swallowwort (*Cynanchnum rossicum*). Both buckthorn and pale swallowwort are invasive species that outcompete native vegetation.

Pale swallowwort covered almost the entire herbaceous layer on the site. This species has outcompeted all the other herbaceous species on the site including the sedges and ferns. TES did not find any alvar prairie habitat, or wooded areas that would support Richardson's sedge.

TES did note a variety of sedges present on the site including *Carex communis*, *C. crinita*, and *C. lupulina*. TES did not record Richardson's sedge on the site. Based on past disturbance and current habitat conditions, it would not be expected to occur.

#### SUMMARY

TES collected background information on Richardson's sedge. This species is not listed as endangered threatened, or rare in New York State. TES botanists performed a field review on the site to search for this sedge. TES did not record Richandson's sedge on the site due to the disturbed nature of the site, the dense cover of invasive plants and the lack of suitable habitat, Richandson's sedge was not found and is not expected to occur.

Sincerely, Terrestrial Environmental Specialists, Inc.

Bernard RC

Bernard P. Carr Vice President

BPC/dma

cc: J. Dimarco



#### REFERENCES

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August 15, 2007

(315) 695-7228

Ms. Diane C. Kozlowski, Biologist Chief, NY Permit Evaluation Section U.S. Army Corps of Engineers Buffalo District, Regulatory Branch 1776 Niagara Street Buffalo, New York 14207-3199

Re: 4320 West Ridge Road, Town of Greece, Monroe County, New York TES File No. 2739

E-MAIL: tesinc@alltel.net

Dear Diane:

On behalf of the DiMarco Group, Terrestrial Environmental Specialists, Inc. (TES) is submitting a wetland delineation report for a 60-acre parcel located at 4320 West Ridge Road, Town of Greece, Monroe County, New York.

TES located one wetland, identified as Wetland A, which is 0.38 acre in size. It appears that this wetland is isolated. TES would like a jurisdictional determination and written verification from your office whether the wetland is regulated. TES would like to attend the field review with your staff.

If you have any questions, please give me a call.

Sincerely,

TERRESTRIAL ENVIRONMENTAL SPECIALISTS, INC.

Fierra

Bernard P. Carr Vice President

BPC/dmm Enclosure

cc: J. DiMarco M. Petroski

Terrestrial Environmental Specialists. Inc.

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# WETLAND DELINEATION REPORT 4320 WEST RIDGE ROAD SITE

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1990 B.C.

## TOWN OF GREECE MONROE COUNTY, NEW YORK

Prepared for:

THE DIMARCO GROUP 1950 Brighton-Henrietta Townline Road Rochester, New York 14623

Prepared by:

TERRESTRIAL ENVIRONMENTAL SPECIALISTS, INC. 23 County Route 6, Suite A Phoenix, New York 13135



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(all figures follow text)

Figure 1. Site Location

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- Figure 2. NYS Freshwater Wetlands Map
- Figure 3. National Wetlands Inventory Map
- **Figure 4.** Soil Survey Map
- Figure 5. Aerial Photograph of Site
- Figure 6. Wetland Boundary with Plot and Photograph Locations

## **1.0 INTRODUCTION**

This report describes a wetland resources survey for a proposed commercial development site located at 4320 West Ridge Road in the Town of Greece, Monroe County, New York. The study area investigated is approximately 60 acres and is located north of New York State Route 104 (Ridge Road), east of Manitou Road, and west of North Greece Road (Figure 1).

Terrestrial Environmental Specialists, Inc. (TES) was contracted by The DiMarco Group to delineate and describe the wetlands on the site regulated by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act and to conduct an endangered species survey. The delineation of regulated wetlands was conducted using the methods described in the 1987 Corps Wetlands Delineation Manual (Environmental Laboratory 1987).

This report is intended to be used as documentation of the wetland boundaries. It includes the following: agency resource information; methods; a results section which includes a general site description, site ecology, wetland description; and a summary of the findings. This report is complemented by photographs and wetland determination data sheets presented in the appendices. This report is revised from a combined wetland delineation and endangered species report issued in May 2004 based on field work conducted in October 2003.

## 2.0 AGENCY RESOURCE INFORMATION

Prior to the field investigation at the property, various maps and other sources of background information were reviewed. These maps included: the New York State Department of Transportation (NYSDOT) topographic map (Rochester West and Spencerport Quadrangles) (Figure 1); the New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands map (Figure 2); the National Wetlands Inventory (NWI) map (Figure 3) published by the U.S. Fish and Wildlife Service (USFWS); and the Monroe County Soil Survey map (Figure 4) prepared by the U.S. Soil Conservation Service. A 2001 aerial photograph from the New York State GIS Clearinghouse was also used prior to the field investigation (Figure 5).

## **3.0 AGENCY CONTACT INFORMATION**

In accordance with notification requirements of the Corps' Nationwide Permit program, TES sent contact letters for information on cultural resources and endangered species. Both state and federal agencies were contacted regarding the presence of endangered and threatened species. All agency correspondence is provided in Appendix C.

TES sent a letter to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) regarding whether any cultural resources are known from the site. OPRHP requested an archeological survey and determined that a house on the property is eligible for inclusion in the National Register of Historic Places.

The USFWS reported that "Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area."

The NYSDEC Natural Heritage Program reported an undated historical record of a statelisted plant called sweet-scented Indian plantain (*Hasteola suaveolens*) from the Town of Greece. TES conducted an endangered species search for this plant species.

#### 4.0 METHODS

The background information maps, aerial photograph, and soils information discussed above were used during the field review of the site. These maps assisted in the initial identification of potential wetland areas.

Detailed flagging and data collection of the wetland boundaries on the site were performed by TES on October 16 and 23, 2003. The boundaries were delineated using the federal criteria for vegetation, soils, and hydrology (Environmental Laboratory 1987, Reed 1988, USSCS 1989, USDA NRCS 1998).

Surveyor's ribbon was placed along the wetland boundary based on observations of vegetation, soils, and hydrology conditions. These observations were made along transects located perpendicular to the wetland boundary. Additional observations of vegetation, soils, and hydrology were made at intermediate locations between the transects for the placement of additional flagging. Each wetland flag was labeled with the letter of the wetland and was numbered consecutively. The flagged wetland boundaries were surveyed by Bergmann Associates. TES calculated the wetland acreage using AutoCAD.

To further support the wetland boundary, data on vegetation, soils, and hydrology were collected on October 16 and 23, 2003 in plots along transects located perpendicular to the wetland boundary on the site. Eight plots were sampled and their locations are shown on Figure 7. Plots were located on the upland and wetland sides of the boundary at various locations. The plot data were recorded on data sheets similar to those used in the federal manual (Environmental Laboratory 1987).

Vegetation data were collected in the plots at both the upland and wetland end of each transect. Ocular estimates of the percent areal cover by plant species for each vegetation layer (tree, shrub, and herbaceous layers) were recorded. The plots varied in size by vegetation layer being sampled. The sizes were: 30-foot diameter for the trees, 10-foot diameter for the shrubs, and 5-foot diameter for the herbaceous layer.

The presence of wetland vegetation was determined when more than 50 percent of the dominant species in a sample plot had an indicator status of obligate (OBL), facultative-wet (FACW), or facultative (FAC+, FAC), excluding FAC-. The dominant species for each layer in a plot were determined by ranking the species in decreasing order of percent cover and recording those species which, when cumulatively totaled, immediately exceeded 50 percent of the total cover of that layer. Additionally, any plant species that comprised 20 percent or more of the total cover for each layer was considered to be a dominant species.

Scientific nomenclature for plant species follows A Checklist of New York State Plants (Mitchell and Tucker 1997). The indicator status for each dominant plant species was determined using the National List of Plants that Occur in Wetlands: Northeast (Region 1) (Reed 1988) and the 1995 Supplement To the List Of Plant Species That Occur In Wetlands: Northeast (Region 1) (Tiner et al. 1995). For any species not included in the list, the indicator status was designated using the Manual of Vascular Plants of Northeastern United States and Adjacent Canada (Gleason and Cronquist 1991), New Britton and Brown Illustrated Flora (Gleason 1952), and Gray's Manual of Botany (Fernald 1950).

Soil and hydrology data were collected in soil pits or soil borer holes to a depth of 20 inches within each sample plot. Soil characteristics were noted along the soil profile at the depth specified by the Corps criteria (Environmental Laboratory 1987). Procedures for identifying hydric soils as outlined in the *Field Indicators of Hydric Soils in the United States* (USDA NRCS 1995) were also followed. Soil colors were determined by using the Munsell color chart. Primary and secondary indicators of hydrology were also noted at each sample plot. The wetland boundary was refined on the basis of intermediate soil borer holes along each transect.

#### 5.0 **RESULTS**

Results of the wetland delineation and survey are shown on Figure 6, with a large-scale copy of the plan presented in the back pocket. Representative photographs of the site are presented in Appendix A. Plot data are presented in Appendix B.

#### 5.1 General Site Description

The site is located north of State Route 104 (Ridge Road), east of Manitou Road, and west of North Greece Road in the Town of Greece, Monroe County, New York. Topography on the site is gently sloping to the north and ranges from an elevation of 441 feet above mean sea level (amsl) at the southern property line to 392 feet on the northern property line. The site is primarily brushy vacant land, with a small residential area in the southwestern portion of the site. An old building pad is located on the eastern edge of the site. The site is located adjacent to a major commercial corridor. Single-family homes are located on Route 104 and a townhouse development and residential subdivision adjoin the site on the eastern border (Figure 5). There are five single-family homes located on the site.

The NYSDEC Freshwater Wetlands map (Figure 2) does not show any regulated wetlands on the site or in the immediate vicinity. The National Wetlands Inventory map (Figure 3) does not show any wetlands on the project site. It shows a palustrine, forested, temporarily flooded wetland immediately north of the site boundary. TES did note this off-site wetland during our field investigation.

The Monroe County Soil Survey (USSCS 1973) indicates that the site contains Alton gravelly sandy loam, Elnora loamy fine sand, Lairdsville silt loam, and Lockport silty clay loam. Lockport silty clay loam has the potential for hydric (wetland) inclusions.

There are no streams or other waterbodies on the site. Smith Creek is located due west of the site; it flows in a northerly direction into Lake Ontario. The site primarily drains in a northerly direction.

#### 5.2 Site Ecology

The undeveloped portion of the study area is comprised of open field, deciduous forest upland, and deciduous forest wetland (Figure 5). A small residential area occurs in the southwestern portion of the site. The upland cover types will be described in this section and wetland cover types are described in the following section.

The southwestern portion of the site along Ridge Road contains several residential homes. Mowed lawns and ornamental plantings characterize this area.

The southeastern corner of the site contains an open field. This area consists of old fill material and previously a building was on this portion of the site. Within the open field were shrubs of young gray dogwood (*Cornus foemina* ssp. *racemosa*) and blackberry (*Rubus alleghaniensis*). Herbaceous species included narrow-leaved goldenrod (*Euthamia graminifolia*), rough goldenrod (*Solidago rugosa*), wild carrot (*Daucus carota*), and black swallowwort (*Cynanchum louiseae*).

The majority of the site consists of young deciduous forest. There are old farm roads throughout the site. The dominant trees on the site included green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), white ash (*Fraxinus americana*), black cherry (*Prunus serotina*), and sweet cherry (*Prunus avium*). The shrub layer was quite dense in many areas. Gray dogwood, buckthorn (*Rhamnus cathartica*), and hawthorn (*Crataegus* sp.) were the dominant shrubs. Black swallowwort was a dominant herbaceous species in much of the site.

#### 5.3 Wetland Description

TES located one wetland on the eastern edge of the site (Figures 5 and 6). This area was designated as Wetland A; it is a 0.38-acre deciduous forest wetland. Wetland A ends at the property line with the Creek House Commons townhouse complex located east of the site. TES was unable to determine whether this wetland continued onto the adjoining property prior to the construction of the townhouse complex.

Wetland A contained silver maple (*Acer saccharinum*), American elm, and green ash. Reed canary grass (*Phalaris arundinacea*) and sedge (*Carex* sp.) were located in the herbaceous layer. Wetland soils were indicated by a soil sample that contained a low matrix chroma with mottles. Wetland hydrology was noted by watermarks on trees and blackened leaves.

At the present time, this wetland is isolated. We are unaware of any connection to a navigable waterway that may have existed prior to the townhouse development.
A jurisdictional determination from the Corps is needed to determine whether Wetland A is a regulated wetland or not. There is a 100-foot buffer between Creek House Commons and the property line that the developer plans to maintain. Much of this wetland lies within that buffer.

#### 6.0 SUMMARY

TES delineated wetlands on an approximately 60-acre parcel located in the Town of Greece, Monroe County, New York. The site is located north of Ridge Road/State Route 104, east of Manitou Road, and west of North Greece Road. This report is revised from a combined wetland delineation and endangered species report issued in May 2004 based on field work conducted in October 2003.

Topographically, the site is relatively flat and has a gentle slope from south to north. Currently, there are five residential homes on the site. Previously, there was another structure on the eastern portion of the site.

Vegetation cover on the site is predominantly young deciduous forest. An open field area occurs on the southeast corner of the site.

TES located a 0.38-acre deciduous forest wetland on the eastern edge of the site. Silver maple, green ash, and American elm were the dominant trees in the wetland. The soils exhibited hydric characteristics and indicators of hydrology were noted. It appears that this wetland is isolated from any navigable waterway. A determination from the Corps is necessary to determine whether this wetland is isolated or not. There is a 100-foot Town of Greece buffer between the site and the Creek House Commons townhouse and much of this wetland is located within that buffer.

The New York State Historic Preservation Office requested an archeological survey and determined that a house on the property is eligible for listing in the National Register of Historic Places.

7.0 REFERENCES

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# **APPENDIX A – Photographs**

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### **APPENDIX B – Wetland Determination Data Sheets**

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Town/County/State	Greece /	Monroe / NY Community Type: Deciduous F	prest Upland
Investigators:	B.Carr, P.Kallfe	Flag No.: A-1 Field Pho	to(roll/frame): A-9
Do normal environmental o	onditions exist at the pla	nt community? (if no, explain): Yes	
VEGET	ATION	SOILS	
(* = Dominant spe	cies in each stratum)	Mapping	Different than
IRE	ES	The mapped soil type is recognized by the NRC	Sas:
Eraxinus pennsylvanica	20% EACW	Hydric Soil with potential hydric	nclusions Non-hydric
Ulmus americana	20% FACW *	Depth of A horizon: <u>11</u> (in.)	
Acer rubrum	15% FAC *	Mottled No	A haring a still a d
		A horizon matrix color	(sand/silt/clay/loam/other
Dominance = 65 50% =	32.5 <b>20% =</b> 13.0	2.5 vr. 5 vr. 7.5 vr. 10 vr.	Loam
AU-01		$= \begin{bmatrix} 2.5 \text{ y} & 5 \text{ y} & 7.5 \text{ y} & 10 \text{ yr} \end{bmatrix} $	
SHRU	35	2 2	(sand/silt/clay/loam/other
Species Cornus foemina ssp. racemos	Cover Status *	B horizon matrix color	Sandy/Silt/Loam
Rhamnus cathartica	15% FAC	2.5 yr 5 yr 7.5 yr 10 yr	
		2.5 y 5 y Other - 6	Mottle abundance:
		3	
		B horizon mottle color, if present	
lominance = 45 50% =	<b>22</b> .5 <b>20%</b> = 9.0	2.5 yr - 5 yr - 7.5 yr - 10 yr -	Mottle contrast: (faint/distinct/prominent)
HERB	S	2.5 y - 5 y - Other -	
Species	Cover Status *		
arex sp.	30% FACW *	Hydric soil indicators:	
raxinus pennsylvanica	10% FACU *	Histic Epipedon	Regime
luercus alba	5% FACU	Sulfidic Odor	Features
namnus cathartica	5% FACU+	Gleyed Organic Conten	t in Surface Layer
		Upland soil indicators:	-
		Matrix chroma of 2 without mottle Vatrix chr	oma greater than 2
		Remarks:	
		HYDROLOGY	
$cominance = 65 \qquad 50\% - 3$	2.5 <b>20</b> % - 42.0	Is the ground surface inundated ? No Depth of	surface water: (in
Vines	2.3 20% = 13.0	% Area inundated: 1-25 26.75	76 100
Species	Cover Status *		
tis sp.	30% FAC *	Depth to saturated soil:	(in.) or 🗌 Surface
	· · · · · · · · · · · · · · · · · · ·	Other evidence of hydrology?	logy Indicators) 🛛 🗹 No
minance = 30 50% = 1	5.0 <b>20% =</b> 6.0	Primary indicators:	Secondary indicators:
		Inundated Saturated in Upper 12 in.	Oxidized Root Channels
Percent of Dominant Speci OBL, FACW, and/or FAC:	es that are <u>62</u> .5%	Water Marks Drift Lines	in Upper 12 Inches
Greater than 50% of plant of	ipecies are	Sediment Deposits CDrainage Patterns in Wetlands	Local Soil Survey Data
FAC or wetter.		Upland Indicators:	FAC-Neutral Test
Less than or equal to 50% species are FAC or wetter	of plant	State insufficient hydrologic indicators met. No primary indicators	and less than two
,		secondary indicators observed.	
marks:			
marks:		Remarks:	
marks:	JURISI	Nemarks:	
Is the Hydrophytic Veg	JURISE		
Is the Hydrophytic Veg	JURISE etation Criterion Met?	Remarks:         DICTIONAL DETERMINATION         Yes       Is the Sample Plot a Wetland?	
Is the Hydrophytic Veg Is the Hydric Soil Criter	JURISE etation Criterion Met? ion Met?	Remarks:       DICTIONAL DETERMINATION       Yes     Is the Sample Plot a Wetland?       No     Additional       No     Remarks:	

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Project: DIM-2739 D	WEILA Marco Group Developm		DATA SHEET		
Town/County/State	Greece /	Monroe / NY C	Community Type	A-1Ub Deciduous Ecu	Date: 10/23/200
Investigators:	B.Carr, D.Cooga	an <b>F</b>	lag No.: A-17	Field Photo	
Do normal environmental o	onditions exist at the plar	it community? (if no, expl	ain): Yes		
VEGET			80		
(* = Dominant spe	cies in each stratum)	Mapping			Different than
IRE	ES	The mapped soil f	vpe is recognized	hy the NPCS	mapped? No
Species Prunus serotina	Cover Status *	Hydric	Soil with po	tential hydric in	as.
Prunus avium	40% FACU *	Depth of A horizo	n: <u>8</u> (in.)	<i>j</i> (	
		Mottled No	_ 、 ,		A having the
		A horizon matrix c	olor		(sand/silt/clay/loam/other)
Dominance = $60$ 50% =	30.0 <b>20% -</b> 12.0	25 11 5 11	7.5		Loam
	20/0 - 12.0		7.5 yr 10 y	3	
SHRU	35	2.5 y 5 y	Other -	3	B horizon soil texture
Crataeque en	Cover Status *	B horizon matrix co	plor		Loam
Cornus foemina ssp. racemos	a 15% FAC- *	2.5 vr 5 vr	7.5 vr 🖌 10.	/	
Rhamnus cathartica	10% FACU+	2.5 y 5 y	Other -	4	Mottle abundance:
Jonicera latarica	10% FACU			6	(rew/common/many)
		B horizon mottle co	olor, if present		
Dominance = 55 50% =	27.5 <b>20% =</b> 11.0	2.5 yr 🗌 5 yr 🗌	7.5 yr 🗌 10 yr		Mottle contrast:
HERB	S	2.5 y 5 y	Other -	-	(lainvoisuncoprominent)
Species	Cover Status *		· · ·		
Synanchum Iouiseae	60% FAC *	Hydric soil indicato	rs:		
onicera tatarica	5% FACU+	Histosol		quic Moisture R	egime
			dor Gr	ledoximorphic Fi	eatures
		Gleyed	ີ3 C	andy Soils with Irganic Content i	Organic Streaking or High n Surface Laver
		Upland soil indicato	rs:		
		Matrix chrom	a of 2 without mottle	🗹 Matrix chroi	ma greater than 2
		Remarks:			
		11			
			HYDROL	.OGY	
ominance = 70 = 50% - 5		Is the ground surfac	HYDROL e inundated ? No	OGY Depth of s	urface water: (in.
ominance = 70 50% = 3	<u>5.0 <b>20% =</b>14.0</u>	Is the ground surfac	HYDROL e inundated ? No	OGY Depth of s	urface water:(in.
ominance = 70 50% = 3 VINES	<u>5.0 <b>20% =</b>14.0</u>	Is the ground surfac	HYDROL e inundated ? No	OGY Depth of s	urface water:(in.
ominance = 70 50% = 3 VINES	<u>5.0 <b>20% =</b>14.0</u>	Is the ground surfac % Area inundated: Is soil saturated ? [	HYDROL e inundated ? No 1-25 No Depth to sa	OGY Depth of s 26-75 turated soil:	urface water:(in. [76-100] (in.) or [Surface]
ominance = 70 50% = 3 VINES	5.0 <b>20% =</b> 14.0	Is the ground surfac % Area inundated: Is soil saturated ? [ Other evidence of hy	HYDROL e inundated ? No 1-25 No Depth to sa rdrology? Yes	OGY Depth of s 26-75 turated soil: (see Hydrold	urface water:(in. 76-100 (in.) or Surface bgy Indicators) V No
ominance = 70 50% = 3 VINES ominance = 50% =	<u>15.0</u> <b>20% =</b> 14.0 <b>20% =</b>	Is the ground surfac % Area inundated: Is soil saturated ? Other evidence of hy <u>Primary ind</u>	HYDROL e inundated ? No 1-25 No Depth to sa drology? Yes icators:	OGY Depth of s 26-75 turated soil: (see Hydrold	urface water: (in. 76-100 (in.) or Surface ogy Indicators) V No Secondary indicators:
ominance = 70 50% = 3 VINES ominance = 50% =	<u>20% = 20% = </u>	Is the ground surfac % Area inundated: Is soil saturated ? [ Other evidence of hy <u>Primary ind</u> Inundated	HYDROL e inundated ? No 1-25 No Depth to sa rdrology? Yes icators: Saturated in Upper 1	OGY Depth of s 26-75 turated soil: (see Hydroic 2 in.	urface water:(in. ☐ [76-100] (in.) or ☐ Surface pgy Indicators) ☑ No Secondary indicators: ☐ Oxidized Root Channels
ominance = 70 50% = 3 VINES ominance = 50% = Percent of Dominant Speci OBL, FACW, and/or FAC:	<u>20% = 14.0</u> 20% = 20% =	Is the ground surfac % Area inundated: Is soil saturated ? Other evidence of hy <u>Primary ind</u> Inundated Water Marks	HYDROL e inundated ? No 1-25 No Depth to sat rdrology? Yes icators: Saturated in Upper 1 Drift Lines	OGY Depth of s 26-75 turated soil: (see Hydrold 2 in.	urface water: (in. ☐ 76-100 (in.) or ☐ Surface ogy Indicators) ✓ No Secondary indicators: ☐ Oxidized Root Channels in Upper 12 Inches Water-Stained Locuso
ominance = 70 50% = 3 VINES ominance = 50% = Percent of Dominant Speci OBL, FACW, and/or FAC: Greater than 50% of plant s	20% = es that are pecies are	Is the ground surfac % Area inundated: Is soil saturated ? Other evidence of hy Primary ind Inundated Water Marks Sediment Deposits	HYDROL e inundated ? No 1-25 No Depth to sar rdrology? Yes icators: Saturated in Upper 1 Drift Lines Drainage Patterns in	OGY Depth of s 26-75 turated soil: (see Hydroic 2 in.	urface water:(in. ☐ 76-100 (in.) or ☐ Surface ogy Indicators) ✓ No Secondary indicators: Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data
ominance = 70 50% = 3 VINES ominance = 50% = Percent of Dominant Speci OBL, FACW, and/or FAC: Greater than 50% of plant s FAC or wetter.	20% = 20% = es that are pecies are	Is the ground surfac % Area inundated: Is soil saturated ? Other evidence of hy Primary ind Inundated Water Marks Sediment Deposits Upland Indicators:	HYDROL e inundated ? No 1-25 No Depth to sa vdrology? Yes icators: Saturated in Upper 1 Drift Lines Drainage Patterns in	OGY Depth of s 26-75 turated soil: (see Hydroid 2 in. Wetlands	urface water:(in. 76-100 (in.) or □ Surface ogy Indicators) ✓ No Secondary indicators: Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test
ominance = 70 50% = 3 VINES Deminance = 50% = Percent of Dominant Speci OBL, FACW, and/or FAC: Greater than 50% of plant s FAC or wetter. Less than or equal to 50% species are FAC or wetter	$\frac{20\% = 14.0}{20\% =}$ es that are 20.0% pecies are control of plant control of plant control of the plant contr	Is the ground surfac % Area inundated: Is soil saturated ? [ Other evidence of hy Primary ind Inundated Water Marks Sediment Deposits Upland Indicators: ✓ Insufficient hydrologic	HYDROL e inundated ? No 1-25 No Depth to sar rdrology? Yes icators: Saturated in Upper 1 Drift Lines Drainage Patterns in	OGY Depth of s 26-75 turated soil: (see Hydroic 2 in.	urface water:
ominance = 70 50% = 3 VINES ominance = 50% = Percent of Dominant Speci OBL, FACW, and/or FAC: Greater than 50% of plant s FAC or wetter. Less than or equal to 50% of species are FAC or wetter. marks:	20% = 14.0 $20% = 20% = 20.0%$ Species are $20.0%$	Is the ground surfac % Area inundated: Is soil saturated ? [ Other evidence of hy Primary ind Inundated Water Marks Sediment Deposits Upland Indicators: ✓ Insufficient hydrologic secondary indicators of	HYDROL e inundated ? No 1-25 No Depth to sa vdrology? Yes icators: Saturated in Upper 1 Drift Lines Drainage Patterns in indicators met. No prin bserved.	OGY Depth of s 26-75 turated soil: (see Hydroid 2 in. Wetlands	urface water:(in. 76-100 (in.) or □ Surface bgy Indicators) ✓ No Secondary indicators: Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test nd less than two
ominance = 70 50% = 3 VINES ominance = 50% = Percent of Dominant Speci OBL, FACW, and/or FAC: Greater than 50% of plant s FAC or wetter. Less than or equal to 50% of species are FAC or wetter. marks:	$\frac{20\% = 14.0}{20\% =}$ es that are 20.0% species are of plant $\checkmark$	Is the ground surfac % Area inundated: Is soil saturated ? [ Other evidence of hy Primary ind Other Marks Vater Marks Sediment Deposits Upland Indicators: ✓ Insufficient hydrologic secondary indicators of Remarks:	HYDROL e inundated ? No 1-25 No Depth to sat rdrology? Yes icators: Saturated in Upper 1 Drift Lines Drainage Patterns in indicators met. No prin bserved.	OGY Depth of s 26-75 turated soil: (see Hydrold 2 in. Wetlands	urface water:(in. ☐ 76-100 (in.) or ☐ Surface by Indicators) ✓ No Secondary indicators: Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test nd less than two
ominance = 70       50% = 3         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Less than or equal to 50% species are FAC or wetter.         marks:	20% = 20% = es that are 20.0% pecies are of plant JURISD	Is the ground surfac % Area inundated: Is soil saturated ? [ Other evidence of hy Primary ind Other Marks Water Marks Sediment Deposits Upland Indicators: ✓ Insufficient hydrologic secondary indicators o Remarks:	HYDROL e inundated ? No 1-25 No Depth to sa vdrology? Yes icators: Saturated in Upper 1 Drift Lines Drainage Patterns in indicators met. No prin bserved.	OGY Depth of s 26-75 turated soil: (see Hydrold 2 in. Wetlands hary indicators a	urface water:(in. 76-100 (in.) or Surface ogy Indicators) ✓ No Secondary indicators: Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test nd less than two
ominance = 70       50% = 3         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Less than or equal to 50% -         species are FAC or wetter.         marks:         Is the Hydrophytic Version	$\frac{20\% = 14.0}{20\% =}$ es that are 20.0% species are control of plant $\checkmark$ JURISD station Criterion Met2	Is the ground surfac % Area inundated: Is soil saturated ? [ Other evidence of hy Primary ind Other Marks Sediment Deposits Upland Indicators: ✓ Insufficient hydrologic secondary indicators o Remarks:	HYDROL e inundated ? No 1-25 No Depth to sa rdrology? Yes icators: Saturated in Upper 1 Drift Lines Drainage Patterns in indicators met. No prin bserved.	OGY Depth of s 26-75 turated soil: (see Hydroic 2 in. Wetlands	urface water:(in. 76-100 (in.) or Surface by Indicators) ✓ No Secondary indicators: Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Ind less than two
ominance = 70       50% = 3         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Less than or equal to 50% species are FAC or wetter.         marks:         Is the Hydrophytic Veg         Is the Hydric Soil Criter	20% = es that are 20.0% pecies are ☐ of plant ✓ JURISD etation Criterion Met?	Is the ground surfac % Area inundated: Is soil saturated ? [ Other evidence of hy Primary ind Other Marks Vater Marks Sediment Deposits Upland Indicators: ✓ Insufficient hydrologic secondary indicators o Remarks: ICTIONAL DETERMIN No Is the Sa	HYDROL e inundated ? No 1-25 No Depth to sa vdrology? Yes icators: Saturated in Upper 1 Drift Lines Drainage Patterns in indicators met. No prin bserved.	OGY Depth of s 26-75 turated soil: (see Hydrold in ary indicators a d? No	urface water:
ominance = 70       50% = 3         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Less than or equal to 50% species are FAC or wetter.         marks:         Is the Hydrophytic Veg         Is the Hydrology Criteria         Is the Hydrology Criteria	20% = es that are 20.0% species are □ of plant ✓ JURISD etation Criterion Met? ion Met?	Is the ground surfac % Area inundated: Is soil saturated ? [ Other evidence of hy Primary ind Inundated Water Marks Sediment Deposits Upland Indicators: ✓ Insufficient hydrologic secondary indicators o Remarks: ICTIONAL DETERMIN No Is the Sa No Additional	HYDROL e inundated ? No 1-25 No Depth to sat rdrology? Yes icators: Saturated in Upper 1 Drift Lines Drainage Patterns in indicators met. No prin bserved.	OGY Depth of s 26-75 turated soil: (see Hydrold 2 in. Wetlands hary indicators a	urface water: (in.) [76-100] (in.) or □ Surface by Indicators) ✓ No Secondary indicators: Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Ind less than two

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		NO DE LENNINA	ION DAIA SII				
Project: DIM-2739 D	iMarco Group Developm	ent	Sample Plot	No.:	A-1W	Date:	10/16/200
Town/County/State	Greece /	Monroe / NY	Community 1	Type: Dec	iduous Fo	rest Wetland	
investigators:	B.Carr, P.Kallfe	elz	Flag No.:	A-1 F	ield Phote	o(roll/frame):	A-8
o normal environmental o	conditions exist at the pla	nt community? (if no,	explain): Yes				
NECE:							
(* = Dominant spe	Cies in each stratum )	Mapping		SOILS	;	Differ	ant than
IRE	ES	Unit: Lockport	silty clay loam			mapp	ed? No
Species	Cover Status *	The mapped s	oil type is recog	nized by	the NRCS	as:	
Acer saccharinum	30% FACW *	Hydr	ic 💆 Soil	with potent	ial hydric in	iclusions 🔄 No	on-hydric
Fraxinus pennsylvanica	20% FACW- *	Depth of A no	rizon: <u>6</u> (in.) T				
	20/0 1/4000	Mottled Yes				A horizon s	oil texture
		A horizon mat	rix color	_		(sand/silt/clay/	loam/other)
Dominance = 70 50% =	<b>=</b> 35.0 <b>20% =</b> 14.0	2.5 yr 5	yr 7.5 yr	10 yr 🗹	7.		am
SHRU	BS	2.5 y 5	y Other -		3	B horizon s	oil texture
Species	Cover Status *			· · · · · · · · · · · · · · · · · · ·	2	(sand/silt/clay/	loam/other)
Fraxinus pennsylvanica	30% FACW *	B norizon matri			_	Silt/L	oam
		2.5 yr 5	yr 7.5 yr	10 yr 🗹	7	Mottle abun	dance
		2.5 y 5	y Other -		2	(few/common/r	nany)
		B horizon mottl	e color, if prese		-1	Mai	ny
Dominance = 30 50% -	15.0 00% .0.0				1	Mottle contr	
		2.5 yr 🛄 5 y	r 7.5 yr	10 yr ⊻	E	(faint/distinct/pr	ominent)
HERE	35	2.5 y 5 y	/ Other -			Promi	nent
balaris arundinacea	Cover Status *	Hydric soil indic	ators:				
Carex sp.	3% FACW	Histo	isol	Aquic	Moisture P	ogima	
						cgine	
W			c Epipedon	Redo	ximorphic F	eatures	
<b>y</b>			c Epipedon dic Odor	Redo Sandy	ximorphic Fi / Soils with	eatures Organic Streakin	g or High
ğ			c Epipedon Jic Odor ed	Redo Sandy Orgar	ximorphic Fi / Soils with hic Content i	eatures Organic Streakin in Surface Layer	g or High
ġ.		Upland soil india	c Epipedon dic Odor ed <b>cators:</b> broma of 2 without	Redo Sandy Orgar	ximorphic Fo / Soils with hic Content i Matrix chron	eatures Organic Streakin in Surface Layer	g or High
ğ		Upland soil indic	c Epipedon dic Odor ed <b>cators:</b> hroma of 2 without	Redo Sandy Orgar	ximorphic Fi y Soils with lic Content i Matrix chror	eatures Organic Streakin n Surface Layer ma greater than 2	g or High 2
ÿ		Upland soil indic Matrix cl Remarks:	c Epipedon dic Odor ed c <b>ators:</b> hroma of 2 without	Redo. Sandy Orgar	ximorphic Fo y Soils with iic Content i Matrix chror	eatures Organic Streakin n Surface Layer ma greater than 2	g or High 2
ġ.		Upland soil indic Matrix cl Remarks:	c Epipedon dic Odor ed cators: hroma of 2 without	Redo     Sandy     Organ mottle	ximorphic Fi y Soils with ic Content i Matrix chron	eatures Organic Streakin n Surface Layer ma greater than 2	g or High 2
ÿ		Upland soil india Matrix cl Remarks:	E Epipedon dic Odor ed cators: hroma of 2 without HY	Redo     Sandy     Orgar  mottle  DROLOG	ximorphic Fi y Soils with ic Content i Matrix chror Y Y	eatures Organic Streakin n Surface Layer ma greater than 2	g or High 2
ominance = 33 50% = 1	6.5 <b>20% =</b> 6.6	Upland soil india	c Epipedon dic Odor ed cators: hroma of 2 without HY rface inundated		ximorphic Fi y Soils with ic Content i Matrix chron Y Y Depth of s	eatures Organic Streakin n Surface Layer ma greater than 2 <b>urface water:</b>	g or High 2 (in.;
ominance = 33 50% = 1 VINES	<u>6.5 <b>20% =</b>6.6</u>	Upland soil india Matrix cl Remarks: Is the ground suil % Area inundate	E Epipedon dic Odor ed cators: hroma of 2 without HY fface inundated ed: 1-25	Redo. Sandy Orgar mottle  DROLOG ? No [	ximorphic Fi y Soils with ic Content i Matrix chror Y Pepth of s 26-75	eatures Organic Streakin n Surface Layer ma greater than 2 <b>urface water:</b>	g or High 2 (in.)
ominance = 33 50% = 1 VINES	16.5 <b>20% =</b> 6.6	Upland soil india Matrix cl Remarks: Is the ground sur % Area inundate Is soil saturated	Epipedon dic Odor ed cators: hroma of 2 without HY rface inundated ed: 1-25 ? No Denth		ximorphic Fi y Soils with hic Content i Matrix chror Y Depth of s 26-75 ted soil:	eatures Organic Streakin n Surface Layer ma greater than : urface water: [] [76-100]	g or High 2 (in.
pminance = 33 50% = 1 VINES	<u>16.5 <b>20% =</b>6.6</u>	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundate Is soil saturated	E Epipedon dic Odor ed cators: hroma of 2 without HY fface inundated ed: 1-25 ? No Depth	Redo. Sandy Orgar mottle  DROLOG ? No [ to satura	ximorphic Fi y Soils with ic Content i Matrix chron Y Depth of s 26-75 ted soil:	eatures Organic Streakin n Surface Layer ma greater than 2 curface water: [] [76-100] (in.) or	g or High 2 (in. Surface
ominance = 33 50% = 1 VINES	<u>16.5 <b>20% =</b>6.6</u>	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundate Is soil saturated Other evidence o	E Epipedon dic Odor ed cators: hroma of 2 without HY rface inundated ed: 1-25 ? No Depth f hydrology?	✓ Redo.         Sandy         Orgar mottle          DROLOG ? No I          to satura          Yes (se	ximorphic Fi y Soils with iic Content i Matrix chron Y Depth of s 26-75 ted soil: 	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: [76-100] (in.) or [999 Indicators]	g or High 2 (in. Surface ) 🗌 No
ominance = 33 50% = 1 VINES minance = 50% =	<u>16.5</u> <b>20%</b> =6.6 20% =	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundate Is soil saturated Other evidence o <u>Primary</u>	E Epipedon dic Odor ed cators: hroma of 2 without HY fface inundated ed: 1-25 ? No Depth f hydrology? indicators:	✓ Redo. Sandy Orgar mottle	ximorphic Fi y Soils with ic Content i Matrix chron Y Depth of s 26-75 ted soil: 	eatures Organic Streakin n Surface Layer ma greater than 2 	g or High 2 (in.; ] Surface ) No :ators:
pminance = 33 50% = 1 VINES minance = 50% =	<u>20% = 20% = 1000 = 1000 = 100 = 100 = 100 = 100 = 100 = 100 = 100 = 100 = 100</u>	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence o Primary Inundated	E Epipedon dic Odor ed cators: hroma of 2 without HY rface inundated ed: 1-25 ? No Depth of hydrology? indicators: Saturated in		ximorphic Fi y Soils with ic Content i Matrix chror Y Depth of s 26-75 ted soil: ee Hydrolo	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: [] [76-100] [(in.) or [] ogy Indicators] Secondary indicators] Oxidized Root	g or High 2 (in. Surface No cators:
pminance = 33 50% = 1 VINES minance = 50% = Percent of Dominant Speci OBL, FACW, and/or FAC:	<u>16.5</u> 20% =6.6 20% = es that are <u>100.0%</u>	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence o <u>Primary</u> Inundated ¥ Water Marks	E Epipedon dic Odor ed cators: hroma of 2 without HY rface inundated ed: 1-25 ? No Depth of hydrology? indicators: Saturated in Drift Lines	✓ Redo.         Sandy Orgar mottle DROLOG         ?[No] I [         to satura Yes (se Upper 12 in. Upper 12 in.	ximorphic Fi y Soils with hic Content i Matrix chror Y Depth of s 26-75 ted soil:	eatures Organic Streakin n Surface Layer ma greater than 2 	g or High 2 (in.) Surface No cators: Channels ches
pminance = 33       50% = 1         VINES         minance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s	$\frac{16.5  20\% = 6.6}{20\% =}$ es that are 100.0% species are	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence o <u>Primary</u> Inundated ✓ Water Marks Sediment Deposits	E Epipedon dic Odor ed cators: hroma of 2 without HY fface inundated ed: 1-25 ? No Depth of hydrology? indicators: Saturated in Drift Lines S Drainage Pat	Redo.     Sandy     Orgar  mottle  DROLOG  No  C  T  T  T  T  T  T  T  T  T  T  T  T	ximorphic Fi y Soils with ic Content i Matrix chron Y Depth of s 26-75 ted soil: ee Hydrolo	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: 76-100 (in.) or 99 Indicators) Secondary indic Oxidized Root in Upper 12 In 2 Water-Stained Local Soil Surv	g or High 2 (in.) Surface No Channels ches Leaves Yey Data
pminance = 33       50% = 1         VINES         pminance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Loo than any first sectors	$\frac{16.5  20\% = 6.6}{20\% =}$	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence of Primary Inundated ✓ Water Marks Sediment Deposits Upland Indicators	E Epipedon dic Odor ed cators: hroma of 2 without HY rface inundated ed: 1-25 ? No Depth of hydrology? indicators: Saturated in Drift Lines S Drainage Pat	✓ Redo.     Sandy Orgar mottle      ✓     PROLOG      ?     No     I      C      to satura      ✓     Yes (se Upper 12 in. terns in Wet	ximorphic Fi y Soils with hic Content i Matrix chron Y Depth of s 26-75 ted soil: he Hydrolo	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: [] 76-100 [(in.) or [] gy Indicators] Secondary indic Secondary indic [] Oxidized Root in Upper 12 In [] Water-Stained [] Local Soil Surv [] FAC-Neutral T	g or High 2 (in.) Surface ) No cators: Channels ches Leaves vey Data est
ominance = 33       50% = 1         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Less than or equal to 50% of species are FAC or wetter.	$\frac{16.5  20\% = 6.6}{20\% =}$	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence of Primary Inundated ✓ Water Marks Sediment Deposite Upland Indicators Insufficient hydrolo	E Epipedon dic Odor ed cators: hroma of 2 without HY fface inundated ed: 1-25 ? No Depth f hydrology? Lindicators: Saturated in Drift Lines S Drainage Pat	Redo.     Sandy Orgar mottle	ximorphic Fi y Soils with ic Content i Matrix chron Y Depth of s 26-75 ted soil: ted soil: ands	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: 76-100 (in.) or 9gy Indicators) Secondary indic Oxidized Root in Upper 12 In Oxidized Root in Upper 12 In Water-Stained Local Soil Surv FAC-Neutral To nd less than two	g or High 2 (in.) Surface ) No cators: Channels ches Leaves vey Data est
ominance = 33       50% = 1         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Less than or equal to 50% of species are FAC or wetter.         narks:	16.5   20% = 6.6 $20% = 100.0%$ species are of plant	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence of Primary Unundated ✓ Water Marks Sediment Deposits Upland Indicators Insufficient hydrolo secondary indicato	E Epipedon dic Odor ed Cators: hroma of 2 without HY rface inundated ed: 1-25 ? No Depth of hydrology? indicators: Saturated in Drift Lines Drift Lines Drainage Pat Si: pgic indicators met.	✓ Redo.     Sandy     Orgar  mottle  DROLOG  No  C  to satura  ✓ Yes (se  Upper 12 in. terns in Wet No primary	ximorphic Fi y Soils with ic Content i Matrix chron Y Depth of s 26-75 ted soil: he Hydrolo lands	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: 76-100 (in.) or or or ygy Indicators) Secondary indic Oxidized Root in Upper 12 In Oxidized Root in Upper 12 In Water-Stained Local Soil Surv FAC-Neutral Tin d less than two	g or High
pminance = 33       50% = 1         VINES         pminance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Less than or equal to 50% s         species are FAC or wetter.         marks:	16.5  20% = 6.6 $20% =$ $100.0%$ Species are image of plant im	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundate Is soil saturated Other evidence o <u>Primary</u> Inundated ✓ Water Marks Sediment Deposits Upland Indicators Insufficient hydrolo secondary indicators	E Epipedon dic Odor ed cators: hroma of 2 without HY rface inundated ed: 1-25 ? No Depth of hydrology? indicators: Saturated in 1 Drift Lines S Drainage Pat S: pgic indicators met. ors observed.	Redo.     Sandy Orgar mottle	ximorphic Fi y Soils with iic Content i Matrix chron Y Depth of s 26-75 ted soil: ted soil: he Hydrolo lands	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: [] 76-100 [(in.) or [] or [] gy Indicators] Secondary indic Oxidized Root in Upper 12 In [] Water-Stained [] Local Soil Surv [] FAC-Neutral Tin nd less than two	g or High 2 (in. Surface ) No cators: Channels ches Leaves vey Data est
ominance = 33       50% = 1         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Less than or equal to 50% of species are FAC or wetter.         marks:	$\frac{16.5}{20\%} = \frac{20\%}{100.0\%}$ Species are of plant	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence o Primary □ Inundated ✓ Water Marks Sediment Deposits Upland Indicators □ Insufficient hydrolo secondary indicators ■ Insufficient hydrolo	E Epipedon dic Odor ed Cators: hroma of 2 without HY fface inundated ed: 1-25 ? No Depth of hydrology? indicators: Saturated in Drift Lines S Drainage Pat Si: ogic indicators met. ors observed.	Redo.     Sandy     Orgar  mottle  DROLOG  No  Control  To satura  V Yes (se Upper 12 in. terns in Wet No primary	ximorphic Fi y Soils with ic Content i Matrix chron Y Depth of s 26-75 ted soil: ee Hydrolo lands	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: 76-100 (in.) or 9gy Indicators) Secondary indic Oxidized Root in Upper 12 In Oxidized Root in Upper 12 In Water-Stained Local Soil Surv FAC-Neutral To nd less than two	g or High 2 (in.) Surface Surface No Channels Channels Ches Leaves Yey Data est
ominance = 33       50% = 1         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant s         FAC or wetter.         Less than or equal to 50% of species are FAC or wetter.         narks:	$\frac{16.5  20\% = 6.6}{20\% =}$	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence of Primary Unundated ✓ Water Marks Sediment Deposits Upland Indicators Insufficient hydrolo secondary indicators Insufficient hydrolo secondary indicators Insufficient hydrolo	E Epipedon dic Odor ed Cators: hroma of 2 without HY rface inundated ed: 1-25 ? No Depth of hydrology? indicators: Saturated in Drift Lines S Drainage Pat S Drainage Pat S Drainage Pat S Drainage Pat	Redo     Sandy     Orgar  mottle  DROLOG  No I  to satura  Yes (se Upper 12 in. terns in Wet No primary	ximorphic Fi y Soils with hic Content i Matrix chron Y Depth of s 26-75 ted soil: ted soil: he Hydrolo lands	eatures Organic Streakin n Surface Layer ma greater than 2 surface water: [76-100] (in.) or [999 Indicators] Secondary indis Oxidized Root in Upper 12 In [Oxidized Root in Upper 12 In [Coal Soil Surv FAC-Neutral To nd less than two	g or High 2 (in.) Surface Surface No cators: Channels ches Leaves vey Data est
ominance = 33       50% = 1         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant se         FAC or wetter.         Less than or equal to 50% of species are FAC or wetter.         narks:         Is the Hydrophytic Vegal	16.5       20% =6.6         20% =         les that are       100.0%         species are       ✓         of plant       JURISD         etation Criterion Met?	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence o Primary Upland Indicators Upland Indicators Upland Indicators Insufficient hydrolo secondary indicator Remarks: ICTIONAL DETER Yes Is the	E Epipedon dic Odor ed Cators: hroma of 2 without HY fface inundated ed: 1-25 ? No Depth f hydrology? findicators: Saturated in Drift Lines S Drainage Pat Si Drainage Pat Si MINATION Sample Plot a V	✓ Redo.     Sandy Orgar mottle     ✓ PROLOG ? No     I ↓ to satura ✓ Yes (se Upper 12 in. terns in Wet No primary Vetland?	ximorphic Fi y Soils with ic Content i Matrix chron Y Depth of s 26-75 ted soil: ands indicators an Yes	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: 76-100 (in.) or 9gy Indicators) Secondary indic Oxidized Root in Upper 12 In Oxidized Root in Upper 12 In Water-Stained Local Soil Surv FAC-Neutral Ti- nd less than two	g or High 2 (in.) Surface Surface No Cators: Channels ches Leaves rey Data est
ominance = 33       50% = 1         VINES         ominance =       50% =         Percent of Dominant Speci         OBL, FACW, and/or FAC:         Greater than 50% of plant se         FAC or wetter.         Less than or equal to 50% of species are FAC or wetter.         narks:         Is the Hydrophytic Vegals the Hydric Soil Criter	16.5       20% = 6.6         20% =         les that are       100.0%         species are       ✓         of plant       JURISD         etation Criterion Met?       [	Upland soil india Gleya Upland soil india Matrix cl Remarks: Is the ground sur % Area inundated Is soil saturated Other evidence of Primary Inundated Water Marks Sediment Deposits Upland Indicators Upland Indicators Insufficient hydrolo secondary indicator Remarks: ICTIONAL DETER Yes Is the Yes Addit	E Epipedon dic Odor ed Cators: hroma of 2 without HY rface inundated ed: 1-25 ? No Depth of hydrology? indicators: Saturated in Drift Lines Saturated in Drift Lines Drainage Pat Si Officiators met. Sample Plot a V ional		ximorphic F4 y Soils with iic Content i Matrix chron Y Depth of s 26-75 ted soil: ted soil: he Hydrolo lands indicators an Yes	eatures Organic Streakin n Surface Layer ma greater than 2 urface water: 76-100 (in.) or ogy Indicators) Secondary indic Oxidized Root in Upper 12 In Oxidized Root in Upper 12 In Water-Stained Local Soil Surv FAC-Neutral Tind less than two	g or High 2 (in.) Surface Surface No Channels ches Leaves rey Data est

Prepared by: Terrestrial Environmental Specialists Inc.

Project: DIM-2739 D	WETLA Marco Group Developm		
Town/County/State	Greece /	Monroe / NY Community Type: Decid	luous Forest Upland
Investigators:	B.Carr, D.Coog	Flag No.: Fie	eld Photo(roll/frame):
o normal environmental o	conditions exist at the plai	t community? (if no, explain): Yes	
VEGE	ATION	SOILS	
(* = Dominant spe	cies in each stratum)	Unit: Lairdsville silt loam	Different than
Species	EQ Cover Statue 1	The mapped soil type is recognized by th	e NRCS as:
Fraxinus pennsylvanica	40% FACW *	Hydric Soil with potential	hydric inclusions 🛛 🖌 Non-hydric
Ulmus americana	30% FACW- *	Depth of A horizon: <u>8</u> (in.)	
		Mottled Yes	A horizon soil textur
		A horizon matrix color	(sand/silt/clay/loam/other
Dominance = 70 50% =	<b>20% =</b> 14.0	2.5 yr 5 yr 10 yr ✔	Loam
SHRU	BS	2.5 y 5 y Other -	3 B horizon soil texture
Species	Cover Status *		2 (sand/silt/clay/loam/other)
Ulmus americana	40% FACW- *	B horizon matrix color	Silt/Loam
Rhamnus cathartica	20% FACU+ *	2.5 yr 5 yr 7.5 yr 10 yr 🗹	5 Mottle abundance:
		2.5 y 5 y Other -	(few/common/many)
		B horizon mottle color, if present	Common
		B nonzon motile color, in present	Mottle contract.
50% =	30.0 <b>20%</b> = 12.0	2.5 yr 5 yr 7.5 yr 10 yr 🗹	(faint/distinct/prominent)
HERE	S	2.5 y 5 y Other -	4 Distinct
Species	Cover Status *		•
olidago sp.	10% FAC *		Acisture Regime
oxicodendron radicans	5% FAC	Histic Epipedon	morphic Features
arex sp.	5% FACW	Sulfidic Odor Sandy S	Soils with Organic Streaking or High
		Gleyed Organic	Content in Surface Layer
		Upland soil indicators:	latrix chroma greater than 0
		Remarks:	ative chroma greater than 2
		HYDBOLOGY	1
		Is the ground surface investory to the	<i></i>
ominance = 35 50% = 1	17.5 <b>20% =</b> 7.0		epth of surface water:(in
VINES		% Area inundated: 🗌 1-25 🗌 20	6-75 76-100
		Is soil saturated ? No Depth to saturate	ed soil: (in.) or 🗌 Surface
		Other evidence of hydrology?	
		Primary indicators	nyarology Indicators) 🗶 No
ominance = 50% =	20% =		Secondary indicators:
Percent of Dominant Spec	ies that are	Water Marks	in Upper 12 Inches
OBL, FACW, and/or FAC:	83.3%	Sediment Deposits Drainage Patterns in Wetla	Inds Water-Stained Leaves
Greater than 50% of plant : FAC or wetter	species are 🛛 🔽		Local Soil Survey Data
Less than or equal to 50%	of plant		
species are FAC or wetter.	••	secondary indicators observed.	dicators and less than two
		Remarks: Old furrows in some areas	
marks:			
marks:			
ls the Hydrophytic Vec	JURISE		****
Is the Hydrophytic Veg	JURISE etation Criterion Met?	ICTIONAL DETERMINATION Yes Is the Sample Plot a Wetland?	No
Is the Hydrophytic Veg	JURISE etation Criterion Met? rion Met?	ICTIONAL DETERMINATION Yes Is the Sample Plot a Wetland? No Additional	No

WET	LAND DETERMINATION DATA SHEET
Town/County/State	pment Sample Plot No.: UP-2 Date: 10/23/2003
Investigators:	Monroe / NY Community Type: Deciduous Forest Upland
D.Call, D.Ca	Bogan         Flag No.:         Field Photo (roll/frame):
Do normal environmental conditions exist at the	plant community? (if no, explain): Yes
VEGETATION	
(* = Dominant species in each stratum)	Mapping SOILS Different than
IREES	Unit: Lairdsville silt loam mapped?
Species Cover Status	* I Hudrig The Hudrig Coll type is recognized by the NRCS as:
Acer platanoides 80% FACU	Depth of A horizon     O      O
Fidands americana 10% FACU	$\underline{\bullet}$ (in.)
	A horizon soil texture:
	A horizon matrix color (sand/silt/clay/loam/other)
Dominance = 90 50% = 45.0 20% = 18.0	2.5 yr 5 yr 7.5 yr ✓ 10 yr Loam
SHRUBS	2.5 y 5 y Other - B horizon soil texture:
Species Cover Status	* B horizon matrix calor
Rhamnus cathartica 30% FACU+	* Silt/Loam
10% FACU	2.5 yr 5 yr 7.5 yr ✓ 10 yr 4 Mottle abundance:
	2.5 y 5 y Other - 4 (few/common/many)
	B horizon mottle color, if present
<b>Dominance = 40 50% = 200 20%</b> $-$ <b>20</b> %	
	= 2.5 yr 5 yr 7.5 yr 10 yr (faint/distinct/prominent)
HERBS	2.5 y 5 y Other -
Species         Cover         Status           Rhampus cathartica         20%         FACULE	Hydric soil indicators:
Alliaria petiolata 5% FACU-	* Histosol
A	
<b>W</b> 6	Histic Epipedon Redoximorphic Eastures
ÿ	Histic Epipedon     Redoximorphic Features     Sulfidic Odor     Sandy Soils with Ornanic Strocking or Hist
<b>9</b>	Histic Epipedon     Redoximorphic Features     Sulfidic Odor     Sandy Soils with Organic Streaking or High     Gleyed     Organic Content in Surface Layer
<b>ÿ</b>	Histic Epipedon       Redoximorphic Features         Sulfidic Odor       Sandy Soils with Organic Streaking or High         Gleyed       Organic Content in Surface Layer         Upland soil indicators:       Image: Content in Surface Layer
<b>9</b>	□ Histic Epipedon       □ Redoximorphic Features         □ Sulfidic Odor       □ Sandy Soils with Organic Streaking or High         □ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       □ Matrix chroma of 2 without mottle
<b>&gt;</b>	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle         ☑ Matrix chroma of 2 without mottle       ☑ Matrix chroma greater than 2         Remarks:       ☑
<b>&gt;</b>	<ul> <li>☐ Histic Epipedon</li> <li>☐ Redoximorphic Features</li> <li>☐ Sulfidic Odor</li> <li>☐ Gleyed</li> <li>☐ Gleyed</li> <li>☐ Upland soil indicators:</li> <li>☐ Matrix chroma of 2 without mottle</li> <li>☑ Matrix chroma of 2 without mottle</li> <li>☑ Remarks:</li> </ul>
»	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle         ☑ Matrix chroma of 2 without mottle       ☑ Matrix chroma greater than 2         Remarks:       HYDROLOGY
Dominance = 25 50% = 12.5 20% =5.0	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle         ☑ Matrix chroma of 2 without mottle       ☑ Matrix chroma greater than 2         Remarks:       HYDROLOGY         Is the ground surface inundated ? No       Depth of surface water: (in.)
<u>Dominance = 25 50% = 12.5 20% =5.0</u>	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle         ☑ Matrix chroma of 2 without mottle       ☑ Matrix chroma greater than 2         Remarks:       HYDROLOGY         Is the ground surface inundated ? No       Depth of surface water:(in.)         % Area inundated:       [1:25]
Dominance = 25         50% = 12.5         20% = 5.0           VINES           Species	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ✓ Matrix chroma greater than 2         Remarks:         Matrix chroma of 2 without mottle       ✓ Matrix chroma greater than 2         Remarks:
Dominance = 25         50% = 12.5         20% = 5.0           VINES         Species         Cover         Status         Mitis sp.         20%         FAC         ***	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle         ☑ Matrix chroma of 2 without mottle       ☑ Matrix chroma greater than 2         Remarks:          ☐ Is the ground surface inundated ?       No         Ø Area inundated:       ☐ 1-25         ☐ 26-75       ☐ 76-100         Is soil saturated ?       No         Depth to saturated soil:       (in.) or
Dominance = 25         50% = 12.5         20% = 5.0           VINES         Species         Cover         Status           /itis sp.         20%         FAC         *	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ✓ Matrix chroma greater than 2         Remarks:        ✓ Matrix chroma greater than 2         HYDROLOGY         Is the ground surface inundated ?       No         Ø Area inundated:       1-25       26-75       76-100         Is soil saturated ?       No       Depth to saturated soil:       (in.) or       Surface         Other evidence of hydrology?       Yes (see Hydrology Indicators)       ✓ No
Dominance = 25       50% = 12.5       20% = 5.0         VINES       Species       Cover       Status         Vitis sp.       20%       FAC       *         vominance = 20       50% = 10.0       20% = 4.0	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ✓ Matrix chroma greater than 2         Remarks:        ✓ Matrix chroma greater than 2         Remarks:           ✓       HYDROLOGY         Is the ground surface inundated ?       No       Depth of surface water:
Dominance = 25       50% = 12.5       20% = 5.0         VINES       Species       Cover       Status       *         Vitis sp.       20%       FAC       *         *       20%       FAC       *         *       20%       = 4.0       *	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle         ☑ Matrix chroma of 2 without mottle       ☑ Matrix chroma greater than 2         Remarks:           HYDROLOGY         Is the ground surface inundated ?       No         Depth of surface water:       (in.)         % Area inundated:       1-25       26-75       76-100         Is soil saturated ?       No       Depth to saturated soil:       (in.) or       Surface         Other evidence of hydrology?       Yes (see Hydrology Indicators)       ✓ No         Primary indicators:       Secondary indicators:         Inundated       ☐ Saturated in Upper 12 in.       Oxidized Root Channels
Dominance = 25         50% = 12.5         20% = 5.0           VINES         Species         Cover         Status         *           Vitis sp.         20%         FAC         *           */itis sp.         20% = 10.0         20% = 4.0           Percent of Dominant Species that are OBL, FACW, and/or FAC*         16.7%	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ☑ Matrix chroma greater than 2         Remarks:       HYDROLOGY         Is the ground surface inundated ?       No       Depth of surface water:(in.)         % Area inundated:       ☐ 1-25       ☐ 26-75       ☐ 76-100         Is soil saturated ?       No       Depth to saturated soil:(in.) or ☐ Surface         Other evidence of hydrology?       Yes (see Hydrology Indicators)       ☑ No         Primary indicators:       Secondary indicators:       Secondary indicators:
Dominance = 25 $50\% = 12.5$ $20\% = 5.0$ VINESSpeciesCoverStatusVitis sp. $20\%$ FACNominance = 20 $50\% = 10.0$ $20\% = 4.0$ Percent of Dominant Species that are OBL, FACW, and/or FAC: $16.7\%$ Greater than 50% of plant species are $50\% = 10.0$	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:
Dominance = 25 $50\% = 12.5$ $20\% = 5.0$ VINESVINESSpeciesCoverStatusVitis sp. $20\%$ FACVominance = 20 $50\% = 10.0$ $20\% = 4.0$ Percent of Dominant Species that are OBL, FACW, and/or FAC:16.7%Greater than 50% of plant species are FAC or wetter.	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ✓ Matrix chroma greater than 2         Remarks:       HYDROLOGY         Is the ground surface inundated ?       No       Depth of surface water:(in.)         % Area inundated:       1-25       26-75       76-100         Is soil saturated ?       No       Depth to saturated soil:(in.) or       Surface         Other evidence of hydrology?       Yes (see Hydrology Indicators)       ✓ No         Primary indicators:       Secondary indicators:       Secondary indicators:         ☐ Inundated
Dominance = 25 $50\% = 12.5$ $20\% = 5.0$ VINESSpeciesCoverStatusVitis sp. $20\%$ FACNominance = 20 $50\% = 10.0$ $20\% = 4.0$ Percent of Dominant Species that are OBL, FACW, and/or FAC: $16.7\%$ Greater than 50% of plant species are FAC or wetter.Less than or equal to 50% of plant species are FAC or wetter.	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ✓ Matrix chroma greater than 2         Remarks:       HYDROLOGY         Is the ground surface inundated ?       No       Depth of surface water:       (in.)         % Area inundated:       1-25       26-75       76-100         Is soil saturated ?       No       Depth to saturated soil:       (in.) or       Surface         Other evidence of hydrology?       Yes (see Hydrology Indicators)       No       No         Primary indicators:       Secondary indicators:       in Upper 12 in.       Oxidized Root Channels in Upper 12 in.         Water Marks       Drift Lines       In Upper 12 in.       Oxidized Root Channels in Upper 12 inches       Sediment Deposits ☐ Drainage Patterns in Wetlands       Water-Stained Leaves         Upland Indicators:       ☐ FAC-Neutral Test       ✓ Insufficient hydrologic indicators met. No primary indicators and leas the state of the
Dominance = 25 $50\% = 12.5$ $20\% = 5.0$ VINESSpeciesCoverStatusVitis sp. $20\%$ FACNominance = 20 $50\% = 10.0$ $20\% = 4.0$ Percent of Dominant Species that are OBL, FACW, and/or FAC: $16.7\%$ Greater than 50% of plant species are FAC or wetter.Image: Comparison of the species and the species are Species are FAC or wetter.Less than or equal to 50% of plant species are FAC or wetter.Image: Comparison of the species are Species are FAC or wetter.	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:
Dominance = 25 $50\% = 12.5$ $20\% = 5.0$ VINESSpeciesCoverStatusVitis sp. $20\%$ FACVominance = 20 $50\% = 10.0$ $20\% = 4.0$ Percent of Dominant Species that are OBL, FACW, and/or FAC: $16.7\%$ Greater than 50% of plant species are FAC or wetter.Image: Comparison of the species are Less than or equal to 50% of plant species are FAC or wetter.Less than or equal to 50% of plant species are FAC or wetter.Image: Comparison of the species are Species are FAC or wetter.Synchronic Species are FAC or wetter.Image: Comparison of the species are Species are FAC or wetter.	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ✓ Matrix chroma greater than 2         Remarks:       HYDROLOGY         Is the ground surface inundated ?       No       Depth of surface water:       (in.)         % Area inundated:       1-25       26-75       76-100         Is soil saturated ?       No       Depth to saturated soil:       (in.) or       Surface         Other evidence of hydrology?       Yes (see Hydrology Indicators)       ✓ No         Primary indicators:       Secondary indicators:       in Upper 12 in.         ☐ Nundated       ☐ Saturated in Upper 12 in.       Oxidized Root Channels in Upper 12 Inches         Water Marks       Drift Lines       Water-Stained Leaves         Sediment Deposits       Drainage Patterns in Wetlands       Water-Stained Leaves         Upland Indicators:       FAC-Neutral Test       ✓ Insufficient hydrologic indicators met. No primary indicators and less than two secondary indicators observed.         Remarks:        Insufficient hydrologic indicators met. No primary indicators and less than two
Dominance = 25 $50\% = 12.5$ $20\% = 5.0$ VINESSpeciesCoverStatusVitis sp. $20\%$ FACNominance = 20 $50\% = 10.0$ $20\% = 4.0$ Percent of Dominant Species that are OBL, FACW, and/or FAC: $16.7\%$ Greater than 50% of plant species are FAC or wetter.Image: Comparison of the species and the species are FAC or wetter.Less than or equal to 50% of plant species are FAC or wetter.Image: Comparison of the species are FAC or wetter.I	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Sulfidic Odor       ☐ Sandy Soils with Organic Streaking or High         ☐ Gleyed       Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ✓ Matrix chroma greater than 2         Remarks:         ✓ Matrix chroma greater than 2         Remarks:            Y       Area inundated:       1-25       26-75       76-100         Is soil saturated?       No       Depth of surface water:       (in.)         % Area inundated:       1-25       26-75       76-100         Is soil saturated?       No       Depth to saturated soil:       (in.) or       Surface         Other evidence of hydrology?       Yes (see Hydrology Indicators)       ✓ No         Primary indicators:       Secondary indicators:       in Upper 12 lnches         ☐ Hundated       Saturated in Upper 12 in.       Oxidized Root Channels         [ Nourdated       Saturated in Upper 12 in.       Oxidized Root Channels         [ Water Marks       Drainage Patterns in Wetlands       Water-Stained Leaves         [ Local Soil Survey Data       Local Soil Survey Data         Upland Indicators:       FAC-Neutral Test         ✓ Insu
Dominance = 25       50% = 12.5       20% = 5.0         VINES       Species       Cover       Status       Yes         Vitis sp.       20%       FAC       Acc       Acc         Vominance = 20       50% = 10.0       20% = 4.0       Acc       Acc         Percent of Dominant Species that are OBL, FACW, and/or FAC:       16.7%       Acc       Acc         Greater than 50% of plant species are FAC or wetter.       Image: Species are FAC or wetter.       Image: Species are FAC or wetter.       Image: Species are FAC or wetter.         It is the transmerker       JURIS       Image: Species are FAC or wetter.       Image: Species are FAC or wetter.	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Gleyed       ☐ Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ☑ Matrix chroma greater than 2         Remarks:       ☐ HYDROLOGY         Is the ground surface inundated ?       No       Depth of surface water:       (in.)         % Area inundated:       ☐ 1-25       ☐ 26-75       ☐ 76-100         Is soil saturated ?       No       Depth to saturated soil:       (in.) or       Surface         Other evidence of hydrology?       Yes (see Hydrology Indicators)       ☑ No         Primary indicators:       Secondary indicators:       ☐ 0xidized Root Channels         ☐ Hundated       ☐ Saturated in Upper 12 in.       ☐ 0xidized Root Channels         ☐ Water Marks       Drift Lines       ☐ Upper 12 Inches         ☐ Sediment Deposits       Drainage Patterns in Wetlands       ☐ Water-Stained Leaves         ☐ Local Soil Survey Data       ☐ Local Soil Survey Data       ☐ Local Soil Survey Data         ☐ Upland Indicators:       ☐ Insufficient hydrologic indicators met. No primary indicators and less than two secondary indicators observed.       Remarks:         SDICTIONAL DETERMINATION       Statement
Dominance = 25       50% = 12.5       20% = 5.0         VINES         Species       Cover       Status         Vitis sp.       20%       FAC         Nominance = 20       50% = 10.0       20% = 4.0         Percent of Dominant Species that are OBL, FACW, and/or FAC:       16.7%         Greater than 50% of plant species are FAC or wetter.       Is the Hydrophytic Vegetation Criterion Met*	☐ Histic Epipedon       ☐ Redoximorphic Features         ☐ Gleyed       ☐ Organic Content in Surface Layer         Upland soil indicators:       ☐ Matrix chroma of 2 without mottle       ✓ Matrix chroma greater than 2         Remarks:       ☐ HYDROLOGY         Is the ground surface inundated ?       No       Depth of surface water:       (in.)         % Area inundated:       ☐ 125       ☐ 26-75       ☐ 76-100         Is soil saturated ?       No       Depth to saturated soil:       (in.) or       Surface         Other evidence of hydrology?       Yes (see Hydrology Indicators)       ✓ No         Primary indicators:       Secondary indicators:       ☐ 0xidized Root Channels         Inundated       ☐ Saturated in Upper 12 in.       ☐ 0xidized Root Channels         Water Marks       ☐ Drit Lines       ☐ Upland Indicators:       ☐ Upland Indicators:         ✓ Insufficient hydrologic indicators met. No primary indicators and less than two secondary indicators observed.       Remarks:         SDICTIONAL DETERMINATION       ?       No
Dominance = 25       50% = 12.5       20% = 5.0         VINES         Species       Cover       Status         Vitis sp.       20%       FAC         Nominance = 20       50% = 10.0       20% = 4.0         Percent of Dominant Species that are OBL, FACW, and/or FAC:       16.7%         Greater than 50% of plant species are FAC or wetter.       Image: Constant species are FAC or wetter.         Less than or equal to 50% of plant species are FAC or wetter.       Image: Constant species are FAC or wetter.         JURIS       Is the Hydrophytic Vegetation Criterion Met?         Is the Hydric Soil Criterion Met?       Soil Criterion Met?	☐ Histic Epipedon ☐ Redoximorphic Features   ☐ Gleyed Organic Content in Surface Layer   Upland soil indicators: ☐ Matrix chroma of 2 without mottle   ☑ Matrix chroma of 2 without mottle ☑ Matrix chroma greater than 2   Remarks:    Is the ground surface inundated ? No   No Depth of surface water:   (in.)   % Area inundated:   [1:25]   [2:6-75]   [7:6-100]   Is soil saturated ?   No   Depth to saturated soil:   (in.) or   Sufface   Other evidence of hydrology?   Yes (see Hydrology Indicators)   ☑ No   Primary indicators:   ☑ No   Primary indicators:   ☑ No   Water Marks   ☑ Drift Lines   ☑ Noufficient hydrologic indicators met. No primary indicators and less than two secondary indicators observed.   Remarks:   SDICTIONAL DETERMINATION   ?   ?   No   Additional

Prepared by: Terrestrial Environmental Specialists, Inc.

Project     Diskards droup Development     Sample Piot No::     UP-3     Date:     1022/200       Investigators:     B Carr D Doogan     Fig No::     Field Photorolitrame;       Investigators:     B Carr D Doogan     Field Photorolitrame;       Investigators:     B Carr D Doogan     Field Photorolitrame;       Investigators:     B Carr D Doogan     Field Photorolitrame;       Investigators:     VECETATION     Field Photorolitrame;       Investigators:     VECETATION     SOLLS     Different than mapped?       Intels:     VECETATION     SOLLS     Different than mapped?       Intels:     Species     Cover Status     The mapped soll type is recognized by the NRCS as:     Intels: topo solution       Intels:     Solution:     20%     FACV     Intels:     Intels:       Dominance = 60     50% = 30.0     20% = +2.0     Intels:     Intels:     Intels:       Strutus:     20%     FACU     Intels:     Intels:     Intels:       Dominance = 60     50% = 33.5     20% = +13.4     Intels:     Intels:     Intels:       Derive anothing:     20%     FACU     Intels:     Intels:     Intels:       Synchen Indicators:     10%     FACU     Intels:     Intels:     Intels:       Synchen Indicators:	Project: Ditt 0700 Dit	WETLA	AND DETERMINATION DATA SHEET
Investigators       Operation       Dearbors       Field Photo routifiame:         Ponormal environmental conditions exist at the plant community? (If no. explain): Yes       Field Photo routifiame:         Ponormal environmental conditions exist at the plant community? (If no. explain): Yes       Solids       Different than mapped?         Yes       Solids       Convert Status :       Ifferent than mapped?       The mapped solid yes is recognized by the NRCS as:         Previous ponneymentice       20%       FACW :       Solids       A horizon matrix color         Dominance = 60       50% = 30.0       20% = 12.0       Noticel NS       A horizon soil texture is and subulation in sufficience of the NRCS as:         Dominance = 60       50% = 30.0       20% = 12.0       B horizon matrix color       2.5 yr = 7.5 yr = 10 yr = 4.6       B horizon soil texture is and subulation in sufficience of Clay         Concrus abond       20% FACU :       FACW :       B horizon matrix color       2.5 yr = 5 yr = 7.5 yr = 10 yr = 4.6       B horizon matrix color       Bindian disclose and subulation and subulation is subulation and subul	Town/County/State	larco Group Developm	ient Sample Plot No.: UP-3 Date: 10/23/200
Prior       Field Photo/indifiants:         Portural environmental conditions exist at the plant community? (If no, explain): Yes         VEGETATION (* = Dominant species in each stratum) TREES       Mapping Solid       SOILS       Different than mapped?         Species       Cover Status **         Paramus permyohynics       40% FACU**         Dominance = 60       50% = 30.0       20% = 12.0         SHUBS       A horizon matrix color       25 yr = 5 yr = 75 yr ± 10 yr = 2.5 1       25 yr = 5 yr = 75 yr ± 10 yr = 2.5 1       25 yr = 5 yr = 75 yr ± 10 yr = 2.5 1       25 yr = 5 yr = 75 yr ± 10 yr = 2.5 1       25 yr = 5 yr = 75 yr ± 10 yr = 2.5 1       25 yr = 5 yr = 75 yr ± 10 yr = 2.5 1       25 yr = 5 yr = 75 yr ± 10 yr = 2.5 1       25 yr = 5 yr = 75 yr ± 10 yr = 2.5 1       25 yr = 5 yr = 75 yr ± 10 yr = 2.5 1       4       Horizon matrix color         Deminance = 67       50% = 33.5       20% = 13.4       Hydric solid latture 25 yr = 5 yr = 75 yr = 10 yr = 1.5 1       4       Hydric solid latture Contrast incommany       Matte contrast: Calid datinet promomany         Deminance = 67       50% = 32.5       20% = 72.0       Hydric solid latture 25 yr = 5 yr = 72 yr = 10 yr = 1.5 1       4       Hydric solid latture Calid datinet promomany         Deminant Steades       10% FACU + 10% cost       FACU + 10	Investigators:	B Carr, D Cooc	Monroe / NY Community Type: Deciduous Forest Upland
Mapping             SOLS             SOLS			Field Photo(roll/frame):
VEGETATION (* = Dominance since and histolum.) IREES       Mapping       SOILS       Different than mapped?         Species       Cover       Status	Do normal environmental co	nditions exist at the pla	nt community? (if no, explain): Yes
(* = Dominant species in each status):       Ifferent than         Species       Cover, Status         ************************************	VEGETA	TION	2002
TREES       mapped? ∑         Sector       Sector       The mapped oil type is recognized by the NRCS as:         The mapped oil type is recognized by the NRCS as:       Depth of A horizon:       § (in.)         Motice Induction       20% FACW       Image: Sector       Sector       A horizon:       § (in.)         Dominance = 60       50% = 30.0       20% = 74.0V       Image: Sector       Image: Sector <t< td=""><td>( * = Dominant specie</td><td>es in each stratum)</td><td>Mapping SOILS Different than</td></t<>	( * = Dominant specie	es in each stratum)	Mapping SOILS Different than
Species       Cover (Status +	TREES	5	The mapped soil type is recognized by the NBCS and mapped? Yes
Limus americana       20%       PACV         Depth of A horizon: g (in.)       Mottled Na         Dominance = 60       56% = 30.0       20% = 12.0         SHRUBS       Species       Cover, Status         Darons balancia       20% FACU         Larons balancia       20% FACU         Larons balancia       20% FACU         Zerrus anomum       2% FACW         Species       Cover, Status         Tambra cathancia       20% FACU         Zerrus anomum       2% FACW         Varianto and tartica       20% FACU         Species       Cover Status         Tymanhum bulase       20% FACU         Juncela vulganis       10% FACU         Variantum bulase       20% FACU         Juncela vulganis       10% FACU         Vinela vulganis <td>Species Fraxinus pennsylvanica</td> <td>Cover Status</td> <td>Hydric Soil with potential hydric inclusions</td>	Species Fraxinus pennsylvanica	Cover Status	Hydric Soil with potential hydric inclusions
Mottled       No         Dominance = 60       50% = 30.0       20% = 12.0         Sharus       A horizon matrix color         Species       Cover       Status         Rhamus cahartica       30% FACU - 25 yr 5 yr 0 ther -       1         Jacrus abootic       15% FACU - 25 yr 5 yr 0 ther -       1         Jacrus abootic       15% FACU - 25 yr 5 yr 0 ther -       4         Jacrus abootic       25 yr 5 yr 0 ther -       4         Species       Cover Status - 7       1         Species       Cover Status - 7       10 yr -       4         Species       Cover Status - 7       10 yr -       4         Species       Cover Status - 7       10 yr -       4         What iterain spanningitio       15% FACU +       11 kitosoti       Aquic Molstura Regime         Vintaria spanningitio       15% FACU +       11 kitosoti       Aquic Molstura Regime       11 kitosoti         Water Span addama to 20% FACU +       11 kitosoti       Aquic Molstura Regime       11 kitosoti       12 kitosoti         Valiand spanningitio       15% FACU +       11 kitosoti       Aquic Molstura Regime       11 kitosoti         Valiand span addama to 20% FACU +       11 kitosoti       Aquic Molstura Regime       11 kitosoti <td< td=""><td>Ulmus americana</td><td>20% FACW *</td><td>Depth of A horizon: 8 (in.)</td></td<>	Ulmus americana	20% FACW *	Depth of A horizon: 8 (in.)
Dominance = 60       50% = 30.0       20% = 12.0         SHRUES       Sincurs       25 yr       5 yr       10 yr       2.5         Series       Cover Status       1       B horizon matrix color       2.5         Concines tatanca       20% FACU       2.5 yr       5 yr       10 yr       2.5         Deminance = 40% FACU       2.5 yr       5 yr       7.5 yr       10 yr       4       6         Dominance = 67       50% FACU       2.5 yr       5 yr       7.5 yr       10 yr       4       6         Species       Cover Status       1       2.5 yr       5 yr       7.5 yr       10 yr       4       6       6         B horizon matrix color       2.5 yr       5 yr       7.5 yr       10 yr       4       6       6       10 yr       10 yr       10 yr       2.5 yr       5 yr       10 yr       4       6       10 yr			
Dominance = 60       50% = 30.0       20% = 12.0         ShrRuBS       Species       Cover       Status         Species       Cover       Status       1         ShrRuBS       Species       Cover       Status         Journas biological tatarica       20%       FACU       2.5 yr       5 yr       7.5 yr       10 yr       4       6         Dominance = 67       50% = 33.5       20% = 13.4       2.5 yr       5 yr       0 ther       6       Mottle abundance:         Yanchum louisaee       20% FACU       2.5 yr       5 yr       0 ther       6       6       Mottle abundance:         Yanchum louisaee       20% FACU       2.5 yr       5 yr       10 yr       4       6       6       Mottle abundance:         Yanchum louisaee       20% FAC       1       Hydric soil indicators:       10 yr       4       6       10 yr       4       6       10 yr       10 yr       10 yr       10 yr       4       6       10 yr			A horizon matrix color (sand/silt/clay/loam/other)
SHRUBS         Species       Cover       Status       1         Species       Cover       Status       1         Ammus cathartica       30%       FACU+       2.5 yr       5 yr       1 yr       1         Derivas blanca       20%       FACU+       2.5 yr       5 yr       1 yr       Motile abundance:         Derivas blanca       20%       FACU+       2.5 yr       5 yr       1 yr       4       6         Derivas blanca       20%       FACU+       2.5 yr       5 yr       1 yr       4       6         Derivas abbolor       15%       FACU+       2.5 yr       5 yr       1 yr       4       6         Derivas abbolor       2.5 yr       5 yr       7.5 yr       10 yr       4       6         B horizon motile color, if present       2.5 yr       5 yr       1 yr       Motile contrast:       1 wotile contrast:	Dominance = 60 50% = 3	0.0 <b>20%</b> = 12.0	Loam
Status         Status         Thamus catharica       30%       FACU         20-cross bioloid       15%       FACU       2.5 yr.       5 yr.       7.5 yr.       10 yr.       4         2.5 yr.       5 yr.       7.5 yr.       10 yr.       4       6       6         2.5 yr.       5 yr.       7.5 yr.       10 yr.       4       6       6         2.5 yr.       7.5 yr.       10 yr.       4       6       6       6         bominance = 67       50% = 33.5       20% = FACU       7.5 yr.       10 yr.       4       6       6       6         bominance = 67       50% = 33.5       20% = FAC       10 yr.       10 yr.       4       6		2078 - 12.0	= 2.5 yr 5 yr 7.5 yr 10 yr 2.5
species Cover   Strutu + indicators   andreas tatarica 20% FACU + indicators   2strus simonum 2% FACW   borninance = 67 50% = 33.5   20% FAC 5 yr   ist es p. 20% FAC   ist es p. 20% FAC   indenia catarica 20% FAC   ist es p. 20% FAC   indenia catarica 20% FAC   ist es p. 20% FAC   indenia granificia 10% FACU   indenia granificia 10	SHRUB	5	B horizon soil texture
conters tataria       Contex       Contex       System       7.5 yr       10 yr       4         contrus amonum       2%       FACU       -       6       Mottle abundance:         contrus amonum       2%       FACU       -       6       Mottle abundance:         contrus amonum       2%       FACU       -       6       Mottle abundance:         contros toolor       15%       FACU       -       6       Mottle abundance:         contros toolor       15%       FACU       -       6       Mottle abundance:         Species       Cover       Status       -       -       6       Mottle contrast:         ynanchum louseae       20%       FAC       -       -       100 yr       4       6         uhama graminolia       1%       FAC       -       -       100 yr       4       6         uhama graminolia       1%       FAC       -       -       Histosol       -       Aquic Misture Regime         uhama graminolia       10%       FAC       -       -       Mottle contrast:       -       -         coopers sp.       10%       FAC       -       -       Mottle contrast:       -       - <td>Species Rhamnus cathartica</td> <td>30% EACULE *</td> <td>B horizon matrix color</td>	Species Rhamnus cathartica	30% EACULE *	B horizon matrix color
Juercus amonum       15%       FACW+       4       Mottle abundance:         Jornus amonum       2%       FACW       4       6       (few.common/many)         Jornus anomum       2%       FACW       7.5 yr       10 yr       (few.common/many)         Jornus anomum       2%       FACU       10 yr       (few.common/many)       Mottle abundance:       (few.common/many)         Jornula vulgati       10%       FACU+       (few.common/many)       Histosol       Aquic Moisture Regime         Jeracting argaminfolia       16%       FACU+       (few.common/many)       Mottie abundance:       (few.common/many)         vithama graminfolia       16%       FACU+       (few.common/many)       Motte abundance:       (few.common/many)         vithama graminfolia       16%       FACU+       (few.common/many)       Motte abundance:       (few.common/many)         vithamate       10%       FA	_onicera tatarica	20% FACU *	2.5 yr 5 yr 7.5 vr 10 vr
2.0       PAUV         bominance = 67       50% = 33.5         2.5 yr ☐       5 yr ☐         Species       Cover         Sters p.       20%         2.5 yr ☐       5 yr ☐         HERBS       Hydric soil indicators:         (famt/distinct/prominent)         12.5 yr ☐       5 yr ☐         10%       FAC +         Histic Epipedon       ☐         10%       FAC +         Histic Epipedon       ☐         2.6 yr ☐       5 yr ☐         10%       FAC +         Histic Epipedon       ☐         2.6 yr ☐       Y ☐         10%       FAC +         Histic Epipedon       ☐         2.6 yr ☐       Y ☐         10%       OBL         Upland soil indicators:       ☐         ☐       Matrix chroma of 2 without motile         Y ☐       10%         yr ☐       Y ☐	Quercus bicolor Corpus amomum	15% FACW+ *	2.5 y 5 y Other - (few/common/man)
bominance = 67       50% = 33.5       20% = 13.4         LERBS       2.5 yr 3 yr 7.5 yr 0 yr 10		270 FACW	6 (tew/conindr/hlany)
Iominance = 67       50% = 33.5       20% = 13.4         HERBS        2.5 yr       5 yr       7.5 yr       10 yr       Italut/distinct/prominent)         Species       Cover       Status       *       2.5 yr       5 yr       0 ther -       Italu/distinct/prominent)         ynanchum louiseae       20%       FAC       *       Histosol       Aquic Moisture Regime         immus cathartica       20%       FAC       *       Histosol       Gayaic Sie with Organic Streaking or High         organic Content in Surface Layer       Upland soil indicators:       Strekey       Organic Streaking or High         winela vulgaria       10%       FAC       Gleyed       Organic Streaking or High         winela vulgaria       10%       FAC       Gleyed       Organic Content in Surface Layer         Upland soil indicators:       Matrix chroma greater than 2       Remarks:         minance = 105       50% = 52.5       20% = 20% =       No       Depth of surface water:       (in.)         Y       Area inundated:       1:25       26.75       76-100       Is soil saturated ?       No       Depth of surface water:       (in.)         Y       Area inundated:       1:25       26.75       76-100       Is soil saturated ?			B horizon mottle color, if present
HERBS         Species       Cover       Status       1         ymanchum louiseae       20%       FAC       1         stor sp.       20%       FAC       1         unaltavitaria       10%       FAC       1         unaltavitaria       10%       FAC       1         unaltavitaria       10%       FAC       1         opposite       50% = 52.5       20% = 21.0       1         Wines       1       1       1       25       26-75       76-100         winance = 105       50% = 20% = 20% = 1       1       1       25       26-75       76-100       1	ominance = 67 50% = 33	3.5 <b>20% =</b> 13.4	2.5 yr         5 yr         7.5 yr         10 yr         Mottle contrast: (faint/distinct/organizat)
Species       Cover       Status       *         ynanchum louiseae       20%       FAC       *         ammus cathartica       20%       FAC       *         harmus cathartica       20%       FAC       *         unella vulgaris       10%       FAC       *         wicodendron radicans       10%       FAC       *         copus sp.       10%       FAC       Suffide Oder       Sandy Soils with Organic Streaking or High         organic Content in Surface Layer       Oge       Upland soil indicators:       Matrix chroma of 2 without motile       ✓ Matrix chroma greater than 2         minance = 105       50% = 52.5       20% = 21.0       Matrix chroma of 2 without motile       ✓ Matrix chroma greater than 2         minance =       50% = 52.5       20% =       *       *       *       *         minance =       50% =       20% =       *       *       *       *       *       *       *       *       *       No       No       No       No       * </td <td>HERBS</td> <td></td> <td>2.5 y 5 y Other -</td>	HERBS		2.5 y 5 y Other -
ynanchum louiseae 20% FAC   aharnus cathartica 20% FAC   itamia graminifula 15% FAC   15% FAC Histis Epipedon   unella vulgaria 10% FAC   ixcodendron radicans 10% </td <td>Species</td> <td>Cover Status *</td> <td></td>	Species	Cover Status *	
minance = 20% FACU+   uthami graminfolia 15% FACU+   uthami graminfolia 15% FACU+   vincela vulgaris 10% FACU+   viccodendron radicans 10% FAC   opus sp. 10% OBL   Upland soil indicators:   uminance = 105 50% = 52.5   20% = 20% =   WiNES   minance = 50% = 20% =   Percent of Dominant Species that are Soil, FAC or wetter.   OBL, FACW, and/or FAC: S2.5%   Greater than 50% of plant species are FAC or wetter. S2.5%   Greater than 50% of plant species are FAC or wetter. S2.5%   JURISDICTIONAL DETERMINATION Is the Sample Plot a Wetland?   Is the Hydrophytic Vegetation Criterion Met? Yes   Is the Hydrology Criterion Met?   No Xeamarks:	ynanchum louiseae ster sn	20% FAC *	Hydric soil indicators:
uthamia graminifolia 15% FAC munella vulgaris 10% FACU+ pxicodendron radicans 10% FACU+ Percent of Dominant Species that are paceis are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. Less than two secondary indicators observed. Remarks: DURISDICTIONAL DETERMINATION Is the Hydrophytic Vegetation Criterion Met? No Additional Remarks: No No No No No No No No No No	hamnus cathartica	20% FAC	
Indexia vulgars 10% FACU+   Copylic Sp. 10% FAC   Copylic Sp. 10% OBL	uthamia graminifolia	15% FAC	
Image: Sp. 10% OB   10% OB   Upland soil indicators:   Matrix chroma of 2 without mottle Matrix chroma greater than 2   Remarks:   Imminance = 105 50% = 52.5 20% =21.0 VINES Is the ground surface inundated ? No Depth of surface water: (in.) % Area inundated: 1:25 ? 20% = Percent of Dominant Species that are 082.5% OBL, FACW, and/or FAC: Greater than 50% of plant species are FAC or wetter. Less than or equal to 50% of plant species are FAC or wetter. JURISDICTIONAL DETERMINATION Is the Hydrophytic Vegetation Criterion Met? No Remarks: UPINOLOGY Water Saturated ? No No Remarks: No Remarks: No No Remarks: No No Remarks: No Remarks: No No Remarks: No No Remarks: No	runella vulgaris Dxicodendron radicans	10% FACU+	Gleyed Organic Content in Surface Laver
☐ Matrix chroma of 2 without mottle ✓ Matrix chroma greater than 2         @minance = 105       50% = 52.5       20% =21.0         WINES       HYDROLOGY         Is the ground surface inundated ? No       Depth of surface water:	/copus sp.	10% OBL	Upland soil indicators:
minance = 105       50% = 52.5       20% =21.0         VINES       Is the ground surface inundated ? No Depth of surface water:			Matrix chroma of 2 without mottle Matrix chroma greater than 2
Implication       HYDROLOGY         Implication       HYDROLOGY         Is the ground surface inundated ?       No       Depth of surface water:			Remarks:
Implication       HYDROLOGY         Implication       Some solution         Implication       Solution         Implicating       Solution			
bminance = 105       50% = 52.5       20% =21.0         VINES       Is the ground surface inundated ? No       Depth of surface water:(in.)         % Area inundated:       1-25       26-75       76-100         Is soil saturated?       No       Depth to saturated soil:(in.) or       Surface         minance =       50% =       20% =        No       Depth to saturated soil:(in.) or       Surface         Percent of Dominant Species that are OBL, FACW, and/or FAC:       62.5%        Mater Marks       Drift Lines        Oxidized Root Channels in Upper 12 in       Oxidized Root Channels in Upper 12 linches        Oxidized Root Channels in Upper 12 linches        Water-Stained Leaves			HYDROLOGY
Mindudes = 103       50% = 52.3       20% # ±21.0         VINES       % Area inundated:       1-25       26-75       76-100         Is soil saturated ?       No       Depth to saturated soil:       (in.) or       Surface         minance =       50% =       20% =       Is soil saturated ?       No       Depth to saturated soil:       (in.) or       Surface         Percent of Dominant Species that are OBL, FACW, and/or FAC:       62.5%       Greater than 50% of plant species are FAC or wetter.       Sediment Deposits       Drift Lines       Oxidized Root Channels         Issues than or equal to 50% of plant species are FAC or wetter.       Issues than or equal to 50% of plant       Sediment Deposits       Drainage Patterns in Wetlands       Upland Indicators:       FAC-Neutral Test         JURISDICTIONAL DETERMINATION       Is the Hydrophytic Vegetation Criterion Met?       Yes       Is the Sample Plot a Wetland?       No         Is the Hydrology Criterion Met?       No       Additional       Is the Sample Plot a Wetland?       No	minance = 105 = 50% = 50	5 <b>00</b> % 04 0	Is the ground surface inundated ? No Depth of surface water: (in.)
MINES       Immundated.	VINEC	<u>5 20% =21.0</u>	% Area inundated: 125
minance =       50% =       20% =         Percent of Dominant Species that are OBL, FACW, and/or FAC:       62.5%         Greater than 50% of plant species are FAC or wetter.       ✓         Less than or equal to 50% of plant species are FAC or wetter.       ✓         Is the Hydrophytic Vegetation Criterion Met?       Yes         Is the Hydrology Criterion Met?       Yes         Is the Hydrology Criterion Met?       No         No       Additional         Is the Hydrology Criterion Met?       No         No       No	VINES		
minance =       50% =       20% =         Percent of Dominant Species that are OBL, FACW, and/or FAC:       62.5%         Greater than 50% of plant species are FAC or wetter.       ✓         Less than or equal to 50% of plant species are FAC or wetter.       ✓         Is the Hydrophytic Vegetation Criterion Met?       Yes         Is the Hydrology Criterion Met?       Yes         Is the Hydrology Criterion Met?       No			Is soil saturated ? No Depth to saturated soil: (in.) or Surface
minance = 50% = 20% =   Percent of Dominant Species that are OBL, FACW, and/or FAC: 62.5%   Greater than 50% of plant species are FAC or wetter. 2   Less than or equal to 50% of plant species are FAC or wetter. 2   Darks: 1   DURISDICTIONAL DETERMINATION Is the Hydrophytic Vegetation Criterion Met? Yes Is the Hydrology Criterion Met? No Additional Is the Hydrology Criterion Met? No Remarks:			Other evidence of hydrology? Thes (see Hydrology Indicators) V No
Invalide -       30% =       20% =       Invalide // Staturated in Upper 12 in.       Oxidized Root Channels         Percent of Dominant Species that are OBL, FACW, and/or FAC:       62.5%       Invalide // Staturated in Upper 12 in.       Oxidized Root Channels         Greater than 50% of plant species are FAC or wetter.       Image Patterns in Wetlands       Water-Stained Leaves         Less than or equal to 50% of plant species are FAC or wetter.       Insufficient hydrologic indicators met. No primary indicators and less than two secondary indicators observed.         Narks:       JURISDICTIONAL DETERMINATION         Is the Hydrophytic Vegetation Criterion Met?       Yes       Is the Sample Plot a Wetland?       No         Is the Hydrology Criterion Met?       No       Additional       Remarks:		<b>66</b> 34	Primary indicators: Secondary indicators:
Percent of Dominant Species that are OBL, FACW, and/or FAC:       62.5%         Greater than 50% of plant species are FAC or wetter.       ✓         Less than or equal to 50% of plant species are FAC or wetter.       ✓         Image: Dispecies are FAC or w		20% =	Inundated Saturated in Upper 12 in.
Greater than 50% of plant species are   FAC or wetter.   Less than or equal to 50% of plant   species are FAC or wetter.   Image: Construct of the species are species are for the spec	Percent of Dominant Species	that are 62.5%	Water Marks Drift Lines in Upper 12 Inches
FAC or wetter.   Less than or equal to 50% of plant   species are FAC or wetter.   upland Indicators:   insufficient hydrologic indicators met. No primary indicators and less than two secondary indicators observed.   narks:   JURISDICTIONAL DETERMINATION   Is the Hydrophytic Vegetation Criterion Met?   Is the Hydric Soil Criterion Met?   No   Additional   Is the Hydrology Criterion Met?   No   Additional Remarks:	Greater than 50% of start		Sediment Deposits Drainage Patterns in Wetlands
Less than or equal to 50% of plant species are FAC or wetter. harks: JURISDICTIONAL DETERMINATION Is the Hydrophytic Vegetation Criterion Met? Is the Hydric Soil Criterion Met? Is the Hydrology Criterion Met? No Additional Is the Hydrology Criterion Met? No No Remarks:	FAC or wetter.	ecies are 🗹	Upland Indicators:
secondary indicators observed. Remarks: JURISDICTIONAL DETERMINATION Is the Hydrophytic Vegetation Criterion Met? Is the Hydric Soil Criterion Met? No Additional Is the Hydrology Criterion Met? No Remarks:	Less than or equal to 50% of	plant	Insufficient hydrologic indicators met. No primary indicators and loss that the
Remarks:         JURISDICTIONAL DETERMINATION         Is the Hydrophytic Vegetation Criterion Met?       Yes         Is the Hydric Soil Criterion Met?       No         Additional         Is the Hydrology Criterion Met?       No		"WYWALA	secondary indicators observed.
JURISDICTIONAL DETERMINATION Is the Hydrophytic Vegetation Criterion Met? Yes Is the Sample Plot a Wetland? No Is the Hydric Soil Criterion Met? No Additional Is the Hydrology Criterion Met? No Remarks:	species are FAC or wetter.		Bernardia
JURISDICTIONAL DETERMINATION         Is the Hydrophytic Vegetation Criterion Met?       Yes       Is the Sample Plot a Wetland?       No         Is the Hydric Soil Criterion Met?       No       Additional         Is the Hydrology Criterion Met?       No       Remarks:	species are FAC or wetter. narks:		Remarks:
Is the Hydrophytic Vegetation Criterion Met? Yes Is the Sample Plot a Wetland? No Is the Hydric Soil Criterion Met? No Additional Is the Hydrology Criterion Met? No Remarks:	species are FAC or wetter. narks:		
Is the Hydric Soil Criterion Met? Is the Hydrology Criterion Met? No Remarks:	species are FAC or wetter. narks:	JURISD	ICTIONAL DETERMINATION
Is the Hydrology Criterion Met? No Remarks:	species are FAC or wetter. narks:  Is the Hydrophytic Vegeta	JURISD ation Criterion Met?	Yes     Is the Sample Plot a Wetland?     No
$,$ $\cdot$ $\cdot$ $\cdot$	species are FAC or wetter. narks: Is the Hydrophytic Vegeta Is the Hydric Soil Criterio	JURISD ation Criterion Met? n Met?	Yes     Is the Sample Plot a Wetland?     No

Prepared by: Terrestrial Environmental Specialists, Inc.

WETLA	AND DETERMINATION DATA SHEET
Town/County/State	nent Sample Plot No.: UP-4 Date: 10/23/20
Investigators:	Monroe / NY Community Type: Deciduous Forest Upland
	Flag No.: Field Photo(roll/frame):
Do normal environmental conditions exist at the plan	ant community? (if no, explain): Yes
VEGETATION	
(* = Dominant species in each stratum)	Mapping SOILS Different than
IREES	The mapped soil type is recommined to the NECO
Species Cover Status *	Hydric Soil with potential bydria inclusion
Ulmus americana 20% FACW *	Depth of A horizon: 6 (in )
	Mottled Yes
	A horizon matrix color (sand/silt/clay/loam/other
<b>Dominance =</b> 50 <b>50% =</b> 25.0 <b>20% -</b> 10.0	
	= 2.5 yr 5 yr 10 yr 2.5
Shrubs	B horizon soil texture (sand/silt/clav/loam/other
Rhamnus cathartica 30% EACULE *	B horizon matrix color
Lonicera tatarica 10% FACU *	2.5 yr 5 yr 7.5 vr ✓ 10 vr
	2.5 y 5 y Other - 4 Mottle abundance:
	A (rew/continon/many)
Demission	B norizon mottle color, if present
Dominance = 40 50% = 20.0 20% = 8.0	2.5 yr □ 5 yr □ 7.5 yr ☑ 10 yr □ Mottle contrast:
HERBS	2.5 y 5 y Other - 5
Species Cover Status *	
Alliaria petiolata 15% FAC	
Solidago sp. 5% FAC	Histic Epipedon
Lonicera tatarica 5% FACU	Sulfidic Odor Sandy Soils with Organic Strepking of High
Rhamnus cathartica 5% FACU+	Gleyed Organic Content in Surface Layer
Geum sp. 2% FAC	Upland soil indicators:
	Bamerica
	Is the around as if
Dominance = 117 50% = 58.5 20% = 23.4	is the ground surface mundated ? No Depth of surface water:(in.
VINES	% Area inundated: 1-25 26-75 76-100
Species Cover Status *	Is soil saturated ? No Depth to saturated soil:
Vitis sp. 2% FAC *	Other evidence of huder to a finite of the second contract of the se
	Detromotion Variable View (see Hydrology Indicators)
Dominance = 2 50% = 1.0 20% = 0.4	Enumary indicators:     Secondary indicators:
Percent of Dominant Species that are	Water Marks Drift Lines in Upper 12 in.
OBL, FACW, and/or FAC: <u>66.7%</u>	Sediment Deposits Drainage Patterns in Wetlands Water-Stained Leaves
Greater than 50% of plant species are	Local Soil Survey Data
Less than or equal to 50% of plant	FAC-Neutral Test
species are FAC or wetter.	secondary indicators observed.
Remarks:	Remarks:
JURISD	DICTIONAL DETERMINATION
Is the Hydrophytic Vegetation Criterion Met? [	Yes Is the Sample Plot a Wotland?
Is the Hydric Soil Criterion Met?	
L Is the Hydrology Criterion Met? 「	No Remarks:
renared by: Terrestrial Environmental Que Ministria	

pared by: Terrestrial Environmental Specialists, Inc.

WETLA Project: DIM-2739 DiMarco Group Developm	AND DETERMINATION DATA SHEET
Investigators: B.Carr. D.Coog	Monroe / NY Community Type: OF
o normal environmental conditions exist at the pla	Int community? (if no, explain): Vec
VEGETATION	
(* = Dominant species in each stratum ) <b>TREES</b>	Mapping     SOILS     Different than       Unit:     Lockport silty clay loam     mapped? No       The mapped soil type is recognized by the NRCS as:
Dominance = 50% = 20% =	A horizon matrix color       A horizon soil texture: (sand/silt/clay/loam/other)         2.5 yr5 yr10 yr ✓       10 yr ✓
SHRUBS	2.5 y     5 y     Other     3       2     B horizon soil texture: (sand/silt/clay/loam/other)
Cornus foemina ssp. racemosa 20% FAC- * Rubus sp. 5% FACU *	B horizon matrix colorSilt/Loam $2.5 \text{ yr}$ $5 \text{ yr}$ $7.5 \text{ yr}$ $10 \text{ yr}$ $2.5 \text{ yr}$ $5 \text{ yr}$ $0 \text{ ther}$ $5 \text{ ther}$
	B horizon mottle color, if present
Dominance = 25         50% = 12.5         20% = 5.0           HERBS	2.5 yr     5 yr     7.5 yr     10 yr     10 yr       2.5 y     5 y     0ther -     Image: Contrast: (faint/distinct/prominent)
Luthamia graminifolia30%FACCornus foemina ssp. racemosa20%FAC-Colidago rugosa20%FACSaucus carota15%FACUCynanchum louiseae10%FACAster novae-angliae5%FACDipsacus sylvestris3%FACU-Eupatorium perfoliatum3%FACW+	Hydric soil indicators:       Aquic Moisture Regime         Histosol       Redoximorphic Features         Sulfidic Odor       Sandy Soils with Organic Streaking or High         Gleyed       Organic Content in Surface Layer         Upland soil indicators:       Matrix chroma of 2 without mottle         Remarks:       Matrix chroma of 2 without mottle
Dominance = 106 50% = 53.0 20% =21.2 VINES	HYDROLOGY         Is the ground surface inundated ?       No       Depth of surface water:(in.)         % Area inundated:       1-25       26-75       76-100
	Is soil saturated ? No Depth to saturated soil: (in.) or Surface
Dominance = 50% = 20% =	Primary indicators:       Secondary indicators:         Inundated       Saturated in Upper 12 in
Percent of Dominant Species that are OBL, FACW, and/or FAC:40.0%Greater than 50% of plant species are FAC or wetter.Image: Comparison of the species are Less than or equal to 50% of plant species are FAC or wetter.Image: Comparison of the species are Remarks:	Water Marks       Drift Lines       Okluized Root Channels         Water Marks       Drift Lines       in Upper 12 Inches         Sediment Deposits       Drainage Patterns in Wetlands       Water-Stained Leaves         Upland Indicators:       Local Soil Survey Data         ✓ Insufficient hydrologic indicators met. No primary indicators and less than two secondary indicators observed.       Remarks:
Is the Hydrophytic Vegetation Criterion Met?	NO     Is the Sample Plot a Wetland?
Is the Hydrology Criterion Met?	No Additional Remarks:

Prepared by: Terrestrial Environmental Specialists. Inc.

# **APPENDIX C – Correspondence**

March 1

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**BORNESS** 



New York State Office of Parks, Recreation and Historic Preservation Historic Preservation Field Services Bureau Peebles Island, PO Box 189, Waterford, New York 12188-0189

Re:

518-237-8643

April 22, 2004

Mandy L. Machut Terrestrial Environmental Specialists 23 County Route 6, Suite A Phoenix, New York 13135

> INFO REQ 4350 West Ridge Rd Greece, Monroe County 04PR01765

Dear Ms. Machut:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP) concerning your project's potential impact/effect upon historic and/or prehistoric cultural resources. Our staff has reviewed the documentation that you provided on your project. Preliminary comments and/or requests for additional information are noted on separate enclosures accompanying this letter. A determination of impact/effect will be provided only after ALL documentation requirements noted on any enclosures have been met. Any questions concerning our preliminary comments and/or requests for additional information should be directed to the appropriate staff person identified on each enclosure.

In cases where a state agency is involved in this undertaking, it is appropriate for that agency to determine whether consultation should take place with OPRHP under Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law. In addition, if there is any federal agency involvement, Advisory Council on Historic Preservation's regulations, "Protection of Historic and Cultural Properties" 36 CFR 800 requires that agency to initiate Section 106 consultation with the State Historic Preservation Officer (SHPO).

When responding, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Ruth &. Rupont

Ruth L. Pierpont Director

RLP:cmp

#### **RESOURCE EVALUATION**

Property: WE Address: 435	STFALL-MERCIER Cobblestone ESTFALL-MERCIER Cobblestone Itage 50 West Ridge Rd	MCD: County:	Greece MONROE
Date: 3/9	9/2004	Staff:	RTF

- I. Property is individually listed on SR/NR :
  - Name of listing :
  - Property is a contributing component of a SR/NR district:
    - Name of District:
- II. 🔽 Property meets eligibility criteria
  - Property contributes to a district which appears to meet eligibility criteria.

Pre SRB: F Post SRB: F SRB Date

#### Criteria for inclusion in the National Register.

- A **A** Associated with events that have made a significant contribution to the broad patterns of our history;
- **B [** Associated with the lives of persons significant in our past;
- **C** F Embodies the distinctive characteristics of a type, period or method of construction; or represents the work of a master; or possess high artistic values; or represents a significant and distinguishable entity whose component may lack individual distinction;
- **D — Have** yielded, or may be likely to yield information important in prehistory or history.

#### STATEMENT OF SIGNIFICANCE:

Based on available information, the property at 4350 West Ridge Rd appears to meet the criteria for listing in the State and National Registers of Historic Places. The cobblestone cottage is one of four surviving examples of this regional building technology in the town of Greece. An example of late Federal vernacular design, the building retains its original multi-pane sash and features cut stone quoins.

If you have any questions concerning this Determination of Eligibility, please call Robert T. Englert at 518-237-8643. ext 3268

#### ARCHEOLOGY COMMENTS 04PR01765

Based on reported resources, there is an archeological site in or adjacent to your project area. Therefore the Office of Parks, Recreation and Historic Preservation (OPRHP) recommends that a Phase 1 archeological survey is warranted for all portions of the project to involve ground disturbance, unless substantial prior ground disturbance can be documented. If you consider the project area to be disturbed, documentation of the disturbance will need to be reviewed by OPRHP. Examples of disturbance include mining activities and multiple episodes of building construction and demolition.

A Phase 1 survey is designed to determine the presence or absence of archeological sites or other cultural resources in the project's area of potential effect. The Phase 1 survey is divided into two progressive units of study including a Phase 1A sensitivity assessment and initial project area field inspection, and a Phase 1B subsurface testing program for the project area. The OPRHP can provide standards for conducting cultural resource investigations upon request. Cultural resource surveys and survey reports that meet these standards will be accepted and approved by the OPRHP.

Our office does not conduct cultural resources surveys. A 36 CFR 61 qualified archeologist should be retained to conduct the Phase 1 survey. Many archeological consulting firms advertise their availability in the yellow pages. The services of qualified archeologists can also be obtained by contacting local, regional, or statewide professional archeological organizations. Phase 1 surveys can be expected to vary in cost per mile of right-of-way or by the number of acres impacted. We encourage you to contact a number of consulting firms and compare examples of each firm's work to obtain the best product.

Documentation of ground disturbance should include a description of the disturbance with confirming evidence. Confirmation can include current photographs and/or older photographs of the project area which illustrate the disturbance (approximately keyed to a project area map), past maps or site plans that accurately record previous disturbances, or current soil borings that verify past disruptions to the land. Agricultural activity is not considered to be substantial ground disturbance and many sites have been identified in previously cultivated land.

Please also be aware that a Section 233 permit from the New York State Education Department (SED) may be necessary before any archeological survey activities are conducted on State-owned land. If any portion of the project includes the lands of New York State you should contact the SED before initiating survey activities. The SED contact is Christina B. Rieth and she can be reached at (518) 402-5975. Section 233 permits are not required for projects on private lands.

If you have any questions concerning archeology, please contact Michael Schifferli at 518-237-8643. ext 3281



### United States Department of the Interior

FISH AND WILDLIFE SERVICE 3817 Luker Road Cortland, NY 13045



October 29, 2003

Ms. Patti Kallfelz Environmental Technician Terrestrial Environmental Specialists, Inc. 23 County Route 6, Suite A Phoenix, NY 13135

Dear Ms. Kallfelz:

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This responds to your letter of October 14, 2003, requesting information on the presence of Federally listed or proposed endangered or threatened species in the vicinity of a 93-acre site on New York State Route 104 east of Manitou Road and west of North Greece Road in the Town of Greece, Monroe County, New York.

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. In addition, no habitat in the project impact area is currently designated or proposed "critical habitat" in accordance with provisions of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Therefore, no further Endangered Species Act coordination or consultation with the U.S. Fish and Wildlife Service (Service) is required. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of Federally listed and proposed endangered and threatened species in New York\* is available for your information.

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the Endangered Species Act. This response does not preclude additional Service comments under other legislation.

For additional information on fish and wildlife resources or State-listed species, we suggest you contact the appropriate New York State Department of Environmental Conservation regional office(s).\*

Since wetlands may be present, you are advised that National Wetlands Inventory (NWI) maps may or may not be available for the project area. However, while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Copies of specific NWI maps can be obtained from: Cornell Institute for Resource Information Systems 302 Rice Hall Cornell University Ithaca, NY 14853 (607) 255-4864

Work in certain waters of the United States, including wetlands, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act, the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).\*

If you require additional information or assistance please contact Michael Stoll at (607) 753-9334.

Sincerely, Mark W. Chough Acting For

David A. Stilwell Field Supervisor

\*Additional information referred to above may be found on our website at: http://nyfo.fws.gov/es/esdesc.htm.

cc: NYSDEC, Avon, NY (Environmental Permits) NYSDEC, Albany, NY (Natural Heritage Program) COE, Buffalo, NY

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New York State Department of Environmental Conservation Division of Fish, Wildlife & Marine Resources New York Natural Heritage Program 625 Broadway, 5<sup>th</sup> floor, Albany, New York 12233-4757 Phone: (518) 402-8935 • FAX: (518) 402-8925 Website: www.dec.state.ny.



October 21, 2003

Patti Kallfelz Terrestrial Environmental Specialists, Inc 23 County Rte 6, Suite A Phoenix, NY 13135

Dear Ms. Kallfelz:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for a possible 93-acre Commercial Development Site, File #2739, area as indicated on the map you provided, located in the Town of Greece, Monroe County.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered <u>sensitive</u> and may not be released to the public without permission from the New York Natural Heritage Program.

The presence of rare species may result in this project requiring additional permits, permit conditions, or review. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC 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 cannot 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, Heidi J. Krahling, Information Services

NY Natural Heritage Program

Encs.

cc: Reg. 8, Wildlife Mgr. Reg. 8, Fisheries Mgr.

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<sup>Prepared</sup> 21 October 2003 by NY Natural Heritage Program, NYS DEC, Albany, New York



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February 20, 2004

Ms. Ruth L. Pierpont, Director Historic Preservation Field Services Bureau NYS Office of Parks, Recreation and Historic Preservation Peebles Island, P.O. Box 189 Waterford, NY 12188-0189

Request for Information on Cultural Resources, Re: Town of Greece, Monroe County, New York. TES File No. 2739

Dear Ms. Pierpont:

Please find enclosed a Data Request Form regarding information on cultural resources for a site located in the Town of Greece, Monroe County, New York. I have also included a NYSDOT topographic map (Rochester West and Spencerport Quadrangles) with the approximate site location outlined.

A field visit was conducted on October 23, 2003. Representative photographs of the site are enclosed, with their location and direction shown on an aerial photograph of the area. There were five single family structures found on the property, one of which appears to be a cobblestone house. Please respond in writing verifying the presence of any known occurrences of properties listed (or eligible for listing) in the National Register of Historic Places that are located within the site boundaries

If you need additional information or have any questions, please contact me. Thank you.

#### Sincerely,

**TERRESTRIAL ENVIRONMENTAL SPECIALISTS, INC.** 

Mandy Machut

Mandy Machut Environmental Technician

MLM Enclosures

New York State Unice of Parks, Recreation and historic Preservation Historic Preservation Field Services Bureau Peebles Island Resource Center, PO Box 189. Waterford, NY 12188-0189

### PROJECT REVIEW COVER FORM

Please complete this form and attach it to the top of any and all information submitted to this office for review. Accurate and complete forms will assist this office in the timely processing and response to your request.

This info PRO. (Previous	prmation relating to a previous JECT NUMBER number assigned to this project by th	ly submitted project PR is office)	If you have checked this box and noted t previous Project Review (PR) number assign this office you do not need to continue unles of the required information below has chan
X. This is a	a new project	If you have checked this be complete ALL of the follo	ox you will need to owing information.
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(315) 695-7228 FAX (315) 695-3277 E-MAIL: tes@dreamscape.com

October 14, 2003

Mr. David A. Stilwell, Acting Director U.S. Fish and Wildlife Service Cortland Regional Office 3817 Luker Road Cortland, New York 13045

Re: Endangered and Threatened Species Town of Greece, Monroe County, NY TES File No. 269

Dear Mr. Stillwell:

Terrestrial Environmental Specialists, Inc. (TES) is collecting background environmental information for a site in the Town of Greece, Monroe County, New York. The site is approximately 93 acres in size. From the aerial photograph, the site is currently shrub and forest land. The property is located east of Manitou Road, west of North Greece Road, and north of NYS Route 104. I have enclosed a copy of the NYSDOT topographic map (Spencerport and Rochester West Quadrangles) with the approximate study area outlined. The coordinates for the approximate center of the property are **43N 13'08**" latitude, and **77W 44'31**" longitude.

Please respond in writing regarding the presence of any known occurrences of federal listed (or proposed for listing) endangered/threatened species located within the study area. TES is also contacting the NYS Department of Environmental Conservation Natural Heritage Program regarding the presence of state-listed endangered and threatened species and significant habitats. If you need additional information or have any questions, please contact me. Thank you.

Sincerely,

**TERRESTRIAL ENVIRONMENTAL SPECIALISTS, INC.** 

Patti Kallfelz

Bavironmental-Technician

PBK Enclosure




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Rochester West Quadrangle

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(315) 695-7228 FAX (315) 695-3277 E-MAIL: tes@dreamscape.com

October 14, 2003

Ms. Jean Petrusiak NYSDEC Wildlife Resources Center-Information Services New York Natural Heritage Program 625 Broadway, 5<sup>th</sup> Floor Albany, NY 12233-4757

Re: Significant Habitats and State-listed Endangered/Threatened Species, Town of Greece, Monroe County, NY. TES File No. 2739

Dear Ms. Petrusiak:

Please find enclosed a Data Request Form for significant and state-listed endangered/threatened species for a site located in the Town of Greece, Monroe County, New York. I have also included a NYSDOT topographic map (Spencerport and Rochester West Quadrangles) with the approximate site location outlined. Please respond in writing regarding the presence of any known occurrences of state-listed (or proposed for listing) endangered/threatened species located within or near the site boundary.

If you need additional information or have any questions, please contact me. Thank you.

Sincerely,

**TERRESTRIAL ENVIRONMENTAL SPECIALISTS, INC.** 

Patti Kallfelz Environmental Technician

PBK Enclosure



New York State Department of Environmental Conservation Division of Fish, Wildlife & Marine Resources Wildlife Resources Center - New York Natural Heritage Program 700 Troy-Schenectady Road, Latham, New York 12110-2400 Phone: (518) 783-3932 FAX: (518) 783-3916	John P. Cahill Commissioner
DATA REQUEST FORM: Please complete one form per project or activity	
Requestor: Dath: Kallfel-2	
Organization: Terrestrich Environmental Specialists, Inc.	
Address: 23 County Route 6, Suite A	
City: Phoenix State: NY Zip: 13135	
Phone: (315) (95-7228 Fax: (315) 695-3277	
Signature of Requestor:	
1. Title of Project: Careere Project	••••••
2. Site Location: Town(s): <u>Carecce</u>	
County(ies): Moncoe	
USGS Topographic 7 1/2 ' Quad Name(s): Rochester West Spenicroort	
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4. Is this project subject to SEQR review? Xes No	
If yes, who is the Lead Agency? <u>Unlenguan</u>	
Address of Lead Agency:	
<ul> <li>5. Proposed Project or Activity. Please check one. If you want to give additional details, you may do so on in an accompanying letter.</li> <li><u>Residential Development</u></li> <li><u>Municipal or County Planning/Zoning</u></li> <li><u>Assessment for Conservation</u></li> <li><u>Potential Land Purchase (to be used for:</u></li> <li><u>Other:</u></li> </ul>	the lines below or Development

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b.	Conservation Plan		Management Plan	
9	Research Report		Remedial Site Inves	itigation
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		Please check below wi	nich data you are req	uesting:
	Standard Rare Spe	cies/Natural Commun	ities Report	Breeding Bird Atlas I
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Appendix B:

Soil Survey

Generic Draft Environmental Impact Statement

Hampton Ridge Center Rezoning



United States Department of Agriculture



Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants Custom Soil Resource Report for Monroe County, New York



# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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EIA—Elnora loamy fine sand. 0 to 2 percent slopes	
EIB—Elnora loamy fine sand, 2 to 6 percent slopes	
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Water Features	
Depth to Water Table	
References	
	CONTRACTOR - 1

# How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

#### Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



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MAP INFORMATION	Original soil survey map sheets were prepared at publication scale.	Viewing scale and printing scale, however, may vary from the original Please rely on the har scale on each man sheet for money	map measurements.		Source of Map: Natural Resources Conservation Service	Web Soil Survey URL: http://websoilsurvey.mcs.usda.gov	Coordinate System: UTM Zone 18N	This product is generated from the USDA-NRCS certified data as	the version date(s) listed below.		Soil Survey Area: Monroe County, New York	DUIVEY AREA DATA. VERSION 0, DEC 11, 2000	Date(s) aerial images were photographed: 4/22/1994	The solution of the free solution of the solut	The ormophoto of other pase map on which the soli lines were compiled and digitized probably differs from the background	imagery displayed on these maps. As a result, some minor shifting	or map unit poundanes may be evident.										
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MAPL	terest (AOI)	Area of Interest (AOI)		Soil Map Units	Point Features	Blowout	Borrow Pil	Clav Spot	Closed Press	Closed Depression	Gravel Pit	Gravelly Spot	Landfill	Lava Flow	Marsh	Mine or Quarry	Miscellaneous Water	Perennial Water	Rock Outcrop	Saline Spot	Sandy Spot	Severely Eroded Spot	Sinkhole	Slide or Slip	Sodic Spot	Spoil Area	i
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Custom Soil Resource Report Legend

Monroe County, New York (NY055)										
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI							
AnB	Alton gravelly sandy loam, 3 to 8 percent slopes	0.0	0.0%							
EIA	Elnora loamy fine sand, 0 to 2 percent slopes	4.9	7.6%							
EIB	Elnora loamy fine sand, 2 to 6 percent slopes	0.0	0.0%							
LaB	Lairdsville silt loam, 2 to 6 percent slopes	31.3	48.2%							
Lp	Lockport silty clay loam	28.7	44.2%							
Totals for Area of Interest (AC	20)	64.9	100.0%							

## **Map Unit Legend**

## **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

### Monroe County, New York

#### AnB—Alton gravelly sandy loam, 3 to 8 percent slopes

#### Map Unit Setting

*Elevation:* 250 to 650 feet *Mean annual precipitation:* 30 to 35 inches *Mean annual air temperature:* 46 to 50 degrees F *Frost-free period:* 145 to 190 days

#### Map Unit Composition

Alton and similar soils: 75 percent

#### **Description of Alton**

#### Setting

Landform: Deltas, outwash plains, terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, derived mainly from acidic rocks, with some limestone below 40 inches

#### **Properties and qualities**

Slope: 3 to 8 percent Depth to restrictive feature: More than 80 inches Drainage class: Somewhat excessively drained Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum content: 15 percent Available water capacity: Low (about 3.5 inches)

#### Interpretive groups

Land capability (nonirrigated): 2s

#### **Typical profile**

0 to 8 inches: Gravelly sandy loam 8 to 32 inches: Very gravelly loam 32 to 60 inches: Stratified very gravelly sand

#### EIA—Elnora loamy fine sand, 0 to 2 percent slopes

#### Map Unit Setting

Mean annual precipitation: 30 to 35 inches Mean annual air temperature: 46 to 50 degrees F Frost-free period: 145 to 190 days

#### Map Unit Composition

Elnora and similar soils: 80 percent

#### **Description of Elnora**

#### Setting

Landform: Beach ridges, deltas Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread Down-slope shape: Concave Across-slope shape: Convex Parent material: Sandy glaciofluvial, eolian, or deltaic deposits

#### Properties and qualities

Slope: 0 to 2 percent Depth to restrictive feature: More than 80 inches Drainage class: Moderately well drained Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr) Depth to water table: About 18 to 24 inches Frequency of flooding: None Frequency of ponding: None Available water capacity: Low (about 3.5 inches)

#### Interpretive groups

Land capability (nonirrigated): 2w

#### **Typical profile**

0 to 8 inches: Loamy fine sand 8 to 60 inches: Loamy fine sand

#### EIB—Elnora loamy fine sand, 2 to 6 percent slopes

#### Map Unit Setting

Mean annual precipitation: 30 to 35 inches Mean annual air temperature: 46 to 50 degrees F Frost-free period: 145 to 190 days

#### Map Unit Composition

Elnora and similar soils: 80 percent

#### **Description of Elnora**

#### Setting

Landform: Beach ridges, deltas Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread Down-slope shape: Concave Across-slope shape: Convex Parent material: Sandy glaciofluvial, eolian, or deltaic deposits

#### **Properties and qualities**

Slope: 2 to 6 percent Depth to restrictive feature: More than 80 inches Drainage class: Moderately well drained Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr) Depth to water table: About 18 to 24 inches Frequency of flooding: None

#### **Custom Soil Resource Report**

Frequency of ponding: None Available water capacity: Low (about 3.5 inches)

#### Interpretive groups

Land capability (nonirrigated): 2w

#### **Typical profile**

0 to 8 inches: Loamy fine sand 8 to 60 inches: Loamy fine sand

#### LaB—Lairdsville silt loam, 2 to 6 percent slopes

#### Map Unit Setting

*Elevation:* 300 to 700 feet *Mean annual precipitation:* 30 to 35 inches *Mean annual air temperature:* 46 to 50 degrees F *Frost-free period:* 145 to 190 days

#### Map Unit Composition

Lairdsville and similar soils: 80 percent

#### **Description of Lairdsville**

#### Setting

Landform: Benches, ridges, till plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest Down-slope shape: Concave Across-slope shape: Convex Parent material: Clayey till dominated by reddish, weakly calcareous shale, with glaciolacustrine deposits included in some places

#### Properties and qualities

Slope: 2 to 6 percent Depth to restrictive feature: 20 to 40 inches to paralithic bedrock Drainage class: Moderately well drained Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr) Depth to water table: About 18 to 36 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum content: 1 percent Available water capacity: Low (about 4.4 inches)

#### Interpretive groups

Land capability (nonirrigated): 2e

#### Typical profile

0 to 8 inches: Silt loam 8 to 28 inches: Clay 28 to 32 inches: Weathered bedrock

#### Lp—Lockport silty clay loam

#### Map Unit Setting

Mean annual precipitation: 30 to 35 inches

#### Custom Soil Resource Report

Mean annual air temperature: 46 to 50 degrees F Frost-free period: 145 to 190 days

#### Map Unit Composition

Lockport and similar soils: 80 percent

#### **Description of Lockport**

Setting

Landform: Benches, ridges, till plains Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope Down-slope shape: Concave Across-slope shape: Linear Parent material: Clayey till derived mainly from reddish, weakly calcareous shale

#### **Properties and qualities**

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water capacity: Low (about 4.2 inches)

#### Interpretive groups

Land capability (nonirrigated): 3w

#### **Typical profile**

0 to 5 inches: Silty clay loam 5 to 8 inches: Silty clay loam 8 to 26 inches: Clay 26 to 36 inches: Weathered bedrock

# Soil Information for All Uses

## Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

## **Building Site Development**

Building site development interpretations are designed to be used as tools for evaluating soil suitability and identifying soil limitations for various construction purposes. As part of the interpretation process, the rating applies to each soil in its described condition and does not consider present land use. Example interpretations can include corrosion of concrete and steel, shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping.

### Local Roads and Streets

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the

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specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Custom Soil Resource Report Map—Local Roads and Streets



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MAP INFORMATION	Original soil survey map sheets were prepared at public Viewing scale and printing scale, however, may vary fir	original. Please rely on the bar scale on each map shee	ruap measurements.	Source of Map: Natural Resources Conservation Servi	Web Soil Survey URL: http://websoilsurvey.nrcs.usda. Coordinate Sustem: 11TM Zona 18N		This product is generated from the USDA-NRCS certified the version detactor instant because	aliable	Soil Survey Area: Monroe County, New York	Survey Area Data: Version 6, Dec 11, 2006	bate(s) aerial images were photographed: 4/22/1994		The orthophoto or other base map on which the soil lines w	complied and diguzed probably different from the packgroun imagery displayed on these maps. As a result, some minor	s of map unit boundaries may be evident.						
MAP LEGENI	Area of Interest (AOI)	Soils	Soil Map Units	Soil Ratings	Very limited	Somewhat limited	Not limited	Not rated or not a	Water Features	Oceans	Streams and Can	Transportation	+++ Rails	Roads	Interstate Highwa	US Routes	State Highways	Local Roads	Other Roads		

Custom Soil Resource Report Legend—Local Roads and Streets

	Local Roads	s and Streets— Su	mmary by Map Ur	nit — Monroe Count	y, New York	
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (rating values)	Acres in AOI	Percent of AOI
AnB	Alton gravelly sandy loam, 3 to 8 percent slopes	Somewhat limited	Alton (75%)	Frost action (0.50)	0.0	0.0%
EIA	Elnora loamy fine sand, 0 to 2	Somewhat limited	Elnora (80%)	Frost action (0.50)	4.9	7.6%
	percent slopes			Depth to saturated zone (0.43)		
EIB	Elnora loamy fine sand, 2 to 6	Somewhat limited	Elnora (80%)	Frost action (0.50)	0.0	0.0%
	percent slopes			Depth to saturated zone (0.43)	-	
LaB	Lairdsville silt Very limited		Lairdsville (80%)	Low strength (1.00)	31.3	48.2%
	percent slopes			Shrink-swell (0.50)		
				Frost action (0.50)		
				Depth to saturated zone (0.05)		
Lp	Lockport silty clay loam	Very limited	Lockport (80%)	Low strength (1.00)	28.7	44.2%
				Depth to saturated zone (1.00)		
				Shrink-swell (0.50)		
				Frost action (0.50)		
Totals for Area of I	nterest (AOI)				64.9	100.0%
		Local Roads and	Streets— Summa	rv by Rating Value		-
	Pating		Acres in AOI		Descent of	4.01

## Tables—Local Roads and Streets

**Rating Options—Local Roads and Streets** 

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified

Very limited

Somewhat limited

60.0

4.9

92.4%

7.6%

Tie-break Rule: Higher

### **Dwellings Without Basements**

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).



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MAP INFORMATION	Original soil survey map sheets were prepared at pub Viewing scale and printing scale, however, may vary original. Please rely on the bar scale on each map sh map measurements.	Source of Map: Natural Resources Conservation S Web Soil Survey URL: http://websoilsurvey.nrcs.us Coordinate System: UTM Zone 18N	This product is generated from the USDA-NRCS certil the version date(s) listed below.	Soil Survey Area: Monroe County, New York Survey Area Data: Version 6, Dec 11, 2006	uate(s) aetai iniages were protographeo: 4/22/19	The orthophoto or other base map on which the soil li compiled and digitized probably differs from the back imagery displayed on these maps. As a result, some of map unit boundaries may be evident.			
AP LEGEND	Area of Interest (AOI) Area of Interest (AOI) Soil Map Units	tings Very limited Somewhat limited	Not limited Not rated or not available	atures Oceans Streams and Canals	tation	Rails Interstate Highways	US Routes	State Highways Local Roads	Other Roads
W	Area of In Soils	Soil Ra		Water Fee	Transport	Koads	2	X	H

Custom Soil Resource Report Legend—Dwellings Without Basements

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (rating values)	Acres in AOI	Percent of AOI
AnB	Alton gravelly sandy loam, 3 to 8 percent slopes	Not limited	Alton (75%)		0.0	0.0%
EIA	Elnora loamy fine sand, 0 to 2 percent slopes	Somewhat limited	Elnora (80%)	Depth to saturated zone (0.77)	4.9	7.6%
EIB	Elnora loamy fine sand, 2 to 6 percent slopes	Somewhat limited	Elnora (80%)	Depth to saturated zone (0.77)	0.0	0.0%
LaB	Lairdsville silt loam, 2 to 6	Somewhat limited	Lairdsville (80%)	Shrink-swell (0.50)	31.3	48.2%
	percent slopes			Depth to saturated zone (0.10)		
Lp	Lockport silty clay loam	Very limited	Lockport (80%)	Depth to saturated zone (1.00)	28.7	44.2%
				Shrink-swell (0.50)		
Totals for Area of I	nterest (AOI)				64.9	100.0%

## Tables—Dwellings Without Basements

Dwellings Without Basements— Summary by Rating ValueRatingAcres in AOIPercent of AOISomewhat limited36.255.8%Very limited28.744.2%Not limited0.00.0%

### **Rating Options—Dwellings Without Basements**

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified Tie-break Rule: Higher

## Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

## **Soil Erosion Factors**

Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

### K Factor, Whole Soil (Erodibility Factor)

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Custom Soil Resource Report Map—K Factor, Whole Soil (Erodibility Factor)



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Custom Soil Resource Report Legend—K Factor, Whole Soil (Erodibility Factor)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AnB	Alton gravelly sandy loam, 3 to 8 percent slopes	.15	0.0	0.0%
EIA	Elnora loamy fine sand, 0 to 2 percent slopes	.20	4.9	7.6%
EIB	Elnora loamy fine sand, 2 to 6 percent slopes	.20	0.0	0.0%
LaB	Lairdsville silt loam, 2 to 6 percent slopes	.37	31.3	48.2%
Lp	Lockport silty clay loam	.37	28.7	44.2%

#### Table—K Factor, Whole Soil (Erodibility Factor)

### Rating Options—K Factor, Whole Soil (Erodibility Factor)

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified Tie-break Rule: Higher Layer Options: Surface Layer

## Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

## **Drainage Class**

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Custom Soil Resource Report Map—Drainage Class



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MAP INFORMATION	Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.	Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: 11TM Zona 18N	This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.	Soil Survey Area: Monroe County, New York Survey Area Data: Version 6, Dec 11, 2006	Date(s) aerial images were photographed: 4/22/1994	The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background	magery usprayed on messe maps. As a result, some mimor smiring of map unit boundaries may be evident.							
MAP LEGEND	Area of Interest (AOI) Area of Interest (AOI) Soils Soil Map Units	Soil Ratings	Somewhat excessively drained Well drained	Moderately well drained Somewhat poorly drained	Poorty drained Very poorty drained	Not rated or not available Water Features	Oceans Streams and Canals	Transportation	Here Rails	Interstate Highways	US Routes	State Highways	Local Roads	Other Roads

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Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AnB	Alton gravelly sandy loam, 3 to 8 percent slopes	Somewhat excessively drained	0.0	0.0%
EIA	Elnora loamy fine sand, 0 to 2 percent slopes	Moderately well drained	4.9	7.6%
EIB	Elnora loamy fine sand, 2 to 6 percent slopes	Moderately well drained	0.0	0.0%
LaB	Lairdsville silt loam, 2 to 6 percent slopes	Moderately well drained	31.3	48.2%
Lp	Lockport silty clay loam	Somewhat poorly drained	28.7	44.2%

#### Table—Drainage Class

#### Rating Options—Drainage Class

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified Tie-break Rule: Higher

## Depth to a Selected Soil Restrictive Layer: Paralithic bedrock

A "restrictive layer" is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers.

This theme presents the depth to the user selected type of restrictive layer as described in for each map unit. If no restrictive layer is described in a map unit, it is represented by the "> 200" depth class.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.
Custom Soil Resource Report Map—Depth to a Selected Soil Restrictive Layer: Paralithic bedrock



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MAP INFORMATION	Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.	Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 18N	This product is generated from the USDA-NRCS certified data as o the version date(s) listed below. Soil Survey Area: Monroe County, New York Survey Area Data: Version 6. Dec 11, 2006	Date(s) aerial images were photographed: 4/22/1994 The orthonholo or other base map on which the soil lines were	compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.		
MAP LEGEND	rea of Interest (AOI) Area of Interest (AOI) Area of Interest (AOI)	Soil Map Units Soil Ratings 0 - 25	50 - 100 100 - 150 150 - 200	er Features Oceans	Streams and Canals     nsportation     Rails     oads     Interstate Highways	<ul> <li>US Routes</li> <li>State Highways</li> <li>Local Roads</li> </ul>	Oliter Roads

Custom Soil Resource Report Levend—Denth to a Selected Soil Restrictive Laver Paralithic hedrock

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI		
AnB	Alton gravelly sandy loam, 3 to 8 percent slopes	>200	0.0	0.0%		
EIA	Elnora loamy fine sand, 0 to 2 percent slopes	>200	4.9	7.6%		
EIB	Elnora loamy fine sand, 2 to 6 percent slopes	>200	0.0	0.0%		
LaB	Lairdsville silt loam, 2 to 6 percent slopes	77	31.3	48.2%		
Lp	Lockport silty clay loam	77	28.7	44.2%		
Totals for Area of Interes	st (AOI)		64.9	100.0%		

#### Table—Depth to a Selected Soil Restrictive Layer: Paralithic bedrock

#### Rating Options—Depth to a Selected Soil Restrictive Layer: Paralithic bedrock

Units of Measure: centimeters Restriction Kind: Paralithic bedrock Aggregation Method: Dominant Component Component Percent Cutoff: None Specified Tie-break Rule: Lower Interpret Nulls as Zero: No

# Water Features

Water Features include ponding frequency, flooding frequency, and depth to water table.

## **Depth to Water Table**

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A

#### Custom Soil Resource Report

"representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Depth to Water Table

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MAP INFORMATION	Original soil survey map sheets were prepared at publi	Viewing scale and printing scale, however, may vary fi	unginal. Frease rely on une var scale on each map sue map measurements		Source of Map: Natural Resources Conservation Se	Web Soil Survey URL: http://websoilsurvey.nrcs.uso Coordinate Svetem: 11TM Zone 18N	COOLUMINE OF STREET, O LINE COURT OF	This product is generated from the USDA-NRCS certific	Ine version date(s) listed below.	Soil Survey Area: Monroe County, New York	Survey Area Data: Version 6, Dec 11, 2006	Date(s) aerial images were photographed: 4/22/199.		The orthophoto or other base map on which the soil lin compiled and digitized probably differs from the backor	imagery displayed on these maps. As a result, some n	of map unit boundaries may be evident.							
MAP LEGEND	Area of Interest (AOI)	Area of Interest (AOI)	Soils	Soil Map Units	Soll Ratings	0-25	25-50	50 - 100	100 - 150	150-200	> 200	Water Features	Oceans	Streams and Canals	Transportation	+++ Rails	Roads	Interstate Highways	US Routes	State Highways	Local Roads	Other Roads	

Custom Soil Resource Report Legend—Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI		
AnB	Alton gravelly sandy loam, 3 to 8 percent slopes	>200	0.0	0.0%		
EIA	Elnora loamy fine sand, 0 to 2 percent slopes	54	4.9	7.6%		
EIB	Elnora loamy fine sand, 2 to 6 percent slopes	54	0.0	0.0%		
LaB	Lairdsville silt loam, 2 to 6 percent slopes	68	31.3	48.2%		
Lp	Lockport silty clay loam	31	28.7	44.2%		
Totals for Area of Interes	st (AOI)	0.00	64.9	100.0%		

# Table—Depth to Water Table

### **Rating Options—Depth to Water Table**

Units of Measure: centimeters Aggregation Method: Dominant Component Component Percent Cutoff: None Specified Tie-break Rule: Lower Interpret Nulls as Zero: No Beginning Month: January Ending Month: December

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