

Exhibit VIII.C.17.e (Storm water management):

Submit as Exhibit VIII.C.17.e. a description of plans for management, detention and discharge of storm water on and from the Project Site to include (i) the estimated cost of the improvements; (ii) the estimated date of completion; (iii) the names of the parties, whether public or private, initiating the improvements; (iv) the names of the parties responsible for the costs of the improvements; and (v) if more than one party is responsible for the costs, the proportionate distribution of the costs among the parties.

Exhibit VIII.C.17.e. presents an approach for stormwater management based on existing site conditions and watersheds, local government regulations, site feasibility, and estimated quantities. Because the project will be developed primarily on vacant land, stormwater runoff detention and stormwater runoff treatment measures will be required to minimize stormwater runoff impacts of development. The overall location and type of stormwater management features can be found in Figure 1 – Stormwater Management Figure.

Predevelopment Conditions

Soils found on the project site have generally poor hydrologic characteristics, limiting infiltration and groundwater recharge. A soils map showing approximate boundaries for the on-site soil types can be found in Figure 2 – Soils Map. Land cover on the project site consists of forests, grasslands, wetlands, and surface waters. Land coverage types have associated curve numbers that are used to calculate stormwater runoff. A land cover map can be found in Figure 3 – Land Cover Map. The project site is divided into four primary watersheds for stormwater runoff. Stormwater runoff generally flows from the central area of the site to the eastern and western extents. The runoff reaches wetlands and open waters where stormwater runoff is conveyed off site through a culvert that discharges under Route 17K. These flows ultimately discharge to the Quassaic Creek as seen in Figure 4 – NYSDEC Surface Waters Map.

Postdevelopment Stormwater Management

Stormwater management design will be in accordance with the following:

- New York Standards and Specifications for Erosion and Sediment Control
- New York State Department of Environmental Conservation (NYSDEC)
- Stormwater Management Design Manual
- Town of Newburgh requirements
- LEED Reference Guide for Building Design and Construction

Stormwater Quantity Management

Detention of on-site stormwater will be achieved through a combination of above and possible underground detention features (see Figure 1 – Stormwater Management Figure). Such features may include aboveground wet ponds, dry detention basins and swales that will be sized based on the volumes produced from the 1, 10, and 100-year, 24-hour design storm events. Peak discharges from these storm events will be controlled to match existing conditions by the use of outlet control structures. For more detail on anticipated stormwater management practices refer to the Preliminary Stormwater Management Report provided in Section IX.A.2.b.

Stormwater Quality Management

We reviewed the New York State Stormwater Management Design Manual for recommended practices that are most applicable and feasible for the site. Sand filters and bioretention measures are anticipated to be used in combination with detention features to satisfy water quality treatment requirements. Stormwater runoff will reach these features via overland flow and underground pipe conveyance. Stream daylighting is proposed along the eastern extent of the site to remove the existing piped conveyance and create a natural stream. This daylighting will address both stormwater green infrastructure design and wetland mitigation. For more detail on anticipated stormwater BMP measures refer to the Preliminary Stormwater Management Report provided in Section IX.A.2.b.

Stormwater Conveyance

Runoff is conveyed off site via a culvert that discharges under Route 17K and then continues east along a series of tributaries that ultimately discharge to the Quassaic Creek.

Estimated cost of the improvements

Costs for described improvements have been estimated and can be found in the detailed project cost estimate included with this package.

Estimated date of completion

All stormwater improvements will be constructed concurrent with the Casino project and all improvements are planned to be completed prior to opening. Refer to the project schedule for a more detailed breakdown of individual task completion dates.

Names of the Parties; whether public or private is initiating the improvements; Names of the parties responsible for the costs of the improvements; if more than one party is responsible for the cost, the proportionate distribution of the costs among the parties

Ownership, as defined elsewhere in this application, is initiating the improvements and will be solely responsible for the cost of all improvements.

Approval by local government

The stormwater management is subject to Town of Newburgh Planning Board and the Board's professionals review and approval. The Town reviews the application based on the general policies of Chapter 163 of Newburgh's Town Code, which includes but is not limited to ensuring the development provides proper drainage. The public will have an opportunity to review and provide comments on the application as part of the review process.

Stormwater management is also subject to the following permits:

- State Pollutant Discharge Elimination System (SPDES) General Permit -Applicable based on disturbance of more than one acre of land.
- NYSDEC 5-Acre Waiver – Applicable based on disturbing more than five acres at any one time.

Procedure for local government approval

A site plan application that includes stormwater plans and a design report along with a Stormwater Pollution Prevention Plan (SWPPP) will be submitted to the Town of Newburgh for review. Upon review and approval, the applicant will request an MS4 Acceptance form from the Town and transmit it to the NYSDEC with a Notice of Intent (NOI) for approval. The NYSDEC is the agency that issues the NYS General Permit for Stormwater Discharges from Construction Activity (GPO-10-001).

Local government approval date

Upon receipt of the site plan application and supporting documents, a typical review period of two to three months will ensue. For further information regarding necessary permits and associated processes and timelines, please see [Exhibit VIII.C.3](#).

Attachment / Figures

Exhibit VIII.C.17.e. - Figure 1

Exhibit VIII.C.17.e. - Figure 2

Exhibit VIII.C.17.e. - Figure 3

Exhibit VIII.C.17.e. - Figure 4

Exhibit VIII.C.17.e. - Figure 5

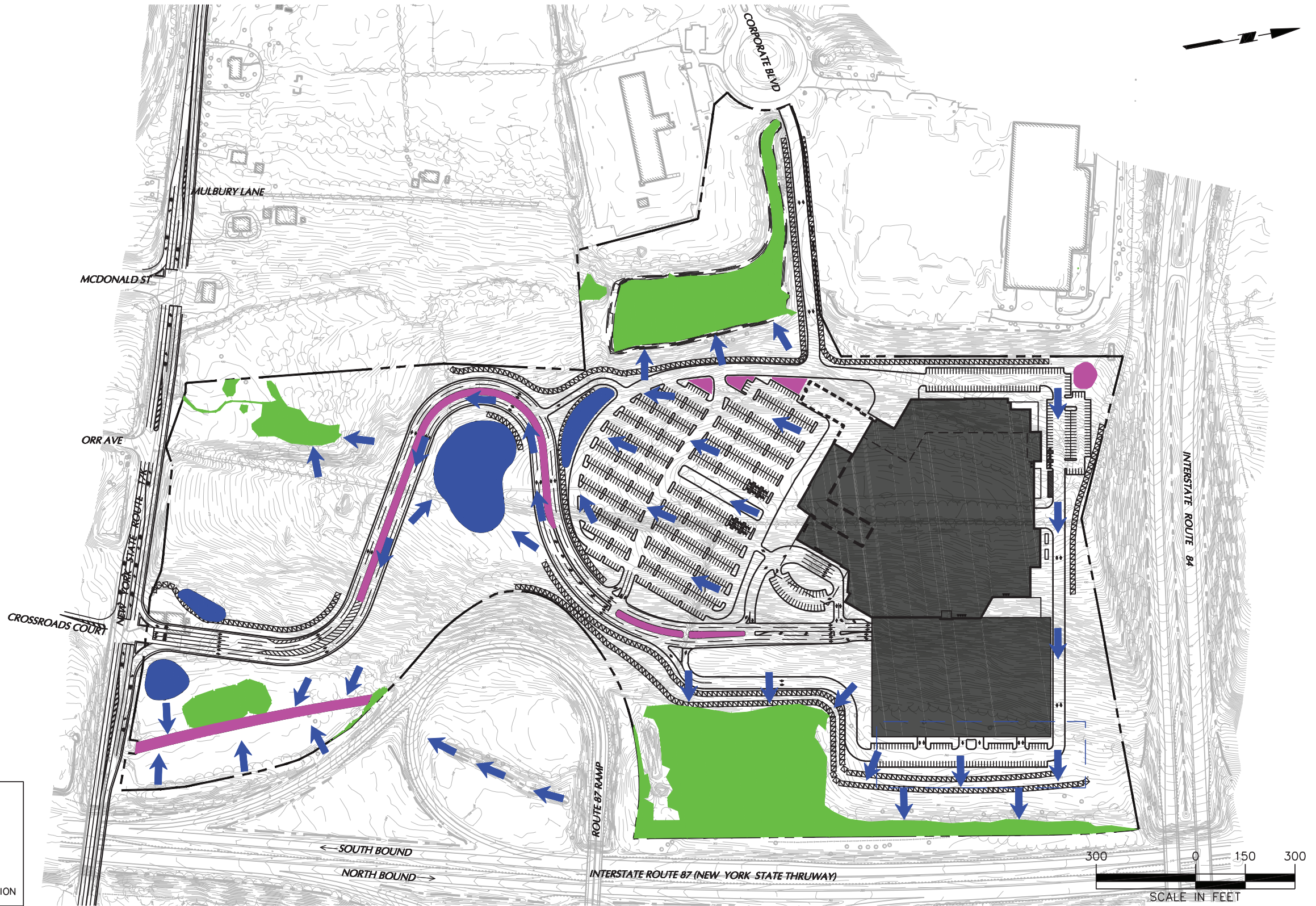
Stormwater Management Figure

Soils Map

Land Cover Map

NYSDEC Surface Waters Map

NYSDEC Freshwater Wetlands Map

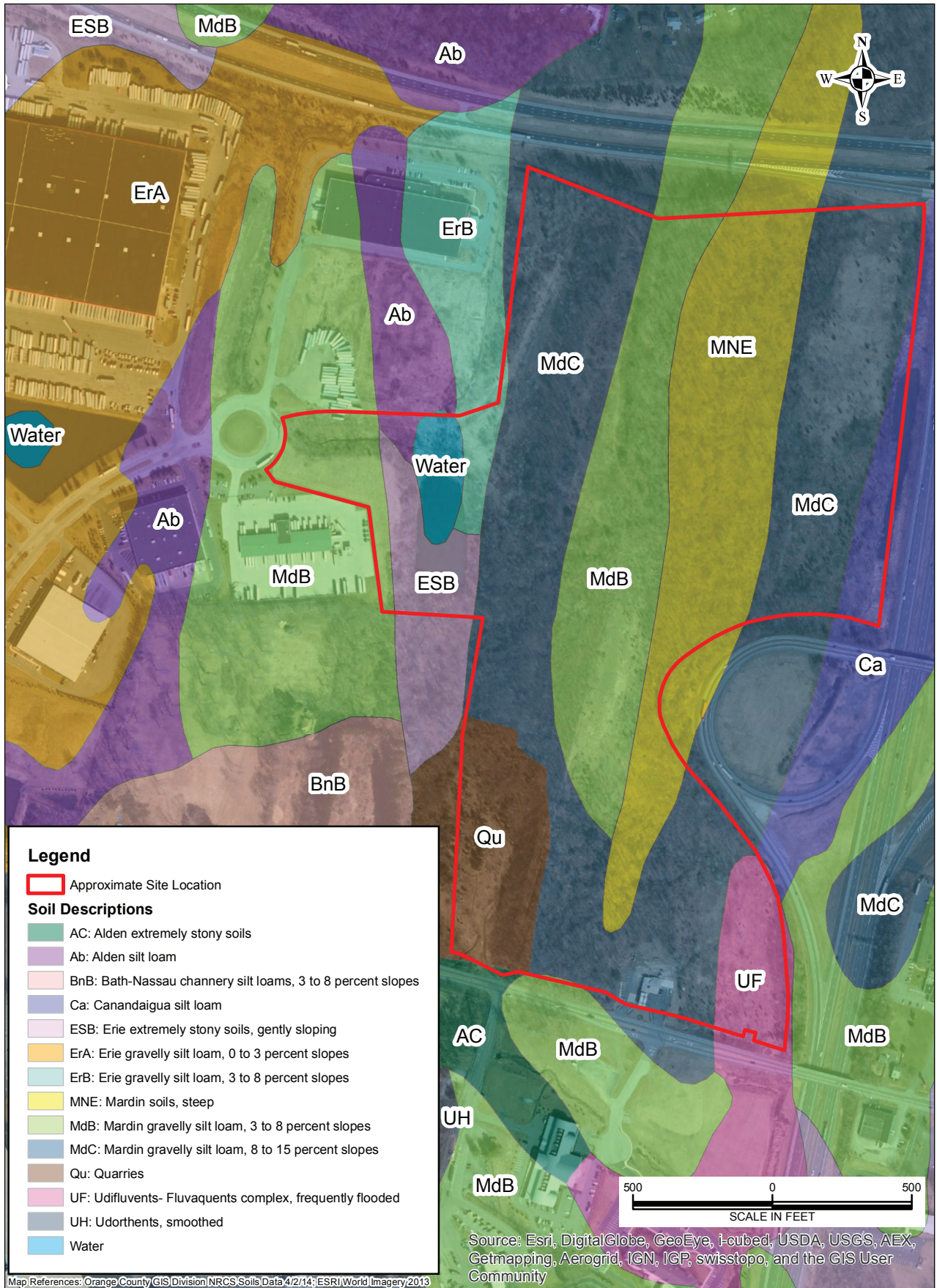


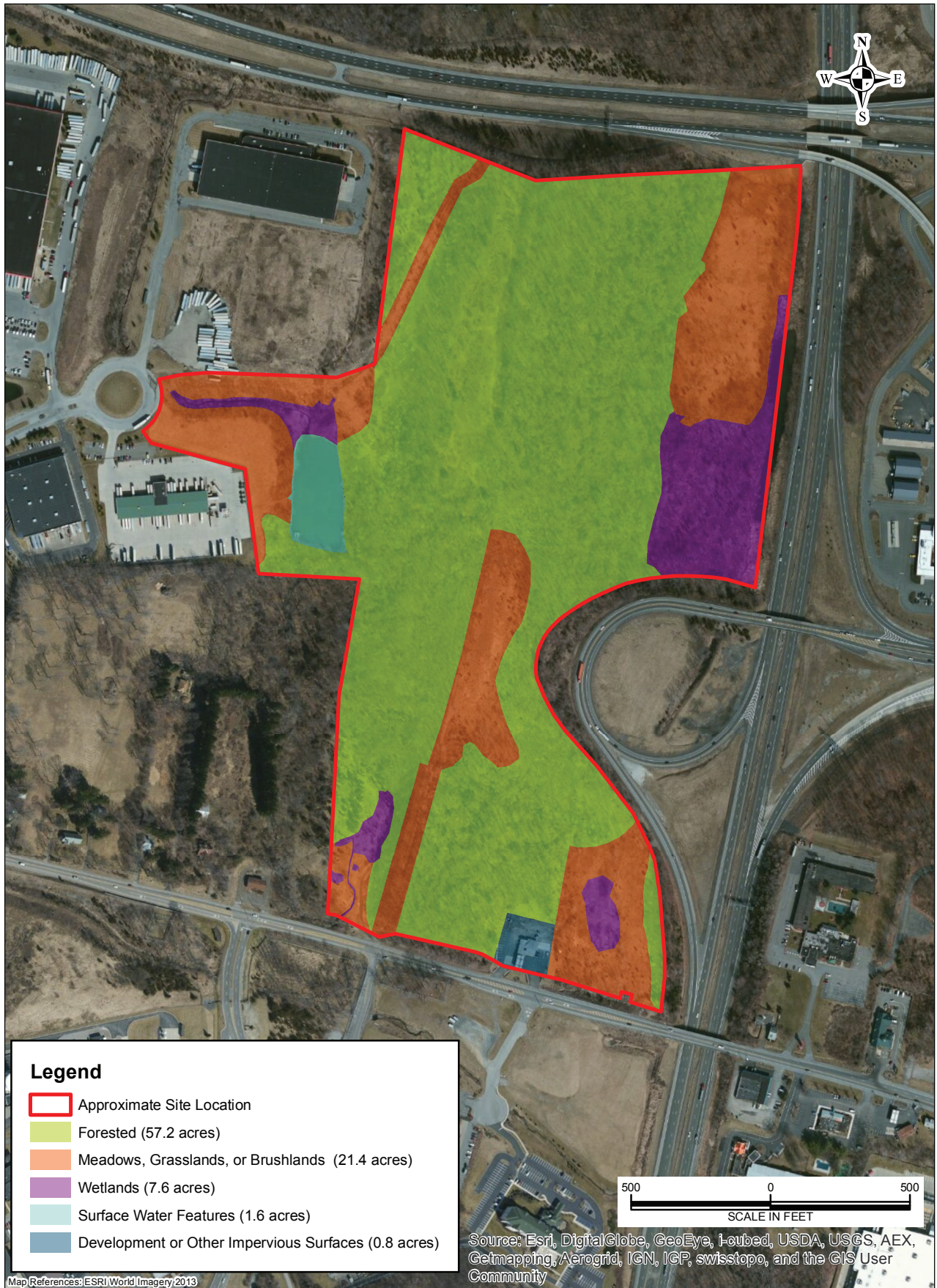
**STORMWATER MANAGEMENT FIGURE
FIGURE 1**

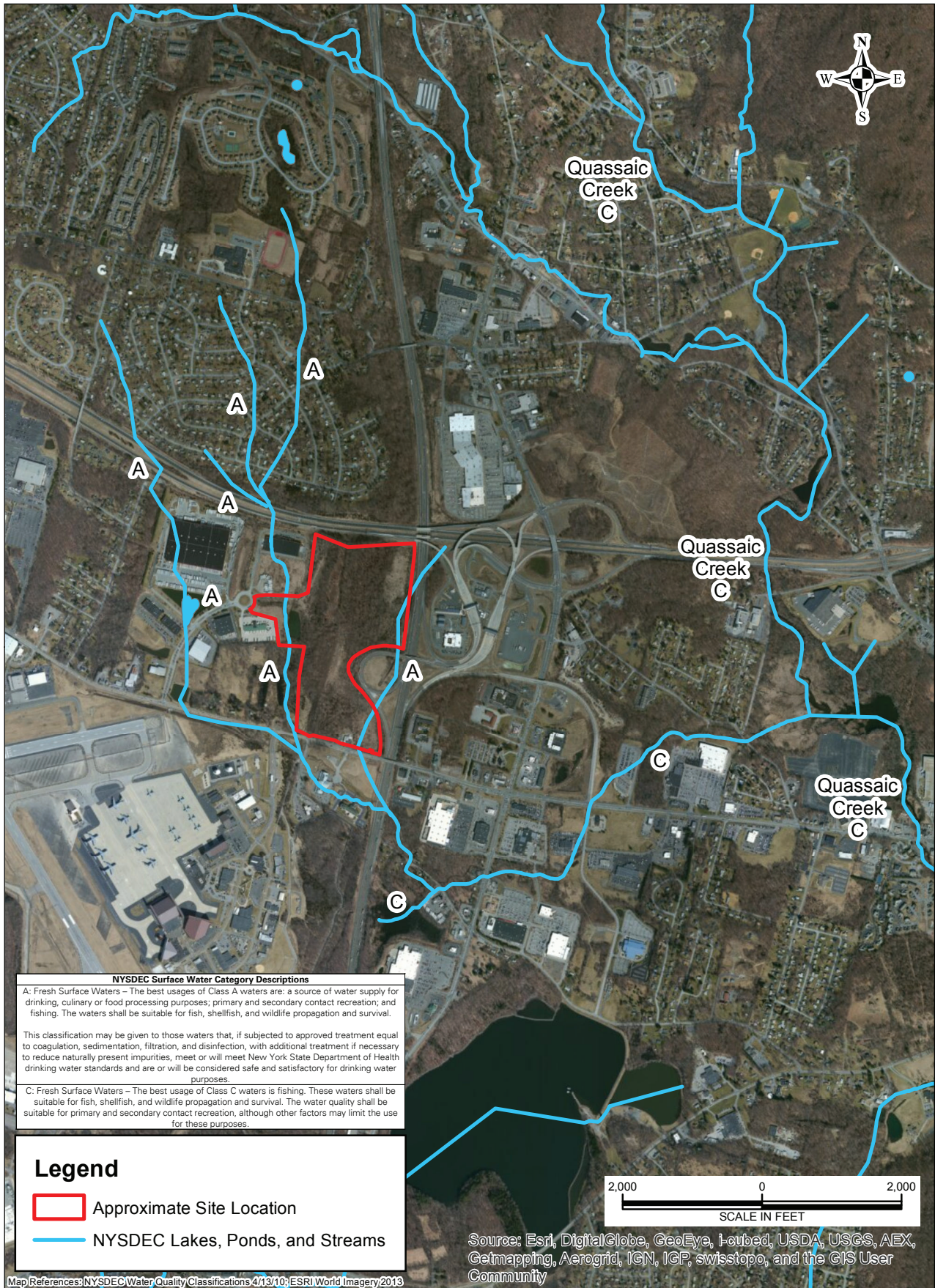
THORNTON TOMASETTI - LANGAN - JAROS BAUM & BOLLES - PERKINS EASTMAN



**Exhibit
VIII.C.17.e**









Legend

 Approximate Site Location

NYSDEC Freshwater Wetlands

CLASS

-  I
-  II
-  III
-  IV

2,500 0 2,500
SCALE IN FEET

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map References: NYSDEC Regulatory Freshwater Wetlands 2002; ESRI World Imagery 2013



**NYSDEC FRESHWATER WETLANDS MAP
FIGURE 5**

**Exhibit
VIII.C.17.e**