TRANSPORTATION

PROJECT REPORT

DRAFT DESIGN REPORT / ENVIRONMENTAL IMPACT STATEMENT

Appendix G – Wetland Assessment & Delineation Report

January 2014

Highway Project
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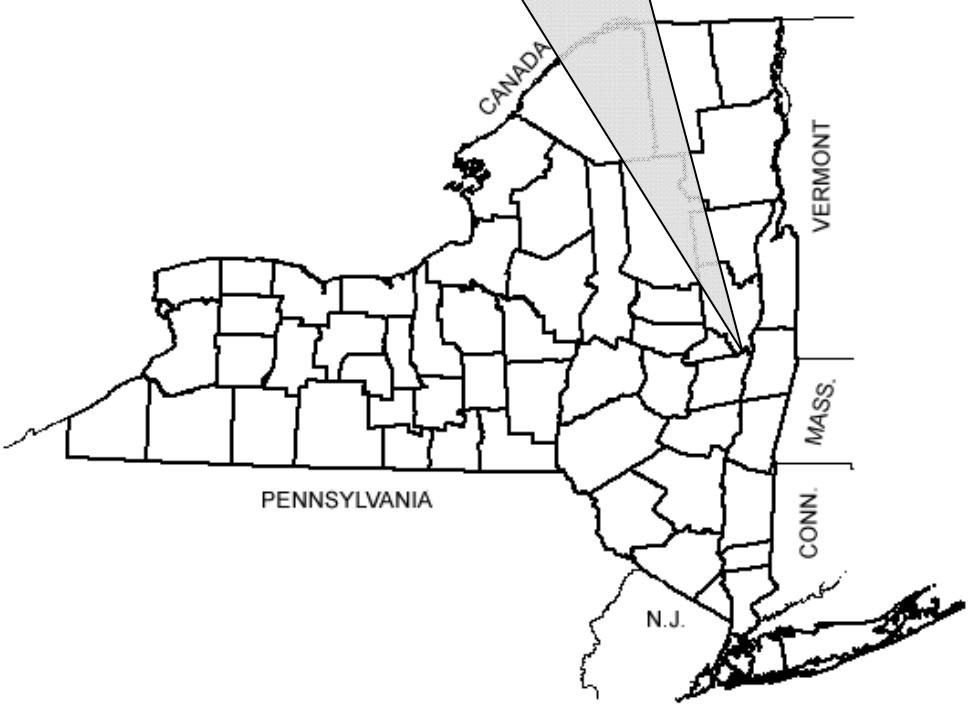
Interstate 87 (I-87) Exit 4 Access Improvements
Albany County



U.S. Department of Transportation Federal Highway Administration

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
ANDREW M. CUOMO, Governor JOAN MCDONALD, Commissioner

Wetland Assessment and Delineation Report

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1. INTRODUCTION

The proposed project is located in the Town of Colonie, Albany County, New York, and involves improving the access between Interstate 87 (I-87) and the Albany International Airport and between I-87 and Wolf Road. The New York State Department of Transportation's (NYSDOT) goal is to improve safety and mobility in the Exit 4 area.

This report describes the background information and methods used to determine the characteristics of the wetlands located within the I-87 Exit 4 Project Study Area (PSA).

The work was completed in accordance with the Sub-consultant Agreement dated December 31, 2004 between Shumaker Consulting Engineering & Land Surveying, P.C. (SCE) and Clough Harbour & Associates, L.L.P. This Wetland Delineation Report describes the subject wetlands that may be regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act. SCE delineations were conducted in accordance with the criteria stated in the 1987 USACE Wetlands Delineation Manual. Supplemental Delineation work was performed in accordance with the 1999 Northcentral and Northeast Regional Supplement.

This report is intended to serve as documentation of the wetland boundaries and supplement a USACE permit application, if required. The report includes: agency resource information, methods, a general site description, hydrologic characteristics, site ecology, wetland descriptions, pictures, and a summary of the findings. Wetland determination data sheets that support the findings for wetlands delineated by SCE are provided in Exhibit A.

2. AGENCY RESOURCE INFORMATION

Prior to the field survey effort, a number of sources were consulted to obtain background information. These sources included: the Albany USGS Quadrangle (Figure 1), the National Wetlands Inventory (NWI) Map published by the United States Fish and Wildlife Service (USFWS) (Figures 2 & 4), the New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands Map (Figures 2 & 4), the Albany County Soil Survey Map (Figure 5) and aerial photography (Figures 3 & 5).

3. SCE METHODOLOGY

The above references aided in the initial identification of potential wetland areas. Detailed data collection and flagging of the wetland boundaries within the PSA was performed by SCE between the months of September and November 2009 and July 2010. Modifications to project alternatives resulted in an expansion of the original PSA and thus the need to extend existing boundaries and investigate/delineate additional wetlands. The supplemental wetland delineation effort was performed in May, June November and December 2011. The alternative alignments were shifted again, in

December 2012, to avoid encroachment of an airport clear zone; therefore, relevant wetland boundaries were extended during December 2012. An additional wetland investigation/delineation was conducted during November 2013 to support the development of the preferred wetland mitigation site. The original wetland boundaries were delineated using the federal criteria for vegetation, hydrology, and soils (USACE 1987 and Reed 1988). Wetlands work performed following the release of the 1999 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Regional Supplement) was conducted in accordance with the both the 1987 Manual and the Regional Supplement. All of the referenced wetland areas were delineated using the Routine On-Site Method, with the exception of Wetland L, which was delineated using the Atypical Method.

The selected delineation method depends on the characteristics of the site and the complexity of the required determination. The Routine On-Site Method is a simple, rapidly applied method that results in sufficient data for making a wetland determination. The Comprehensive Method is used when the project area is very complex and/or when the determination requires rigorous documentation. The Atypical Method can be employed at sites where natural conditions do not exist and/or the positive indicators of hydrophytic vegetation, hydric soils, and/or wetland hydrology could not be found due to human activities or natural events.

In each wetland, soil test plots were needed to characterize the nature of the soil and hydrology. Each sample was visually analyzed for characteristics indicative of wetland soils, as documented in the 1987 USACE Wetlands Delineation Manual and the 1988 New England Hydric Soils Technical Committee (NEHSTC) document. Soil color designations were made based on a comparison with the Munsell soil color chart. Vegetation data was collected in the vicinity of the above referenced plots. Percent coverage by each plant species in each vegetation layer was visually estimated. Determinations were made within a 30 foot (9.14 meter) radius of the plot center for the herbaceous layer, a 10 foot (3.0 meter) radius for shrubs, and a 30 foot (9.14 meter) radius for trees. 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). The indicator status associated with each dominant species was determined using the National List of Plants that Occur in Wetlands: Northeast (Region 1) (Reed 1988). For non-listed (NL) species, the indicator status was assumed to be upland based on page nine (9) of Reed (1988), which states that: “If a species does not occur in wetlands in any region, it is not on the *National List.*”

For delineation work performed in accordance with the Regional Supplement the presence of wetland vegetation was determined by applying variations of a dominance test for positive indicators of a plant community dominated by hydrophytes. Determining positive indicators for a plant community dominated by hydrophytes is a “stepwise” procedure, carried out in a particular sequence. The first test applied is the

Rapid Test, where all dominant species across all stratum (each individual stratum had to comprise an absolute percent cover of at least five (5) percent to be considered a dominant species) had an indicator status of obligate (OBL) or facultative-wet (FACW). If the plant community passes the rapid test, it is dominated by hydrophytes and further vegetation analysis is not required. If the plant community fails the Rapid Test, the next test in the sequence is applied, this is the Dominance Test.

A plant community passed the Dominance Test when more than 50 percent of the dominant species at an ROP had an indicator status of OBL, FACW, or FAC. If the plant community fails the Dominance Test, but indicators of hydric soil and wetland hydrology are present, the Prevalence Index Test is applied.

As such, a plant community passes the Prevalence Index Test when the weighted-average of the wetland indicator status, which has been assigned numeric values, is determined to be less than or equal to 3.0 (assuming at least 80 percent of the total vegetation cover on the plot has been identified to species).

If the plant community fails the Prevalence Index Test, the Morphological Adaptations Test is applied. A plant community passes the Morphological Adaptations test when: (1) more than 50 percent of the individuals of a facultative-upland (FACU) plant species inhabiting an area where indicators of hydric soil and wetland hydrology are present have developed morphological adaptations that allow them to survive in an anaerobic soil environment, and (2) the plant community passes either the previously failed Dominance Test or the Prevalence Index Test after the indicator status of the FACU plant species that exhibits specific morphological adaptations is reassigned a FAC indicator status.

Hydrophytic vegetation is deemed present when the Rapid Test, Dominance Test, Prevalence Index or the morphological adaptations criteria have been satisfied. Deviations are noted on the wetland determination data forms (Exhibit A).

A soil test pit was dug to gather evidence for the presence of indicators of hydric soils and evidence for subterranean indicators of wetland hydrology. The soil was visually inspected for characteristics indicative of hydric soils, as documented in the USACE Wetlands Delineation Manual, the Regional Supplement and the 1988 New England Hydric Soils Technical Committee (NEHSTC) document. Soil color was determined by comparing a ped of soil to the Munsell soil color chart.

Indicators of hydric soils and subterranean wetland hydrology were analyzed to determine whether or not anaerobic conditions in the soil occur during the growing season. Anaerobic soil conditions develop when, during the growing season, soils are inundated for a week or more or are saturated in the upper 12 inches for more than two (2) weeks. At a minimum, wetlands are inundated or saturated at a frequency of five (5) years in ten (10) (i.e., a 50 percent or higher probability) as documented in the 1987

USACE Wetlands Delineation Manual and the Regional Supplement. Additionally, evidence of indicators of wetland hydrology observed above the soil surface was documented.

4. RESULTS

4.1 General Site Description

The PSA is located in the Town of Colonie, in the northeastern portion of Albany County. The overall PSA consists of approximately 285 acres. It includes approximately two (2) miles (3.2 kilometers) of I-87, beginning approximately 300-feet northeast of the Sand Creek Road flyover and ending at I-87, where it crosses Watervliet Shaker Road (Figure 1). Also included in the PSA are all of the On- and Off-ramps associated with this portion of the I-87 corridor, as well as portions of the surrounding land areas and adjacent local roads, including: an area of land between I-87 southbound and Albany Shaker Road near the northwest portion of the project corridor; all of the infield area within the I-87 project corridor between I-87 southbound and northbound lanes; and Albany Shaker Road, Old Wolf Road, and Wolf Road. (Figure 1).

The general terrain of the PSA is predominantly low lying and flat; the northwestern most portion consists of rolling hills. The project area is situated within the Shakers Creek drainage basin, which is part of the larger Mohawk River watershed. The Mohawk River watershed is approximately 1,655,680 acres (670,030 hectares) in size. The reach of Shakers Creek and its tributaries within the study area are NYSDEC Class C streams, and they do not meet the States definition of navigable; therefore they are not subject to the stream protection provisions of Article 15. For discussion purposes, the tributaries will be referred to as unnamed tributaries #1 and #2 to Shakers Creek and #3 through #7 to Ann Lee Pond (Reference Figure 2).

The reach of Shakers Creek within the PSA is a relatively permanent water (RPW). It flows generally northwest through the project area, then generally north, beyond the project limits (Reference Figures 2-4 & 2-10). It eventually outlets to the Mohawk River, which is a traditionally navigable waterway (TNW) as defined by the USACE. The RPW averages 7 feet (2.1 meters) in width and 6 inches (15.2 centimeters) in depth with fairly stable 2:1 side slopes. This meandering, manipulated, perennial stream channel provides for wetland fringe; has an approximate gradient of 2 percent; and exhibited a predominantly silt substrate. There is a stream channel distance of approximately 6.5 miles (10.5 kilometers) between the headwaters of this reach of Shakers Creek and the Mohawk River. The drainage area size for this reach of Shakers Creek is approximately 138 acres (56 hectares).

The reach of the unnamed tributary #1 to Shakers Creek is a RPW that flows northwest through the project area to Shakers Creek (Reference Figures 2-2 & 2-3). As discussed above, Shakers Creek is a RPW that flows to the Mohawk River (TNW). The RPW averages 7 feet (1.5 meters) in width and 6 inches (15.2 centimeters) in depth, with fairly stable 2:1 side slopes. This meandering, manipulated, intermittent stream channel provides for wetland fringe; has an approximate gradient of 2 percent; and exhibited a predominantly sand and gravel substrate. There is a stream channel distance of approximately 6.2 miles (10.0 kilometers) between the headwaters of the reach of unnamed tributary #1 to Shakers Creek and the Mohawk River. The drainage area size for unnamed tributary #1 to Shakers Creek is approximately 39 acres (16 hectares).

The reach of unnamed tributary #2 to Shakers Creek is a RPW that flows northwest through the project area to Shakers Creek (Reference Figure 2-30). Shakers Creek is a RPW that flows to the Mohawk River (TNW). The RPW averages 10 feet (3.0 meters) in width and 8 inches (20.3 centimeters) in depth with fairly stable 2:1 side slopes. This meandering, manipulated, perennial stream channel provides for wetland fringe; has an approximate gradient of 2 percent; and exhibited a predominantly silt substrate. There is a stream channel distance of approximately 7.4 miles (11.9 kilometers) between the headwaters of the reach of unnamed tributary #2 to Shakers Creek and the Mohawk River. The drainage area size for unnamed tributary #2 is approximately 249 acres (102 hectares).

The reach of unnamed tributary #3 to Ann Lee Pond is a RPW that flows northwest through the project area to Ann Lee Pond (Reference Figures 2-22 & 2-23). Ann Lee Pond outlets to Shakers Creek and flows generally north outside of the project limits, and eventually outlets to the Mohawk River (TNW). The RPW averages 7 feet (2.1 meters) in width and 6 inches (15.2 centimeters) in depth with fairly stable 3:1 side slopes. This meandering, manipulated, perennial stream channel provides for wetland fringe; has an approximate gradient of 2 percent; and exhibited a predominantly silt substrate. There is a stream channel distance of approximately 6.1 miles (9.8 kilometers) between the headwaters of the reach of unnamed tributary #1 to Ann Lee Pond and the Mohawk River. The drainage area size for unnamed tributary #3 to Ann Lee Pond is approximately 93 acres (38 hectares).

The reach of unnamed tributary #4 to Ann Lee Pond is a RPW that flows northwest through the project area to Ann Lee Pond (Reference Figures 2-8 & 2-14). As discussed above, Ann Lee Pond outlets to Shakers Creek and eventually outlets to the Mohawk River (TNW). The RPW averages 5 feet (1.5 meters) in width and 12 inches (30.5 centimeters) in depth with fairly stable 2:1 side slopes. This meandering, manipulated, perennial stream channel provides

for wetland fringe; has an approximate gradient of 2 percent; and exhibited a predominantly silt and sand substrate. There is a stream channel distance of approximately 6.3 miles (10.1 kilometers) between the headwaters of the reach of unnamed tributary #4 to Ann Lee Pond and the Mohawk River. The drainage area size for unnamed tributary #4 to Ann Lee Pond is approximately 251 acres (102 hectares).

The reach of unnamed tributary #5 to Ann Lee Pond is a RPW that flows northwest through the project area to Ann Lee Pond (Reference Figure 2-22). Flow from this tributary outlets to Shakers Creek and ultimately the Mohawk River (TNW). The RPW averages 5 feet (1.5 meters) in width and 6 inches (30.5 centimeters) in depth with fairly stable 2:1 side slopes. This meandering, manipulated, intermittent stream channel provides for wetland fringe; has an approximate gradient of 2 percent; and exhibited a predominantly silt substrate. There is a stream channel distance of approximately 6.0 miles (9.7 kilometers) between the headwaters of the reach of unnamed tributary #5 to Ann Lee Pond and the Mohawk River. The drainage area size for unnamed tributary #5 to Ann Lee Pond is approximately 11 acres (4.5 hectares).

The reach of unnamed tributary #6 to Ann Lee Pond is a RPW that flows northwest through the project area to Ann Lee Pond (Reference Figure 2-24). Flow from this tributary outlets to Shakers Creek, which eventually outlets to the Mohawk River (TNW). The RPW averages 5 feet (1.5 meters) in width and 6 inches (30.5 centimeters) in depth with fairly stable 2:1 side slopes. This meandering, manipulated, perennial stream channel provides for wetland fringe; has an approximate gradient of 2 percent; and exhibited a predominantly silt substrate. There is a stream channel distance of approximately 6.2 miles (10.0 kilometers) between the headwaters of the reach of unnamed tributary #6 to Ann Lee Pond and the Mohawk River. The drainage area size for unnamed tributary #6 to Ann Lee Pond is approximately 19 acres (7.7 hectares).

The reach of unnamed tributary #7 to Ann Lee Pond is a RPW that flows northwest through the project area to Ann Lee Pond (Reference Figure 2-27). Flow from this tributary outlets to Shakers Creek, which eventually outlets to the Mohawk River (TNW). The RPW averages 5 feet (1.5 meters) in width and 3 inches (7.6 centimeters) in depth with fairly stable 2:1 side slopes. This meandering, manipulated, intermittent stream channel provides a riparian corridor; has an approximate gradient of 2 percent; and exhibited a predominantly silt substrate. There is a stream channel distance of approximately 6.2 miles (10.0 kilometers) between the headwaters of the reach of unnamed tributary #7 to Ann Lee Pond and the Mohawk River. The drainage area size for unnamed tributary #7 to Ann Lee Pond is approximately 191 acres (77 hectares).

Stream Reaches within Project Study Area - Table 1

Reach	Start Coordinates	End Coordinates	Type of Water
Shakers Creek, stream order 1	42° 43' 25" N 73° 48' 13" W	42° 43' 31" N 73° 48' 25" W	Perennial RPW
unnamed tributary #1 to Shakers Creek, stream order 1	42° 43' 17" N 73° 48' 32" W	42° 43' 21"N 73° 48' 25" W	Seasonal RPW
unnamed tributary #2 to Shakers Creek, stream order 1	42° 43' 33" N 73° 47' 49" W	42° 44' 12" N 73° 48' 31" W	Perennial RPW
unnamed tributary #3 to Ann Lee Pond, stream orders 1 & 2	42° 43' 46" N 73° 47' 49" W	42° 43' 47" N 73° 47' 44" W	Perennial RPW
unnamed tributary #4 to Ann Lee Pond, stream order 1	42° 44' 8" N 73° 47' 7" W	42° 44' 12" N 73° 47' 13" W	Perennial RPW
unnamed tributary #5 to Ann Lee Pond, stream order 1	42° 43' 41" N 73° 47' 40" W	42° 43' 47" N 73° 47' 43" W	Seasonal RPW
unnamed tributary #6 to Ann Lee Pond, stream order 1	42° 43' 43" N 73° 47' 48" W	42° 43' 48" N 73° 47' 33" W	Perennial RPW
unnamed tributary #7 to Ann Lee Pond, stream order 1	42° 43' 55" N 73° 47' 19" W	42° 43' 54" N 73° 47' 39" W	Seasonal RPW

The average annual precipitation for the PSA is estimated to be 38.6 inches (98 centimeters) of rain and 62.7 inches (160 centimeters) of snow annually (National Oceanic and Atmospheric Administration. Climatography of the United States No. 20: 1971–2000 [PDF]; February 2004 [cited 2010-06-18].

The Soil Survey of Albany County, New York (USDA, 1981) indicates that the soils within the PSA of the delineated wetland areas are composed primarily of Colonie loamy fine sand (CoB), Elnora loamy fine sand (EnA, EnB), Granby loamy fine sand (Gr), Stafford loamy fine sand (St), Udipsamments, smoothed (Ud) and Urban land (Ur) soils (Figure 5). Granby loamy fine sand (Gr) is listed as a hydric soil on both the New York State Hydric Soils list (USDA list of Hydric Soils of the United States – New York State, 1995 - Exhibit B) and the Albany County Hydric Soils list (Exhibit B).

Land use within the I-87 Exit 4 PSA consists of a mix of urban development, roadside, woods, agriculture and vacant land (Figure 3).

4.2 Site Ecology

The upland vegetation communities within the PSA include deciduous forest, row crops and open fields. The habitat in the majority of the PSA has been fragmented by the interstate and state and local roadways, which restricts the locomotion of terrestrial wildlife species inhabiting this portion of the study area. However, the northwestern and central northwestern portions of the project area are largely undeveloped, providing a wildlife corridor (Figure 3). Sightings of White-tailed deer, ducks, and a variety of other avian species were observed during the fieldwork. The wetland communities within the PSA include shallow emergent marshes, palustrine forest, wet meadow and scrub-shrub swamp.

4.3 Wetlands Description

A number of potential wetland areas were investigated within the project limits. A total of fifty-two sites, totaling 28.08-acres, investigated by SCE and falling within the current PSA, met the criteria for USACE regulated wetland areas. Additional wetland area falls within the area being considered for wetland mitigation, which is located toward the southern end of the project corridor, west of I-87. Based upon review of state and federal maps, an additional wetland area exists at this site. This area will be further investigated as the mitigation option is pursued. It should be noted, that if a wetland area is identified on Table 3, as included with another wetland, it was only factored as one wetland with regard to total number of sites, and number of sites listed on the NWI and NYSDEC maps. For example, Table 3 indicates that the area of Wetland CCX is included with Wetland CC; therefore, Wetland CC/CCX accounts for one (1) wetland. Two (2) separate areas are provided for Wetlands DD and DDX; therefore, Wetlands DD and DDX are counted separately.

Sixteen of the delineated wetlands, within the PSA, are shown on the USFWS NWI Map (Figures 2 & 4). The NWI wetlands are characterized as Palustrine Forested Broad-Leaved Deciduous Seasonally Flooded/Saturated (PFO1E), Palustrine Forested Broad-Leaved Deciduous Seasonally Flooded (PFO1C), Palustrine Emergent Persistent Seasonally Flooded (PEM1C), Palustrine scrub-shrub Broad-Leaved Deciduous Seasonally Flooded/Saturated (PSS1E) and Palustrine Unconsolidated Bottom Permanently Flooded Diked/Impounded (PUBFh). Twelve of the delineated wetland areas are shown on the NYSDEC Freshwater Wetlands Map as part of a NYSDEC wetland and/or within the 100 foot buffer of a NYSDEC wetland (Figures 2 & 4). Each wetland area delineated for this project was designated by a letter code for identification purposes.

Four (4) of the delineated wetlands (Wetlands L, T, GG and XX) within the bounds of the current PSA could be determined non-jurisdictional by the USACE. Wetlands are considered jurisdictional by the USACE if they are adjacent to a TNW or directly abut a RPW. Wetlands that are isolated or adjacent to a RPW or a non-relatively permanent water need to have a significant nexus determination completed in order to determine whether or not the wetland is jurisdictional.

The observation plots and transects were strategically located to confirm the wetland boundary. The observation plots established along each transect were used to collect data related to soils, hydrology, and vegetation, in accordance with the 1987 USACE Wetlands Delineation Manual. As indicated previously, some of the delineation work was also performed in accordance with the Regional Supplement. At each observation plot, the collected data was recorded on a data sheet. Copies of the wetland determination data sheets for each observation plot are included in Exhibit A.

One (1) wetland observed within the project area is a designated Wetland Mitigation Area.

Wetland A

Wetland A is a 37,259.268 square foot (0.855 acre) shallow emergent marsh, located between Old Wolf Road and I-87 southbound, northeast of Albany Shaker Road, and southeast of the Indigo Hotel (Figures 2 All, 2-20, 2-22 & 2-23). The wetland is bounded in the northwest by the toe of the back slope of Old Wolf Road. The delineation of this wetland includes one (1) small upland inclusion located in the southwestern most portion of the wetland. The dominant vegetation is comprised primarily of a monoculture stand of Common Reed (*Phragmites australis*), an invasive species. The invasive species Purple Loosestrife (*Lythrum salicaria*) was also present to a lesser degree, particularly along the edge of the wetland. A soil sample exhibited a low matrix chroma and was determined to be hydric by criteria I (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by inundation, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage via two (2) culvert pipes: one carries flow from Wetland C in the southwest; the other carries flow from Wetland R. The wetland directly abuts unnamed tributaries #3 and #5 to Ann Lee Pond. The wetland outlets in the west via a culvert pipe, which drains northwest to Wetland B.

Wetland A principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and sediment/shoreline stabilization (Exhibit C).

Wetland B

The portion of Wetland B that exists within the project area is a 57.441 square foot (0.001 acre) shallow emergent marsh, located between the Koto Japanese Steakhouse and the Indigo Hotel, northwest of Old Wolf Road (Figures 2-All, 2-22). The wetland area extends extensively to the northwest outside of the project limits. The dominant vegetation is comprised of Common Reed and Reed Canarygrass (*Phalaris arundinacea*), both of which are considered invasive species. The invasive species Purple Loosestrife was also present to a lesser degree, particularly along the edge of the wetland. A soil sample exhibited a low matrix chroma and was determined to be hydric by criteria I (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Elnora loamy fine sand (EnB), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was indicated by saturation within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands, parking lot runoff from an asphalt gutter that inlets in the east and drainage from the directly abutting unnamed tributary #3 to Ann Lee Pond, which inlets in the southeast via a culvert pipe from Wetland A. The wetland outlets to unnamed tributary #3 to Ann Lee Pond.

Wetland B principally provides floodflow alteration, sediment/toxicant retention, and nutrient removal (Exhibit C).

Wetland C

Wetland C is a 868.828 square foot (0.020 acre) shallow emergent marsh located in the median between I-87 northbound and I-87 southbound, northeast of Albany Shaker Road (Figures 2-All & 2-22). The dominant vegetation is comprised primarily of a monoculture stand of Common Reed. Purple Loosestrife was also present to a lesser degree, particularly along the edge of the wetland. A soil sample exhibited a depleted matrix and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by saturation in the upper 12 inches (0.3 meters) of the soil surface, drainage patterns, and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from Ditches A and B via a culvert pipe that inlets in the southeast. The wetland directly abuts unnamed tributary #5 to Ann Lee Pond. Wetland C outlets to Wetland A via a culvert pipe in the northwest.

Wetland C principally provides floodflow alteration, sediment/ toxicant retention, and nutrient removal (Exhibit C).

Wetland D

Wetland D is a 39,746.075 square foot (0.912 acre) shallow emergent marsh, located southeast of Wolf Road near the intersection with Albany Shaker Road, behind the Moe's and Starbuck's parking lot (Figures 2-All, 2-18 & 2-19). The northwestern portion of the wetland is bounded by the toe of the back slope of the parking lot; the eastern portion of the wetland is bounded by the toe of the back slope of Albany Shaker Road. The delineation of this wetland includes one (1) small upland inclusion near the central portion of the wetland. The dominant vegetation is comprised primarily of a monoculture stand of Common Reed. Other vegetative species, such as, Purple Loosestrife, Sensitive Fern (*Onoclea sensibilis*), Narrow-leaved Cattail (*Typha angustifolia*) and Spotted Jewelweed (*Impatiens capensis*) were observed in the wetland as well, particularly along the edge. A soil sample exhibited a depleted matrix with approximately 85% mottling and was determined to be hydric by criteria III.D and criteria III.H.1 (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Urban Land (Ur), which is considered a miscellaneous area (Figure 5). Wetland hydrology was indicated by saturation within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage via a culvert pipe and ditch that inlet in the eastern most portion of the wetland from outside of the project limits. The wetland outlets to the northwest to a municipal separate storm sewer system via a culvert pipe near the northwestern central portion of the wetland.

Wetland D primarily provides sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland E

Wetland E is a 5,091.662 square foot (0.117 acre) shallow emergent marsh, naturalized swale area located southwest of the intersection between the I-87 southbound on-ramp and Albany Shaker Road (Figures 2-All, 2-15 & 2-20). The dominant vegetation is comprised primarily of a monoculture of Common Reed; Purple Loosestrife was also present to a lesser degree, predominantly along the edge of the wetland. A soil sample exhibited a depleted matrix with approximately 10% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by saturation in the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives

runoff from the surrounding adjacent uplands, flow from Wetland F via a culvert pipe that inlets in the central portion of the wetland and flow from Ditch C via a culvert pipe that inlets in the southeastern portion of the wetland. The wetland does not appear to have an outlet and therefore could be considered non-jurisdictional by the USACE.

Wetland E principally provides sediment/toxicant retention (Exhibit C).

Wetland F

Wetland F is a 15,717.218 square foot (0.361 acre) shallow emergent marsh, naturalized swale area, located in the median between I-87 northbound and I-87 southbound, southwest of Albany Shaker Road (Figures 2-All, 2-14, 2-15 & 2-20). The wetland is predominantly bounded to the northwest by the toe of the back slope of I-87 southbound and to the southeast by the toe of the back slope of I-87 northbound. A small upland inclusion is included near the central portion of the delineated wetland. The dominant vegetation is comprised of Common Reed, Purple Loosestrife, Water Horsetail (*Equisetum fluviatile*), predominantly in the southwestern portion, Green Ash (*Fraxinus pennsylvanica*) and Eastern Cottonwood (*Populus deltoides*). A soil sample exhibited a depleted matrix with approximately 40% mottling and was determined to be hydric by criteria III.D and III.G.2 (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands, drainage via three (3) culvert pipes, a swale that inlets in the southwest and periodic overflow from the directly abutting unnamed tributary #4 to Ann Lee Pond. The three (3) culvert pipes carry flow beneath I-87 to the northwestern, central and southeastern portions of the wetland. Drainage outlets to Wetlands FF and E via culvert pipes in the northwest and southeast respectively.

Wetland F principally provides sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland G

Wetland G is a shallow emergent marsh, naturalized ditch area, located to the northwest of Wolf Road across from Ulenski Drive, just northeast of the Homewood Suites Hilton parking lot (Figures 2-All & 2-17). The wetland is bounded to the southwest by the toe of the back slope of the Homewood Suites Hilton parking lot and to the northeast by the toe of the back slope of an upland berm. This wetland was part of the original PSA; however, due to alternative changes, this area no longer falls within the limits of the PSA. The dominant vegetation is comprised of Narrow-leaved Cattail and Common Reed. A soil

sample exhibited a depleted matrix and was determined to be hydric by criteria I and III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was indicated by saturation within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage via three (3) corrugated plastic culvert pipes that inlet into the wetland in the southeast, north and northwest beyond the PSA. The wetland is adjacent to unnamed tributary #4 to Ann Lee Pond and outlets in the northeast to Wetland H outside the PSA, via a culvert pipe.

Wetland G principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland H

Wetland H is a shallow emergent marsh, located northwest of Wolf Road across from Ulenski Drive and just southwest of Maxie's Bar and Grill (Figures 2-All & 2-17). The wetland is bounded to the southeast by the toe of the back slope of Wolf Road. This wetland was part of the original PSA; however, due to alternative changes, this area no longer falls within the limits of the PSA. The central and northern portions of the wetland area are identified on the NWI Map as a PUBFh wetland (Figure 4). The dominant vegetation is comprised primarily of a monoculture stand of Common Reed; Purple Loosestrife was also present to a lesser degree, predominantly along the southern edge of the wetland. A soil sample exhibited a depleted matrix and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Stafford Loamy Fine Sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 0.3 meters (12 inches) below the soil surface during the months of January through May. Wetland hydrology was indicated by saturation within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from unnamed tributary #4 to Ann Lee Pond via a culvert pipe. The tributary directly abuts the wetland resulting in periodic overflow to the wetland. The wetland outlets to the northwest outside of the project area to unnamed tributary #4 to Ann Lee Pond, which carries flow to Wetland I.

Wetland H principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and sediment/shoreline stabilization (Exhibit C).

Wetland I

The portion of Wetland I that exists within the project area is a 33,345.893 square foot (0.765 acre) shallow emergent marsh, naturalized swale area, located south of I-87 northbound and the I-87 northbound off-ramp and to the north of Country Kitchen, Maxie's Bar and Grill and Hilton Homewood Suites (Figures 2-All, 2-15 & 2-18). The wetland is bounded to the north by the toe of the back slope of I-87 northbound and the I-87 northbound off-ramp. The wetland area extends for a short distance to the southeast outside of the project area, where it connects to Wetland H via unnamed tributary #4 to Ann Lee Pond. The dominant vegetation is comprised primarily of a monoculture stand of Common Reed; Purple Loosestrife was also present to a lesser degree, predominantly along the edge of the wetland. A soil sample exhibited a depleted matrix and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps three (3) separate soil types for the wetland area. The northern portion of the wetland is mapped as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. The southwestern portion is mapped as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 3). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. The southeastern portion is mapped as Urban Land (Ur), which is considered a miscellaneous area (Figure 5). Wetland hydrology was indicated by saturation within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands, drainage via three (3) culvert pipes, Ditch D which inlets in the southwest and periodic overflow from the abutting unnamed tributary #4 to Ann Lee Pond. The culvert pipes exist in the west central, western and eastern portions of the wetland. Flow from the wetland outlets in the northwest central portion of the wetland to the northwest to Wetland F.

Wetland I principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland J

Wetland J is a 12,122.939 square foot (0.278 acre) combination palustrine forest and shallow emergent marsh, depressional area, located to the south of I-87 northbound and north of the Red Roof Inn rear parking lot (Figures 2-All & 2-11). The wetland is bounded to the northwest by the toe of the back slope of I-87

northbound. The dominant vegetation is comprised of Green Ash (*Fraxinus pennsylvanica*), Red Maple (*Acer rubrum*), Paper Birch (*Betula papyrifera*), Ostrich Fern (*Matteuccia struthiopteris*), Purple Loosestrife, Royal Fern (*Osmunda regalis*), Spotted Jewelweed (*Impatiens capensis*), and Tatarian Honeysuckle (*Lonicera tatarica*), an invasive species. A monoculture stand of Common Reed is dominant in the western portion of the wetland. Two (2) soil samples were collected in support of this delineation. The soil sample collected from the eastern portion of the wetland exhibited a depleted matrix and was determined to be hydric by Criteria III.A (NEHSTC, 1998 – Exhibit A). The soil sample collected from the western portion of the wetland exhibited a depleted matrix and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by saturation within the upper 12 inches (0.3 meters) of the soil surface and the FAC-neutral test. Wetland J receives runoff from the surrounding adjacent uplands and periodic overflow from the directly abutting Shakers Creek, which enters in the southern portion of the wetland. The wetland outlets to Shakers Creek in the northwestern portion of the wetland. Shakers Creek flows to the north to Wetland P.

Wetland J principally provides floodflow alteration, sediment/toxicant retention, and nutrient removal/ retention (Exhibit C).

Wetland K

Wetland K is a 1,035.040 square foot (0.024 acre) palustrine forest, located south of I-87 northbound and north of the eastern end of the Town of Colonie stockpile area (Figures 2-All & 2-11). The dominant vegetation is comprised of Red Maple, Pin Oak (*Quercus palustris*), Spotted Jewelweed, Sensitive Fern, and Water Horsetail. A soil sample exhibited a depleted matrix with approximately 25% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was identified by saturation within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. Wetland K receives runoff from the surrounding adjacent uplands and periodic overflow from Ditch E, which backs up over the headwall into Wetland K during high water events in Wetland J and Shakers Creek. Wetland K outlets to Ditch E via a culvert pipe in the north.

Wetland K provides mainly sediment/toxicant retention (Exhibit C).

Wetland L

Wetland L is a 9,726.9161 square foot (0.223 acre) palustrine forest, located northwest of Wolf Road between I-87 northbound and the western end of the Town of Colonie stockpile area (Figures 2-All & 2-39). The dominant vegetation is comprised of Red Maple, Sensitive Fern, and Silky Dogwood (*Cornus amomum*). A soil sample exhibited a depleted matrix with approximately 40% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was indicated by the FAC-neutral test and the observation that all water that enters the wetland is retained within the wetland, since there appears to be no outlet. Additionally, best professional judgment suggests that water-stained leaves are present during the beginning of the growing season. The wetland receives runoff from the surrounding adjacent uplands and does not have an outlet; therefore, the wetland may be considered non-jurisdictional by the USACE. Atypical situation conditions exist in the southern most portion of the delineated wetland. A couple mounds of soil and asphalt appears to have been placed for what appears to be storage purposes. Because of the alteration the three (3) wetland indicators could not be observed. The areas surrounding the mounds of soil and/or asphalt were observed to meet the USACE criteria for a wetland and therefore were included in the delineation of Wetland L and documented as an atypical situation.

Wetland L principally provides sediment/toxicant retention (Exhibit C).

Wetland M Wetland MX (North)/Wetland MX (South)

The Wetland M/MX complex is a 30,636.825 square foot (0.700 acre) palustrine forest. The portion of Wetland M that exists within the project area is a 566.451 square foot (0.013 acre) palustrine forest located in the southwestern most portion of the PSA in the median between I-87 northbound and I-87 southbound (Figures 2-All & 2-2). The wetland extends a short distance to the southwest outside of the project limits. The dominant vegetation is comprised of Green Ash, Sensitive Fern, Red Maple, Northern Arrowwood (*Viburnum recognitum*) and Cinnamon Fern (*Osmunda cinnamomea*). A soil sample exhibited a depleted matrix with approximately 15% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by saturation within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-

neutral test. The wetland receives runoff from the surrounding adjacent uplands and periodic seasonal and storm overflow from a shallow emergent marsh that is located to the southwest beyond the limits of the project area. The emergent marsh is separated from Wetland M by a small upland berm and dominated by Common Reed. The shallow emergent marsh wetland that exists beyond the project area is hydrologically connected to Wetland M, and is expected to outlet to Shaker's Creek. Further investigation would be necessary to verify this connection.

Wetland M principally provides sediment/toxicant retention (Exhibit C).

The portion of Wetland MX that exists within the project area is a 30,070.374 square foot (0.690 acre) palustrine forest broad-leaved deciduous wetland located in the southwestern most portion of the PSA in the median between I-87 northbound and I-87 southbound (Figures 2-All & 2-2). The wetland extends to the southwest toward Sand Creek Road, outside of the project limits. The dominant vegetation is comprised of Red Maple, Swamp White Oak (*Quercus bicolor*), Eastern Cottonwood (*Populus deltoides*) with a herbaceous layer of Tussock Sedge and another sedge species. A soil sample exhibited a depleted matrix. The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by the presence of surface water, a high water table, saturation within the upper 12 inches (0.3 meters) of the soil surface, sediment deposits, and water-stained leaves. The wetland receives runoff from the surrounding adjacent uplands and transportation infrastructure. Ditch I connects Wetland M and the northern part of MX to the southern portion of Wetland MX.

Wetland MX principally provides floodflow alteration and sediment/toxicant retention (Exhibit C).

Wetland N

Wetland N is a 2,856.919 square foot (0.066 acre) shallow emergent marsh located near the southwestern end of the project area, just southwest of the emergency turnaround area, in the median between I-87 northbound and I-87 southbound (Figures 2-All & 2-3). The dominant vegetation is comprised of Narrow-leaved Cattail, Purple Loosestrife, Sensitive Fern and Spotted Jewelweed. A soil sample exhibited a depleted matrix and was determined to be hydric by criteria III.B (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by saturation and oxidized root channels within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands, drainage via two (2) concrete box culverts and

a typical swale area to the southwest along I-87 southbound. One concrete box culvert enters from the southeast, carrying flow from Wetland O and the directly abutting unnamed tributary #1 to Shakers Creek. The second concrete box culvert enters from the northeast, carrying flow from a depressional area that does not meet the criteria to be considered a wetland (no hydric soils). The wetland outlets to Wetland EE via a concrete box culvert in the northwest.

Wetland N principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland O/OX

The Wetland O/OX complex is a 25,716.626 square foot (0.590 acre) forested wetland located near the southwestern end of the PSA (Figures 2-All, 2-1, 2-2 & 2-3). Wetland O is a 4,133.769 square foot (0.095 acre) palustrine forest bounded to the northwest by the toe of the back slope of I-87 northbound. Several small upland inclusions were included, two (2) in the central portion and one (1) in the northeastern portion of the wetland (Figures 2-All, 2-2 & 2-3). The dominant vegetation is comprised of Red Maple, Green Ash, Sensitive Fern, Spotted Jewelweed, Purple Loosestrife, and Black Elderberry (*Sambucus nigra*). A soil sample exhibited a depleted matrix and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was determined by saturation within the upper 12 inches (0.3 meters) of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and periodic overflow from the directly abutting unnamed tributary #1 to Shakers Creek, which inlets via a culvert pipe in the southeast. Two (2) PVC pipe underdrains allow flow to enter in the southeast portion of the wetland; two (2) swales also inlet in the southwest and the northeast. Wetland O outlets to unnamed tributary #1 to Shakers Creek, which drains via a concrete box culvert in the northwest to Wetland N.

Wetland O principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland OX is a 21,582.857 square foot (0.495 acre) palustrine forest broad-leaved deciduous wetland located near the southwestern end of the PSA, on the east side of I-87 northbound (Figures 2-All, 2-1& 2-2). The wetland is bounded to the northwest by the toe of the back slope of I-87 northbound. The dominant vegetation is comprised of Red Maple and Swamp White Aak with a shrub layer of Green Ash. A soil sample exhibited a depleted matrix and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was determined by the presence of

surface water, a high water table, saturation within the upper 12 inches (0.3 meters) of the soil surface, sediment deposits, drift deposits, and water-stained leaves. The wetland receives runoff from the surrounding adjacent uplands and the adjacent transportation infrastructure.

Wetland OX principally provides floodflow alteration and sediment/toxicant retention (Exhibit C).

Wetland P

Wetland P is a 18,909.738 square foot (0.434 acre) combination palustrine forest and shallow emergent marsh, located in the southwest central portion of the PSA, in the median between I-87 northbound and I-87 southbound along Shakers Creek (Figures 2-All, 2-10 & 2-11). The wetland is bounded to the south by the toe of the back slope of I-87 northbound and to the north by the toe of the back slope of I-87 southbound. The dominant vegetation is comprised of Red Maple, Green Ash, American Elm (*Ulmus americana*), Sensitive Fern, Cinnamon Fern, Royal Fern (*Osmunda regalis*), Purple Loosestrife, Water Horsetail, and Narrow-leaved Cattail. Reed Canarygrass was also scattered, but to a lesser degree, along the southeastern boundary of the wetland. A soil sample exhibited a depleted matrix and was determined hydric by criteria III.D and III.E (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was determined by saturation within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and periodic overflow from the directly abutting Shakers Creek. Flow from Shakers Creek enters via a concrete box culvert in the southeast along the southwestern portion of the wetland. Drainage from a swale also inlets in the northwest portion of the wetland. Wetland P outlets to Shakers Creek, which flows along the northwestern portion of the wetland via a concrete box culvert to Wetland II.

Wetland P principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and sediment/shoreline stabilization (Exhibit C).

Wetland Q

Wetland Q is 6,836.654 square foot (0.157 acre) a shallow emergent marsh, naturalized swale area, located in the southwest central portion of the PSAin the median between I-87 northbound and I-87 southbound, northeast of Wetland P (Figures 2-All & 2-12). The wetland is bounded in the north by the toe of the back slope of I-87 southbound. One (1) small upland inclusion (berm) was included in the southwestern portion of the delineated wetland. The dominant vegetation is comprised of Common Reed, Purple Loosestrife, Narrow-leaved

Cattail, and Green Ash. A soil sample exhibited depleted matrix with approximately 45% mottling and was determined hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). According to the Albany County Soil Survey map, the soil type is Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas, but, based on the aerial imagery and the adjacent soil types, the soils at Wetland Q were more like Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by saturation in the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage via a concrete box culvert that inlets in the south. The wetland outlets in the northwest via a concrete box culvert to Wetland HH, which appears to drain to a wetland area outside of the project limits. No hydrologic connection to a TNW was observed within the project area, but wetland flow is expected to outlet to Shakers Creek beyond the project area. Further investigation would be necessary to verify this connection.

Wetland Q principally provides sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland R

Wetland R is a 39,292.620 square foot (0.902 acre) combination shallow emergent marsh/ palustrine forest, located in the northeastern central portion of the PSA in the median between I-87 northbound and I-87 southbound along unnamed tributary #1 to Shakers Creek (Figures 2-All, 2-23, 2-24 & 2-25). The wetland is bounded to the northwest by the toe of the back slope of I-87 southbound. Several small upland inclusions (berms) were incorporated in the northeastern (palustrine forest) portion of the delineated wetland. The dominant vegetation in the palustrine forest portion is comprised of Red Maple, Green Ash, Sensitive Fern, Cinnamon Fern, Royal Fern, and Common Reed. The dominant vegetation in the shallow emergent marsh portion is comprised of Common Reed, Purple Loosestrife, and Narrow-leaved cattail. A soil sample exhibited a depleted matrix and was determined hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was determined by saturation within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage via two (2) culvert pipes. One pipe carries flow from Wetland Y and unnamed tributary #3 to Ann Lee Pond in the northeastern portion of the wetland; the second pipe carries flow from Wetland Z and unnamed tributary #6 to Ann Lee Pond in the central portion of the wetland. Both tributaries directly abut the wetland and provide periodic overflow to the wetland. The wetland outlets via a box culvert pipe in the southwestern portion of the wetland, which flows northwesterly to Wetland A.

Wetland R principally provides floodflow alteration, sediment/toxicant retention, sediment/shoreline stabilization and nutrient removal (Exhibit C).

Wetland S/SX

The portion of Wetland S/SX that exists within the project limits is a 48,900.306 square foot (1.122 acre) combination shallow emergent marsh and palustrine forest, located northwest of the Wolf Road and Metro Park Road intersection, between the Hess gas station and Cerone Commercial Drive near the southwestern end of the PSA (Figures 2-All, 2-42 & 2-43). The wetland area extends for a short distance to the southwest outside of the project limits. One (1) upland inclusion (upland mound) of relatively fair size was included in the north central portion of the delineated wetland area. The dominant vegetation is comprised of Common Reed, Sensitive Fern, Wrinkle-leaf Goldenrod (*Solidago rugosa*), Purple Loosestrife, Willow (*Salix sp*.) and Quaking Aspen (*Populus tremuloides*). A soil sample was determined to be hydric by criteria I (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps two (2) separate soil types within the wetland. The northwestern portion is mapped as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. The central and southeastern portions are mapped as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was determined by inundation, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands, drainage via Ditches F and G that inlet in the southeastern portion of the wetland and periodic overflow from the directly abutting Shakers Creek. The wetland outlets to the headwaters of Shakers Creek in the northeastern portion of the wetland.

Wetland S/SX provides principally floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland T

Wetland T is a 1,642.079 square foot (0.038 acre) shallow emergent marsh, located between Cerone Commercial Drive and Shaker's Creek, north of Wetland S (Figures 2-All & 2-40). The dominant vegetation is comprised of Purple Loosestrife, Softrush (*Juncus effusus*), Spotted Jewelweed, and Sedge (*Carex sp*.). A soil sample exhibited a depleted matrix with approximately 30% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 –

Exhibit A). The Albany County Soil Survey maps the soil type as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was determined by drainage patterns, oxidized root channels within the upper 12 inches (0.3 meters) of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands. The wetland does not appear to have an outlet and therefore could be considered non-jurisdictional by the USACE.

Wetland T principally provides sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland U

Wetland U is a 2,949.270 square foot (0.068 acre) shallow emergent marsh, naturalized ditch area located in the median between I-87 northbound and I-87 southbound, in the northeastern portion of the PSA (Figures 2-All & 2-26). The wetland is bounded in the northwest by the toe of the back slope of I-87 southbound and is bounded in the southeast by the toe of the back slope of I-87 northbound. The dominant vegetation is comprised of Narrow-leaved Cattail, an invasive species, Purple Loosestrife, Sensitive Fern, Softrush, Yellow Foxtail (*Setaria pumila*) and Sedge. No soil sample was collected due to ponding; however, the soil was determined to be hydric by criteria I (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was determined by inundation, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands (including sheet flow from the two (2) median swales bordering the northeastern and southwestern portions of the wetland) and drainage from Wetland AA via a concrete box culvert pipe that inlets in the southeast. The wetland outlets to Wetland X via a concrete box culvert in the northwest.

Wetland U principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland V/VX

The portion of the Wetland V/VX complex that exists within the study area is a 20,024.045 square foot (0.460 acre) combination palustrine forest/emergent wetland (Figures 2-All, 2-28, 2-30& 2-31). Wetland V is a 13,692.674 square foot (0.314 acre) palustrine forest, naturalized swale area located in the median between I-87 northbound and I-87 southbound in the northeastern portion of the PSA, northeast of Wetland U (Figures 2-All & 2-28). The wetland is bounded by

the toe of the back slope of I-87 southbound in the northwest and by the toe of the back slope of I-87 northbound in the southeast. The eastern portion and part of the north central portion of the wetland area are identified on the NWI Map as a PFO1E wetland (Figure 4). The delineation of this wetland includes one (1) small upland inclusion in the northeastern most portion of the wetland area. The dominant vegetation is comprised of Red Maple, American Elm (*Ulmus americana*), Northern Arrowwood, Common Reed (predominantly in the northeastern half of the wetland), Sensitive Fern, Upright Sedge (*Carex stricta*) and Sweet Flag (*Acorus calamus*). Purple Loosestrife (*Lythrum salicaria*) was also scattered throughout the wetland, but to a lesser degree. No soil sample was collected due to ponding; however, the soil was determined to be hydric by criteria I (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by inundation, drainage patterns, local soil survey data and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and flow from Wetland BB that inlets in the east southeast via a concrete box culvert. The wetland outlets in the northwest to Wetland W via a concrete box culvert pipe.

Wetland V principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland VX is a 6,331.371 square foot (0.145 acre) Palustrine Emergent Persistent wetland located in the median between I-87 southbound and associated on/off ramp (Figures 2-All, 2-30& 2-31). The wetland is bounded by the toe of the back slope of I-87 southbound to the east and by the toe of the back slope of the on/off ramp to the west. The dominant vegetation is comprised of Red Maple, Speckled Alder (*Alnus rugosa*), Common Reed Purple Loosestrife. Soils were determined to hydric based on the presence of a depleted matrix. The Albany County Soil Survey maps the soil type as Stafford loamy fine sand (St), which is found on lake plains and are somewhat poorly drained (Figure 5). The soil survey further indicates that the seasonal high water table is 6 to 18 inches below the surface from January to May. Wetland hydrology was determined by a high water table and saturation within the upper 12 inches of the soil profile. The wetland receives runoff from the surrounding adjacent uplands and probably flows from Wetland DDX, which appears to serve as a storm water management basin, by way of a culvert.

Wetland VX principally provides sediment/toxicant retention (Exhibit C).

Wetland W/WX

The portion of the Wetland W/WX complex that exists within the study area is a 68,269.690 square foot (1.567 acre) palustrine forest (Figures 2-All, 2-27, 2-28 & 2-19). Wetland W is a 35,902.690 square foot (0.8242 acre) palustrine forest, naturalized swale area, located in the median between the I-87 southbound/Old Wolf Road on-ramp and I-87 southbound in the northeastern portion of the PSA (Figures 2-All, 2-28 & 2-28). Wetland W is bounded to the northwest by the toe of the back slope of the I-87 southbound/Old Wolf Road on-ramp. The vast majority, except for the eastern and western most portions wetland area is identified on the NWI Map as a PFO1E wetland (Figure 4). The delineation of this wetland includes one (1) small upland inclusion near the southwestern corner of the wetland. The dominant vegetation is comprised of Red Maple, American Elm, Northern Arrowood, Common Winterberry (*Illex verticillata*), Reed Canarygrass, Cinnamon Fern, Sedge, and Common Reed, which was observed predominantly along the northwestern boundary of the wetland. Purple Loosestrife was also scattered along the wetland boundary, but to a lesser degree. No soil sample was collected, due to ponding; however, the soil was determined to be hydric by criteria I (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by inundation, drainage patterns, local soil survey data and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from Wetland V via a concrete box culvert that inlets in the northeast. The wetland outlets in the southwest to Wetland X via Ditch H.

Wetland W principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland WX comprises 32,366.428 square foot (0.743 acre) of the palustrine forest, naturalized swale area. The vast majority of Wetland WX, with the exception of the eastern and western most portions wetland area is identified on the NWI Map as a PFO1E wetland (Figure 4). The delineation of this wetland includes one (1) small upland inclusion near the southwestern corner of the wetland (Figures 2-All, 2-28 & 2-29). The dominant vegetation is comprised of Red Maple, American Elm, Northern Arrowood, Common Winterberry (*Illex verticillata*), Reed Canarygrass, Cinnamon Fern, Sedge, and Common Reed, which was observed predominantly along the northwestern boundary of the wetland. Purple Loosestrife was also scattered along the wetland boundary, but to a lesser degree. No soil sample was collected, due to ponding; however, the soil was determined to be hydric by criteria I (NEHSTC, 1998 – Exhibit A). The

Albany County Soil Survey maps the soil type as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by inundation, drainage patterns, local soil survey data and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from Wetland V via a concrete box culvert that inlets in the northeast. The wetland outlets in the southwest to Wetland X via Ditch H.

Wetland WX principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C; Sheet for Wetland W).

Wetland X

Wetland X is a 61,150.021 square foot (1.404 acre) combination palustrine forest and wet meadow, naturalized swale area, located in the median between the I-87 southbound/ Wolf Road on-ramp and I-87 southbound near the northeastern portion of the PSA (Figures 2-All, 2-26 & 2-27). The wetland is bounded to the northwest by the toe of the back slope of the I-87 southbound/Wolf Road on-ramp. The northeastern and south central portions of the wetland area are identified on the NWI Map as a PFO1E wetland and the southwestern and north central portions of the wetland area are identified on the NWI Map as a PEM1E (Figure 4). The dominant vegetation in the palustrine forest portion of the wetland is comprised of Red Maple, Green Ash, Reed Canarygrass, Common Reed, Sensitive Fern and Tatarian Honeysuckle. The dominant vegetation in the wet meadow portion of the wetland is comprised of Reed Canarygrass, Common Reed, Softrush, Sensitive Fern and Purple Loosestrife. A soil sample exhibited a depleted layer with approximately 10% mottling present and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from Wetlands W and U via Ditch H and culvert pipes that inlet from the northeast and southeast, respectively. The wetland outlets to the adjacent intermittent unnamed tributary #7 to Ann Lee Pond, via culvert pipes in the southwestern and northern corners of the wetland.

Wetland X principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland Y

The portion of Wetland Y that exists within the project area is a 8,658.580 square foot (0.199 acre) combination shallow emergent marsh and palustrine forest located southeast of the I-87 northbound on-ramp and I-87 northbound merge in the northeastern portion of the PSA (Figures 2-All, 2-24& 2-25). The wetland is bounded to the northwest by the toe of the back slope of the I-87 northbound on-ramp and I-87 northbound merge. The wetland area extends extensively to the southeast outside of the project area. The majority of the wetland area, except for the southwestern portion is identified on the NWI Map as a PFO1E wetland (Figure 4). The dominant vegetation in the shallow emergent marsh is comprised primarily of a monoculture stand of Common Reed. The dominant vegetation in the palustrine forest is comprised of Red Maple, Swamp White Oak (*Quercus bicolor*), Northern Arrowood, Tussock Sedge (*Carex stricta*), Grass (*Poa sp*.) and Royal Fern. Purple Loosestrife was also scattered throughout the wetland, but to a lesser degree. A soil sample exhibited a depleted layer and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps two (2) separate soil types within the wetland. The northeastern portion is mapped as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. The southwestern portion is mapped as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was determined by inundation, saturation in the upper 12 inches (0.3 meters) of the soil surface, water marks, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from two (2) swales that inlet in the southwest and the northeast along I-87 northbound. The wetland outlets in the southwest to the northeastern portion of Wetland R via a culvert pipe.

Wetland Y principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland Z

Wetland is a shallow emergent marsh, located to the southeast of the I-87 northbound on-ramp in the northeastern central portion of the PSA, near the northern corner of the Times Union parking lot (Figures 2-All & 2-24). The wetland is bounded to the northwest by the toe of the back slope of the I-87 northbound on-ramp. This wetland was part of the original PSA; however, due to alternative changes, this area no longer falls within the limits of the PSA. The

dominant vegetation is comprised primarily of a monoculture stand of Common Reed; Purple Loosestrife was also scattered throughout the wetland, but to a lesser degree. A soil sampled exhibited a depleted layer and was determined to be hydric by Criteria III.C and III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Elnora loamy fine sand (EnB), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was determined by saturation within the upper 12 inches (0.3 meters) of the soil surface and drainage patterns. The wetland receives runoff from the surrounding adjacent uplands, periodic overflow from the directly abutting unnamed tributary #6 to Ann Lee Pond that inlets from the southeast and drainage via two (2) swales that inlet in the northeast and southwest along the I-87 northbound on-ramp. The wetland outlets to the south central portion of Wetland R via a concrete box culvert in the northwest.

Wetland Z principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and sediment/shoreline stabilization (Exhibit C).

Wetland AA

The portion of Wetland AA that exists within the project area is a 256.604 square foot (0.006 acre) combination palustrine forest and wet meadow located to the southeast of I-87 northbound in the northeastern portion of the PSA (Figures 2-All & 2-26). The wetland area extends extensively to the southeast outside of the project limits. The dominant vegetation in the palustrine forest is comprised of Red Maple, Green Ash, Sensitive Fern and Riverbank Grape (*Vitis riparia*). The dominant vegetation in the wet meadow is comprised of Grasses, Purple Loosestrife and Soft Rush. A soil sample exhibited a depleted layer with approximately 25% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps two (2) separate soil types within the wetland. The northwestern portion is mapped as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. The southeastern portion is mapped as Colonie loamy fine sand (CoB), which is well drained and found on beach ridges and deltas (Figure 5). Wetland hydrology was indicated by drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from two (2) swales that inlet in the southwest and the northeast along I-87 northbound. The wetland outlets to Wetland U in the northwest via a culvert pipe.

Wetland AA principally provides sediment/toxicant retention (Exhibit C).

Wetland BB

The portion of Wetland BB that exists within the project area is a 4,200.881 square foot (0.096 acre) palustrine forest and shallow emergent marsh located southeast of I-87 northbound, in the northeastern portion of the PSA, northeast of Wetland AA (Figures 2-All & 2-28). The wetland area extends extensively to the southeast outside of the project limits. The dominant vegetation is comprised of Red Maple, American Elm, Northern Arrowwood, Sensitive Fern, Royal Fern, Tussock Sedge, and Grass. Common Reed was observed in the northwestern and north central portions of the delineated wetland area. A soil sample exhibited a depleted layer with approximately 25% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface, local soil survey data and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from two (2) swales that inlet in the southwest and northeast along I-87 northbound. The wetland outlets in the northwest to Wetland V via a culvert pipe in the central portion of the wetland.

Wetland BB principally provides sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland CC/CCX

The portion of the Wetland CC/CCX complex that exists within the project limits is a 147,157.300 square feet (3.378 acre) shallow emergent marsh located to the southwest of Albany Shaker Road and Engel's Farmstead (Figures 2-All, 2-9, 2-21& 2-34). The wetland area extends for a fair distance to the southeast and northwest outside of the project limits. The central and northeastern portions of Wetland CC are identified on the NWI Map as a PFO1C wetland and the southern most portion of the wetland area is identified on the NYSDEC Freshwater Wetlands Map as NYSDEC Wetland A-10 (Figure 4). The dominant vegetation is comprised of Common Reed, Purple Loosestrife, Grasses, and Goldenrod (*Solidago sp.*). A soil sample exhibited a depleted layer with approximately 15% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was

indicated by saturation in the upper 12 inches (0.3 meters) of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from two (2) ditches that inlet in the northwest. The wetland appears to outlet in the north outside of the project limits to unnamed tributary #4 to Ann Lee Pond.

Wetland CC principally provides sediment/ toxicant retention and nutrient removal (Exhibit C).

The central and northeastern portions of Wetland CCX are identified on the NWI Map as a PFO1C wetland, and the southernmost portion of the wetland area is identified on the NYSDEC Freshwater Wetlands Map as NYSDEC Wetland A-10 (Figure 4). The dominant vegetation is comprised of Common Reed with some Skunk Cabbage (*Symplocarpus foetidus*) scattered throughout. A soil sample exhibited a depleted layer with approximately 15% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998). The Albany County Soil Survey maps the soil type in the southeastern part of the wetland as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The northwestern most portion is mapped as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was indicated by saturation in the upper 12 inches (0.3 meters) of the soil surface and hydrogen sulfide odor. The wetland receives runoff from the surrounding adjacent uplands and drainage ditches in the southeast. The wetland appears to outlet in the north to unnamed tributary #4 to Ann Lee Pond.

Wetland CCX principally provides Groundwater Recharge/Discharge, sediment/ toxicant retention and nutrient removal (Exhibit C).

Wetland DD/DDX

The Wetland DD/DDX complex is a 25,026.272 square foot (0.575 acre) emergent wetland located southeast of the I-87 northbound near the northeastern limits of the PSA (Figures 2-All, 2-29, 2-30 & 2-31). Wetland DD is a 8,091.364 square foot (0.186 acre) shallow emergent marsh (Figures 2-All, 2-29 & 2-30). The wetland is bounded to the northwest by the toe of the back slope of I-87 northbound. The dominant vegetation is comprised of Common Reed, Softrush, Grass, and Goldenrod. Purple Loosestrife was also scattered throughout the wetland, but to a lesser degree. A soil sample exhibited a depleted layer with approximately 5% mottling present and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps three (3) separate soil types within the wetland. The northeastern

portion is mapped as Colonie loamy fine sand (CoB), which is well drained and found on beach ridges and deltas (Figure 5). The southwestern portion is mapped as Udipsamments-Urban land complex (Uf), which is somewhat excessively drained (Figure 5). The eastern most central portion is mapped as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was determined by drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands, drainage from two (2) swales that inlet in the southwest and the northeast along I-87 northbound and periodic overflow from the directly abutting unnamed tributary # 2 to Shakers Creek. Shakers Creek inlets in the southeast via a culvert pipe, which appears to be connected to a municipal separate storm sewer system and pump house along Rogers Drive. The wetland outlets to unnamed tributary #2 to Shakers Creek, which drains to the northwest underneath I-87 northbound via a culvert pipe.

Wetland DD principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and sediment/shoreline stabilization (Exhibit C).

Wetland DDX is a 16,934.940 square foot (0.389 acre) palustrine emergent persistent wetland located in the infield area between I-87 northbound and southbound lanes, south of Watervliet Shaker Road (Figures 2-All, 2-30 & 2-31). The wetland is bounded to the west by the toe of the back slope of I-87 southbound and to the east by the toe of the back slope of I-87 northbound. The dominant vegetation is comprised of Common Reed. Purple Loosestrife and Broad-leaved Cattail were also scattered throughout the wetland. A soil sample exhibited a depleted matrix. The Albany County Soil Survey maps the soil type within the wetland as Colonie loamy fine sand (CoB), which is well drained and found on beach ridges and deltas (Figure 5). Wetland hydrology was determined by saturation within the upper 12 inches of the soil profile and the presence of iron deposits. The wetland receives runoff from the surrounding adjacent uplands, and a culvert, which is associated with Wetland DD.

Wetland DDX principally provides floodflow alteration and sediment/toxicant retention (Exhibit C).

Wetland EE

The portion of Wetland EE that exists within the project area is a 23,638.936 square foot (0.543 acre) palustrine forest located northwest of I-87 southbound in the southwestern portion of the PSA (Figures 2-All, 2-2 & 2-3). The northeastern portion of the delineated wetland extends to the northwest a short distance beyond the project area; the southwestern and central portions of the delineated

wetland extend to the northwest a fair distance beyond the project area. The central portion of the wetland area is identified on the NWI Map as a PFO1E wetland and is identified on the NYSDEC Freshwater Wetlands Map as Wetland A-10 or within the one-hundred (100) foot buffer (Figure 4). The delineation of this wetland includes several small upland inclusions throughout the central and northeastern portions. The dominant vegetation is comprised of Red Maple, American Elm, Green Ash, Cinnamon Fern, Royal Fern, and Sensitive Fern. Soil samples exhibited depleted layers and were determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from Wetlands N, O and the directly abutting unnamed tributary #1 to Shakers Creek, via a culvert pipe that inlets from the southeast in the central portion of the wetland. The wetland is expected to outlet outside of the project limits to unnamed tributary #1 to Shakers Creek; however, further investigation would be necessary to confirm this connection.

Wetland EE principally provides floodflow alteration, sediment/toxicant retention, nutrient removal, production export and wildlife habitat (Exhibit C).

Wetland FF

The portion Wetland FF within the study area is a 26,738.26 square foot (0.614 acre) shallow emergent marsh located northwest of the I-87 southbound, just southwest of the Desmond Hotel in the central portion of the PSA (Figures 2-All & 2-14). Most of the central northwestern portions of Wetland FF are identified on the NWI Map as a PFO1C wetland and is identified on the NYSDEC Freshwater Wetlands Map as Wetland A-10 or within the one-hundred (100) foot buffer (Figure 4). The dominant vegetation is comprised primarily of a monoculture of Common Reed in the southeastern and northwestern portions of the wetland. The dominant species within the central portion of the wetland consist of Softrush, Purple Loosestrife, Reed Canarygrass, Narrow-leaved Cattail, and Sensitive Fern. A soil sample exhibited a depleted layer and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps three (3) separate soil types within the wetland. The majority of the wetland is mapped as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. The southwestern most portion is mapped as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone

of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. The southeastern most portion is mapped as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from two (2) swales that inlet in the southwest and northeast along I-87 southbound. Hydrologic inputs also include drainage from the pond spillway outlet and periodic overflow from the directly abutting unnamed tributary #4 to Ann Lee Pond, which inlets in the southeast via a concrete box culvert pipe. The wetland outlets to unnamed tributary #4 to Ann Lee Pond, which flows to the northwest outside of the project limits.

Wetland FF principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and sediment/shoreline stabilization (Exhibit C).

Wetland GG

Wetland GG is a 5,018.479 square meter (0.115 acre) shallow emergent marsh located northwest of I-87 southbound, northeast of the cemetery in the central portion of the PSA (Figures 2-All, 2-13 & 2-14). The dominant vegetation is comprised primarily of a monoculture stand of Narrow-leaved Cattail (*Typha angustifolia*); Purple Loosestrife was also scattered along the wetland boundary, but to a lesser degree. No soil sample was collected due to ponding; however, the soil was determined to be hydric by criteria I (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was determined by inundation of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands. No wetland outlet was observed; however, the wetland appears to be within the one-hundred (100) foot buffer of the adjacent mapped NYSDEC wetland. As such, it may be determined that this area is part of the mapped NYSDEC wetland and therefore regulated by both the NYSDEC and USACE.

Wetland GG principally provides sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland HH/HHX

The portion of the Wetland HH/HHX complex that exists within the project area is a 9,229.822 square foot (0.212 acre) palustrine forest located northwest of I-87 southbound and Wetland Q, in the southwestern central portion of the PSA

(Figures 2-All, 2-5, 2-6 & 2-12). Wetland HH is a 2,183 square foot (0.050 acre) palustrine forest that extends to the northwest outside of the project area, then back in it, at Wetland Boundary HHX (Figures 2-All, 2-6 & 2-12). The northwestern most portion Wetland HH is identified on both the NWI Map (PUBHh) and the NYSDEC Freshwater Wetlands Map (Figure 4). The dominant vegetation is comprised of Green Ash, Red Maple, Sensitive Fern, Purple Loosestrife, and Grass. Common Reed and Reed Canarygrass were also present near the central portion of the wetland, but to a lesser degree. A soil sample exhibited a depleted layer with approximately 5% mottling present and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface and drainage patterns. The wetland receives runoff from the surrounding adjacent uplands, drainage from Wetland Q via a culvert pipe that inlets in the southeast, and drainage from two (2) swales that inlet in the southwest and northeast along I-87 southbound. No outlet was observed within the project area; however, the delineated wetland area appears to be mapped as part of a NYSDEC wetland. As such, it is anticipated that the wetland outlets outside of the project limits to Wetland PP; however, further investigation would be necessary to confirm this connection.

Wetland HH principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and wildlife habitat (Exhibit C).

Wetland HHX is a 7,046.560 square foot (0.162 acre) palustrine forest that is identified on both the NWI Map (PUBHh) and the NYSDEC Freshwater Wetlands Map (Figure 4). The dominant vegetation is comprised of Green Ash, Red Maple, Tussock Sedge, and Cattail (*Typha* sp.). A hydrogen sulfide odor was detectable by merely walking in the wetland. The Albany County Soil Survey maps the soil type as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas, and Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was determined by the presence of surface water and a detectable hydrogen sulfide odor. The wetland receives runoff from the surrounding adjacent uplands, drainage from Wetland Q via a culvert pipe that inlets in the southeast, and drainage from two (2) swales that inlet in the southwest and northeast along I-87 southbound. Wetland HHX drains into Wetland PPX at the southwestern boundary corner.

Wetland HHX principally provides groundwater recharge/discharge, sediment/toxicant retention, nutrient removal and wildlife habitat (Exhibit C).

Wetland II

The portion of Wetland II that exists within the project area is a 235,002.000 square foot (5.394 acre) palustrine forest located northwest of I-87 southbound along Shakers Creek in the southwestern central portion of the PSA (Figures 2-All, 2-3A, 2-3B, 2-3C, 2-4, 2-4A, 2-5 & 2-10). Since the proposed wetland mitigation design will abut Wetland II, the previously delineated boundaries of Wetland II were extended relative to the bounds of the preferred wetland mitigation site. An additional 4.64-acres of wetland have been added to the original 32,850.544 square feet (0.75-acres) of Wetland II within the former PSA. The eastern extent of the wetland is bounded to the southeast by the toe of the back slope of I-87 southbound. The wetland area extends extensively to the northwest outside of the project area. The northern most portion of the wetland area is identified on the NWI Map as a PFO1E wetland and on the NYSDEC Freshwater Wetlands Map as Wetland A-10 or within the one-hundred (100) foot buffer (Figure 4). The delineation of this wetland includes a couple of very small upland inclusions in the northwestern portion of the wetland area. The dominant vegetation is comprised of Green Ash, Red Maple, Musclewood (*Carpinus carolina*), Purple Loosestrife, Cinnamon Fern, Eastern Marsh Fern (*Thelypteris palustris*), Royal Fern, Sensitive Fern and Sedge. Common Reed and Reed Canarygrass were also present in the southern portion of the wetland, but to a lesser degree. A soil sample exhibited a depleted layer with approximately 5% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps two (2) separate soil types within the wetland. The southeastern portion is mapped as Udipsamments, smoothed (Ud), which is well drained (Figure 5). The northwestern portion is mapped as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands, drainage from two (2) swales that inlet in the southwest and northeast along I-87 southbound and periodic overflow from the directly abutting Shakers Creek. The wetland outlets to Shakers Creek.

Wetland II principally provides floodflow alteration, sediment/toxicant retention, nutrient removal, sediment/shoreline stabilization and wildlife habitat (Exhibit C).

The boundaries of Wetland II were extended in November 2013 to support the development of the preferred wetland mitigation site and expansion of the PSA.

The wetland mitigation site was screened to determine the location and extent of existent wetlands within the bounds of the site and confirm that the area proposed for wetland creation is currently upland. Forest canopy trees were dominated by Red Maple and Yellow Birch (*Betula alleghaniensis*). There are two Eastern Hemlock (*Tsuga Canadensis*) groves, and a few eastern White Pines (*Pinus strobus*) are scattered throughout the mitigation site. The forested wetland lacked an understory except at its easterly and southerly edges, which abut a maintained overhead utility right-of-way. The ground layer was thin and dominated by cinnamon fern, royal fern, sensitive fern, and sedge. A soil sample exhibited a depleted layer with approximately 70% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The site is mapped as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface.

The wetland receives runoff from the surrounding adjacent uplands and periodic overflow from the directly abutting Shakers Creek and an unnamed tributary of Shakers Creek. The wetland outlets to Shakers Creek.

Wetland JJ

The portion of Wetland JJ that exists within the project area is a 6,048.067 square foot (0.139 acre) shallow emergent marsh located northwest of I-87 southbound and Wetland P in the southwestern central portion of the PSA (Figures 2-All, 2-5 & 2-11). The wetland is bounded to the southeast by the toe of the back slope of I-87 southbound. The central northwestern most portion of the wetland area is identified on the NWI Map as a PFO1E wetland and is identified on the NYSDEC Freshwater Wetlands Map as Wetland A-10 or within the one-hundred (100) foot buffer (Figure 4). The dominant vegetation is comprised of Common Reed, Purple Loosestrife, Sedges, Arrowleaf Tearthumb (*Polygonum sagittatum*) and Common Winterberry. Reed Canarygrass was also present in the northwestern portion of the wetland, but to a lesser degree. A soil sample exhibited a depleted layer with approximately 5% mottling present and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps two (2) separate soil types within the wetland area. The majority of the wetland is mapped as Udipsamments, smoothed (Ud), which is well drained. The northwestern most portion is mapped as Colonie loamy fine sand (CoB), which is well drained and found on beach ridges and deltas (Figure 5). Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage from one (1) swale that inlets in the southwest along I-87 southbound.

No outlet was observed within the project limits; however, the delineated wetland area appears to be mapped as part of a NYSDEC wetland. As such, it is expected that an outlet may exist outside the project limits. Further investigation would be necessary to confirm this connection.

Wetland JJ principally provides floodflow alteration, sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland KK/KKX

The Wetland KK/KKX complex is a 39,185.712 square foot (0.900 acre) combination palustrine scrub-shrub, open water and palustrine emergent wetland. Wetland KK is a wet meadow located in the vicinity of two farm access roads (Figures 2-All, 2-6 & 2-7). Wetland KK was part of the original PSA; however, due to alternative changes, this area no longer falls within the limits of the PSA. The wetland is bounded to the northeast by the toe of the backslope of a farm access road. The wetland area is identified on the NYSDEC Freshwater Wetlands Map as being within the one-hundred (100) foot buffer of NYSDEC Wetland A-10 (Figure 4). The dominant vegetation is comprised of Reed Canarygrass, Common Red Raspberry (*Rubus Idaeus*), Sedge, and Eastern Marsh Fern. A soil sample exhibited a depleted layer and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was determined by saturation and oxidized root channels in the upper 12 inches (0.3 meters) of the soil surface. The wetland receives runoff from the surrounding adjacent uplands. No outlet was observed within the project limits; however, the wetland is mapped as part of a NYSDEC wetland. As such, it is expected that an outlet may exist beyond the project limits. Further investigation would be necessary to confirm this connection.

Wetland KK principally provides sediment/toxicant retention and nutrient removal (Exhibit C).

The portion of Wetland KKX that exists within the project area is a 39,185.712 square foot (0.900 acre) wet meadow situated on both sides of a farm access road along the western edge of the PSA (Figured 2-All, 2-6 & 2-7). The wetland is bisected by the farm access road. The wetland area is identified on the NYSDEC Freshwater Wetlands Map as part of NYSDEC Wetland A-10 (Figure 4). The dominant vegetation is comprised of Poa sp., a Sedge (*Carex* sp.), and Soft Rush (*Juncus effusus*). A soil sample exhibited a depleted matrix and was

determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type of the wetland area south of the farm access road as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas, and, in the area north of the farm access road, Colonie loamy fine sand (CoC), a very deep well to excessively well drained soil found on deltas, dunes, and plains (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was determined by the presence of surface water and saturation in the upper 12 inches (0.3 meters) of the soil surface. The wetland receives runoff from the surrounding adjacent uplands. No outlet was observed within the project limits; however, the wetland is mapped as part of a NYSDEC wetland. As such, it is expected that an outlet may exist beyond the project limits. Further investigation would be necessary to confirm this connection.

Wetland KKX principally provides groundwater recharge/discharge, floodflow alteration, sediment/toxicant retention and wildlife habitat (Exhibit C).

Wetland LL

Wetland LL is a wet meadow located south of Wetland KK (Figure 2-All). Due to changes in the PSA boundaries, this wetland no longer falls within the limits of the project area. The eastern and southern portions of the wetland area are identified on the NYSDEC Freshwater Wetlands Map as being within the one hundred (100) foot buffer of NYSDEC Wetland A-10 (Figure 4). The dominant vegetation is comprised of Sedge, Softrush, Goldenrod, Common Red Raspberry, Woolgrass (*Scirpus cyperinus*) and Eastern Marsh Fern. A soil sample exhibited a depleted layer with approximately 20% mottling present and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands. No wetland outlet was observed within the project limits; however, the wetland appears to be within the one-hundred (100) foot buffer of the adjacent mapped NYSDEC wetland. As such, it may be determined that this area is part of the mapped NYSDEC wetland and therefore regulated by both the NYSDEC and USACE.

Wetland LL principally provides sediment/toxicant retention (Exhibit C).

Wetland MM

Wetland MM is a shallow emergent marsh, depressional area, located just south of Wetland LL (Figure 2-All). Due to changes in the PSA boundaries, this wetland no longer falls within the limits of the project area. The wetland area is identified on the NYSDEC Freshwater Wetlands Map as being within the one hundred (100) foot buffer of NYSDEC Wetland A-10 (Figure 4). The dominant vegetation is comprised of Sedge and Softrush. No soil sample was collected due to ponding; however, the soil was determined to be hydric by Criteria I (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was determined by inundation of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands. No wetland outlet was observed; however, the wetland appears to be within the one-hundred (100) foot buffer of the adjacent mapped NYSDEC wetland. As such, it may be determined that this area is part of the mapped NYSDEC wetland and therefore regulated by both the NYSDEC and USACE.

Wetland MM principally provides sediment/toxicant retention and wildlife habitat (Exhibit C).

Wetland NN

Wetland NN is a wet meadow located southwest of Wetland MM (Figure 2-All). Due to changes in the PSA boundaries, this wetland no longer falls within the limits of the project area. The wetland area extends for a fair distance to the northwest outside of the project limits. The wetland area is identified on the NYSDEC Freshwater Wetlands Map as NYSDEC Wetland A-10 (Figure 4). The dominant vegetation is comprised of Softrush, Sedge and Eastern Marsh Fern. A soil sample exhibited a depleted layer with approximately 5% mottling present and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands. No wetland outlet was observed within the project limits; however, the wetland is mapped as a NYSDEC wetland and therefore regulated by the NYSDEC.

Wetland NN principally provides sediment/toxicant retention, nutrient removal, wildlife habitat and visual quality/aesthetics (Exhibit C).

Wetland OO

Wetland OO is a shallow emergent marsh located south of Wetland NN (Figure 2-All). Due to changes in the PSA boundaries, this wetland no longer falls within the limits of the project area. All of the wetland area is identified on the NWI Map as a PFO1E wetland, with the exception of the northern most, northcentral and northeastern most portions of the wetland area, which are identified on the NYSDEC Freshwater Wetlands Map as being within the one-hundred (100) foot buffer of NYSDEC Wetland A-10 (Figure 4). The delineation of this wetland area includes a few relatively small upland inclusions primarily near the central portion of the wetland area. The dominant vegetation is comprised of Sedge, Softrush, Woolgrass, Sensitive Fern, Goldenrods and Eastern Marsh Fern. A soil sample exhibited a depleted layer and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface. The wetland receives runoff from the surrounding adjacent uplands and periodic overflow from the ponded area outside of the project limits to the northeast. No wetland outlet was observed; however, the wetland appears to be within the one-hundred (100) foot buffer of the adjacent mapped NYSDEC wetland. As such, it may be determined that this area is part of the mapped NYSDEC wetland and therefore regulated by both the NYSDEC and USACE.

Wetland OO principally provides floodflow alteration, sediment/toxicant retention, nutrient removal, wildlife habitat and visual quality/aesthetics (Exhibit C).

Wetland PP/PPX

The portion of the Wetland PP/PPX complex that exists within the project area is a 12,216.832 square foot (0.280 acre) shallow emergent marsh located south of Wetland OO along the southern portion of the eastern most portion of the PSA (Figures 2-All & 2-5). The wetland extends extensively to the northwest outside of the project limits and a short distance to the southeast outside of the project limits. All of the wetland area except the eastern most portion of the wetland area is identified on the NWI Map as a PFO1E wetland and the central and most

of the northern portions of the wetland area are identified on the NYSDEC Freshwater Wetlands Map as Wetland A-10 (Figure 4). The dominant vegetation is comprised of Sedges, Reed Canarygrass, Purple Loosestrife, Sensitive Fern, Softrush, Goldenrods, Red Maple, Green Ash and Gray Dogwood (*Cornus racemosa*). A soil sample exhibited a depleted layer with approximately 15% mottling present and was determined to be hydric by criteria I and III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by inundation, saturation in the upper 12 inches (0.3 meters) of the soil surface, local soil survey data and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands. No wetland outlet was observed within the project limits; however, the delineated wetland area appears to be mapped as part of a NYSDEC wetland. As such, it is expected that an outlet exists beyond the project limits. Further investigation would be necessary to confirm this connection.

Wetland PP principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and wildlife habitat (Exhibit C).

Wetland PPX extends extensively to the northwest outside of the project limits. All of this wetland area except the eastern most portion of the wetland area is identified on the NWI Map as a PFO1E wetland and the central and most of the northern portions of the wetland area are identified on the NYSDEC Freshwater Wetlands Map as Wetland A-10 (Figure 4). The dominant vegetation is comprised of Green Ash, Red Maple, Sedges, Skunk Cabbage, and Spotted Jewelweed. The Albany County Soil Survey maps the soil type within the wetland area as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by inundation, saturation in the upper 12 inches (0.3 meters) of the soil surface, and local soil survey data. The wetland receives runoff from the surrounding adjacent uplands. No wetland outlet was observed within the project limits; however, the delineated wetland area appears to be mapped as part of a NYSDEC wetland. As such, it is expected that an outlet exists beyond the project limits. Further investigation would be necessary to confirm this connection.

Wetland PPX principally provides groundwater recharge/discharge, floodflow alteration, and wildlife habitat (Exhibit C).

Wetland QQ

Wetland QQ is a) wet meadow located southwest of Wetland TT (Figure 2-All). Due to changes in the PSA boundaries, this wetland no longer falls within the limits of the project area. The dominant vegetation is comprised of Common Reed, Woolgrass, Sensitive Fern, and Softrush. Purple Loosestrife was also scattered along the wetland boundary, but to a lesser degree. A soil sample exhibited a depleted layer with approximately 15% mottling present and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Colonie loamy fine sand (CoB), which is well drained and found on beach ridges and deltas (Figure 5). Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands. No apparent outlet was observed within or near the delineated wetland area during the field investigation. Further investigation would be required to determine whether or not an outlet exists.

Wetland QQ principally provides sediment/toxicant retention (Exhibit C).

Wetland RR/RRX

The portion of the Wetland RR/RRX complex that exists within the project area is a 75,781.38 square foot (1.740 acre) shallow emergent marsh located to the southwest of Albany Shaker Road and Wetland CC in the northern central portion of the PSA (Figures 2-All,2-8, 2-9, & 2-14). Wetland RR extends extensively to the southeast and northwest outside of the project area, along unnamed tributary #2 to Ann Lee Pond. All of the wetland area is identified on the NWI Map as aPFO1C wetland, except for the northeastern portion and the wetland area is identified on the NYSDEC Freshwater Wetlands Map as NYSDEC Wetland A-10 (Figure 4). The dominant vegetation is comprised of Common Reed, Grasses, Purple Loosestrife, Arrowleaf, Tearthumb and Speckled Alder. A soil sample exhibited a depleted layer and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface, local soil survey data and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and periodic overflow from the directly abutting unnamed tributary #4 to Ann Lee Pond. The wetland outlets to unnamed tributary #4 to Ann Lee Pond.

Wetland RR principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and sediment/shoreline stabilization (Exhibit C).

Wetland RRX extends extensively to the southeast and northwest outside of the project area, along unnamed tributary #4 to Ann Lee Pond. All of the wetland area is identified on the NWI Map as aPFO1C wetland, except for the northeastern portion and the wetland area is identified on the NYSDEC Freshwater Wetlands Map as NYSDEC Wetland A-10 (Figure 4). The dominant vegetation is comprised of Common Reed and Skunk Cabbage. A soil sample exhibited a thick dark layer and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained, and Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface and local soil survey data. The wetland receives runoff from the surrounding adjacent uplands and periodic overflow from the directly abutting unnamed tributary #4 to Ann Lee Pond. The wetland outlets to unnamed tributary #4 to Ann Lee Pond.

Wetland RRX principally provides groundwater recharge/discharge, sediment/toxicant retention, and nutrient removal (Exhibit C).

Wetland SS

Wetland SS is a shallow emergent marsh located between Wetlands QQ and TT (Figure 2-All). Due to changes in the PSA boundaries, this wetland no longer falls within the limits of the project area. The dominant vegetation is comprised of Woolgrass, Reed Canarygrass, Softrush, Purple Loosestrife, and Narrow-leaved Cattail. No soil sample was collected due to ponding; however, the soil was determined to be hydric by criteria I (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Colonie loamy fine sand (CoB), which is well drained and found on beach ridges and deltas (Figure 5). Wetland hydrology was determined by saturation in the upper 12 inches (0.3 meters) of the soil surface and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands. Since no wetland outlet was observed, this area may be considered non-jurisdictional by the USACE.

Wetland SS principally provides sediment/toxicant retention and nutrient removal (Exhibit C).

Wetland TT/TTX

The Wetland T/TTX complex is a 77,381.139 square foot (1.776 acre) combination shallow emergent marsh/palustrine forest located along the west side of Albany Shaker Road, near the northwesterly corner of the PSA (Figures 2-All, 2-35, 2-36 & 2-37). The portion of Wetland TT that exists within the project area is a 70,085.374 square foot (1.609 acre) shallow emergent marsh bounded to the northeast by the toe of the backslope of Albany Shaker Road (Figures 2-All, 2-35, 2-36 & 2-37). The wetland extends extensively to the southeast beyond the project area. The center of the delineated wetland area is identified on the NWI Map as a PSS1E wetland (Figure 4). The dominant vegetation is comprised primarily of a monoculture stand of Common Reed. A soil sample exhibited a depleted layer with approximately 5% mottling present and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type within the wetland area as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by saturation in the upper12 inches (0.3 meters) of the soil surface, local soil survey data and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and drainage via a culvert pipe that inlets in the north along Albany Shaker Road. No wetland outlet was observed within the project limits; however, the delineated wetland area is part of a NWI mapped wetland, which is expected to outlet to unnamed tributary #4 to Ann Lee Pond in the northwest outside of the project area. Further investigation would be necessary to confirm this connection.

Wetland TT principally provides floodflow alteration, sediment/toxicant retention, nutrient removal and wildlife habitat (Exhibit C).

The portion of Wetland TTX that exists within the project area is a 7,295.765 square foot (0.167 acre) shallow emergent marsh/palustrine forest bounded to the northeast by the toe of the backslope of Albany Shaker Road (Figures 2-All & 2-37). The wetland extends extensively to the northwest beyond the project area. The center of the delineated wetland area is identified on the NWI Map as a PSS1E wetland and PFO1E (Figure 4). The dominant vegetation is comprised of a Red Maple and American Elm with a herbaceous layer of Skunk Cabbage, Spotted Jewelweed, and Sensitive Fern. A soil sample exhibited a depleted matrix. The Albany County Soil Survey maps the soil type within the wetland area as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was determined by saturation in the upper12 inches (0.3 meters) of the soil surface. The wetland receives runoff from the surrounding adjacent uplands

and drainage via a culvert pipe that inlets in the north along Albany Shaker Road. This wetland complex is directly connected to Ann Lee Pond, which lies to the northwest.

Wetland TTX principally provides groundwater recharge/discharge, floodflow alteration, sediment/toxicant retention, and wildlife habitat (Exhibit C).

Wetland UU/UUX

Wetland UU/UUX is a 20,837.239 square foot (0.4784 acre) shallow emergent marsh located northwest of and adjacent to I-87 southbound and Old Wolf Road on-ramp in the northeastern portion of the PSA, across from Wetland W (Figures 2-All, 2-27, 2-28, 2-30 & 2-31).The portion of Wetland UU that exists within the project area is a 8,309.374 (0.191 acre) shallow emergent marsh, naturalized ditch area bounded to the southeast by the toe of the backslope of I-87 southbound and Old Wolf Road on-ramp (Figures 2-All, 2-27 & 2-28). The dominant vegetation is comprised primarily of a monoculture stand of Common Reed. A soil sample exhibited a depleted layer with approximately 45% mottling present and was determined to be hydric by criteria III.D (NEHSTC, 1998 – Exhibit A). The Albany County Soil Survey maps the soil type as Granby loamy fine sand (Gr), which is found on depressions and are very poorly drained (Figure 5). The soil survey further indicates that the surface of the soil is saturated during the months of November through June. Wetland hydrology was indicated by a drainage pattern and the FAC-neutral test. The wetland receives runoff from the surrounding adjacent uplands and flow via a culvert pipe which inlets in the southwestern most portion of the wetland from Ditch H. The wetland outlets via a culvert pipe in the southwestern most portion of the wetland, draining to the northwest outside of the project limits. Since the ditch meets all three (3) wetland criteria and has been constructed in hydric soils, the ditch would not likely be considered exempt by the USACE and therefore, has been delineated as a wetland.

Wetland UU principally provides floodflow alteration and sediment/toxicant retention (Exhibit C).

The portion of Wetland UUX that exists within the project area is a 12,527.865 square foot (0.288 acre) shallow emergent marsh located northwest of and adjacent to I-87 southbound and Old Wolf Road on-ramp in the northeastern portion of the PSA, across from Wetland VX and north of Wetland XX (Figures 2-All, 2-30 & 2-31). The wetland is bounded to the southeast by the toe of the backslope of the I-87 southbound on/off-ramp. The dominant vegetation is comprised primarily of a monoculture stand of Common Reed. A soil sample exhibited a depleted matrix. The Albany County Soil Survey maps the soil type as Stafford loamy fine sand (St), which is somewhat poorly drained and found on

beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was indicated by the presence of surface water, a high water table, and saturation within the upper 12 inches of the soil profile. The wetland receives runoff from the surrounding adjacent uplands and flow via a culvert pipes from Wetland VX and DDX. The wetland outlets via a culvert pipe, draining to the west, between two storage mall areas, outside of the project limits. Since the ditch meets all three (3) wetland criteria and has been constructed in hydric soils, the ditch would not likely be considered exempt by the USACE and therefore, has been delineated as a wetland.

Wetland UUX principally provides floodflow alteration and sediment/toxicant retention (Exhibit C).

Wetland VV

The portion of Wetland VV that exists within the project area is a 5,754.450 square foot (0.132 acre) palustrine forest broad-leaved deciduous wetland that abuts Ditch J, located west of west of Albany Shaker Road, across from the airport (Figures 2-All & 2-38). The wetland is bounded to the east by Albany Shaker Road. The dominant vegetation is comprised of Green Ash and Black Willow with Fox Sedge and another Sedge species beneath a shrub layer of Silky Dogwood. A soil sample exhibited a depleted matrix. The Albany County Soil Survey maps the soil type as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was indicated by saturation within the upper 12 inches of the soil profile, the presence of iron deposits; water stained leaves, and oxidized rhizospheres on living roots. The wetland receives runoff from the surrounding adjacent uplands and flow via a culvert pipe which inlets at Ditch J, which flows into Ann Lee Pond.

Wetland VV principally provides floodflow alteration (Exhibit C).

Wetland WW

The portion of Wetland WW that exists within the project area is a 3,159 square foot (0.073 acre) palustrine emergent persistent wetland, located just to the south of Watervliet Shaker Road on the west side of the I-87 southbound on/off ramp, north of Wetland UUX (Figures 2-All & 2-31). The wetland is bounded to the west by the toe of the backslope of I-87 southbound on/off ramp. The dominant vegetation is comprised of Broad-leaved Cattail and there was some Sensitive

Fern and Purple Loosestrife growing as well. A soil sample exhibited a depleted matrix. The Albany County Soil Survey maps the soil type as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. Wetland hydrology was indicated by a high water table, saturation within the upper 12 inches of the soil profile, and the presence of iron deposits. The wetland receives runoff from the surrounding adjacent uplands and flow via a culvert pipe associated with Wetland DDX.

Wetland WW principally provides floodflow alteration and sediment/toxicant retention (Exhibit C).

Wetland XX

The portion of Wetland XX that exists within the project area is a 3,311.649 square foot (0.076 acre) palustrine forest broad-leaved deciduous wetland located west of the I-87 southbound on/off ramp, south of Wetland UUX (Figures 2-All & 2-29). The wetland is bounded to the east by the toe of the backslope of I-87 southbound and to the west by the backslope along a driveway associated with a storage mall. The dominant vegetation is comprised of Red Maple and Green Ash with Gray Dogwood and Sensitive Fern in the understory. A soil sample exhibited a depleted matrix. The Albany County Soil Survey maps the soil type as Udipsamments-Urban Land Complex (Figure 5). Wetland hydrology was indicated by the presence of surface water, a high water table, and saturation within the upper 12 inches of the soil profile. The wetland receives runoff from the surrounding adjacent uplands. This area appears to be an isolated depression surrounded by urban development.

Wetland XX principally provides floodflow alteration (Exhibit C).

Wetland Mitigation Area (WMA)

The Wetland Mitigation Area is an approximate 8,914.767 square foot (0.205 acre) area located on the west side of Albany Shaker Road, with Wetland VV to its north and Wetland TT/TTX to its south (Figures 2-All, 2-37 & 2-38). The dominant plant is Common Reed with some rushes and sedges present and Red Maple and Speckled Alder plantings scattered around the wetland/upland fringe. The soils were saturated and exhibited a depleted matrix at least six inches thick starting within the upper ten inches of the soil profile.

Ditch J

Ditch J is a 3,518.268 square foot (0.081 acre) channelized stream, which is the Unnamed Tributary #3 to Ann Lee Pond, located on the west side of Albany Shaker Road, across from the airport (Figures 2-All & 2-38). The Albany County Soil Survey maps the soil type as Stafford loamy fine sand (St), which is somewhat poorly drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 12 inches (0.3 meters) below the soil surface during the months of January through May. The ditch receives runoff from the surrounding adjacent uplands and outlets to Ann Lee Pond.

Ordinary High Water (OHW) Location A

A total of five (5) flags (A1-A5) were placed along unnamed tributary #1 to Shakers Creek to depict the OHW elevation at this location (Figure 2-3). Three (3) flags were placed on the northwestern bank of the tributary, southeast of I-87 northbound along Wetland O; the remaining two (2) flags were placed on the western bank of the tributary, along Wetland N in the median between I-87 northbound and I-87 southbound near the inlet and outlet culvert pipes. The tributary consisted of a sand and gravel substrate, with water levels on averaging approximately 4 inches (10 centimeters) in depth.

OHW Location B

A total of eight (8) flags (B1-B8) were placed along Shakers Creek to depict the OHW elevation at this location (Figures 2-4, 2-10 & 2-11). One (1) flag was placed on the southwestern bank of the tributary, southeast of I-87 northbound near Wetland J; two (2) flags were placed on the southwestern bank of the tributary in the median between I-87 northbound and I-87 southbound, near the box culvert; the remaining five (5) flags were placed on the southwestern bank of the tributary along Wetland II. The tributary consists of a silt substrate, with water levels on averaging approximately 6 inches (15 centimeters) in depth.

OHW Location C

A total of two (2) flags (C1-C2) were placed along unnamed tributary #4 to Ann Lee Pond to depict the OHW elevation at this location (Figure 2-14). Both flags were placed on the southwestern bank of the tributary in the median between I-87 northbound and I-87 southbound, near the box culvert pipes along Wetland F. Clear OHW indicators were not present along the tributary southeast of I-87 northbound or northwest of I-87 southbound within the project area; however, the entire reach of stream within these locations was included within the delineated

boundaries of Wetlands I, FF and RR. The tributary consists of a silt substrate, with water levels averaging approximately 6 inches (15 centimeters) in depth.

Open Waters

Two (2) man-made Ponds (Pond 1 and Pond 2) exist within the PSA. Pond 1 is located between Wetlands FF and GG, and is anticipated to have an outlet with flow going to Unnamed Tributary #4 to Ann Lee Pond; this outlet will be further investigated during a field investigation conducted Spring 2013. Pond 2 is located within Wetland CC. Both ponds have been classified as Open Water for the purpose of discussing impacts relative to USACE jurisdiction and regulatory authority. Pond 1 is approximately 0.18-acres and Pond 2 is approximately 0.17-acres.

4.4 Areas Not Subject to Section 404 of the Clean Water Act

Ditch A

Ditch A is a 2,425 square foot (0.06 acre) naturalized ditch located between I-87 northbound and the I-87 northbound on-ramp, northeast of Albany Shaker Road (Figures 2-All & 2-22). The dominant vegetation is comprised primarily of a monoculture stand of Common Reed; Purple Loosestrife was also present particularly along the edge of the ditch, but to a lesser degree. The soils were screened and determined not to be hydric. The Albany County Soil Survey maps two (2) separate soil types in the ditch area. The northwestern portion of the ditch is mapped as Udipsamments, smoothed (Ud), which is well drained (Figure 5). The southeastern portion of the ditch is mapped as Urban land (Ur), which is considered a miscellaneous area (Figure 5). Wetland hydrology was indicated by drainage patterns and the FAC-neutral test. The ditch receives runoff from the surrounding adjacent uplands, drainage from Ditch B via a culvert pipe that inlets in the southeast and drainage from a swale along the northwest side of the I-87 northbound on-ramp that inlets to the southeastern portion of the ditch. The ditch outlets to Wetland C via a culvert pipe in the northwest. Although Ditch A meets all three (3) wetland criteria the ditch appears to be maintained and constructed in upland soils. As such, the ditch will likely be considered exempt and non-jurisdictional by the USACE.

Ditch B

Ditch B is a 1,900 square foot (0.04 acre) naturalized ditch located east of the intersection of Albany Shaker Road and the I-87 northbound on-ramp. The ditch is bounded to the northwest by the toe of the backslope of the I-87 northbound on-ramp (Figures 2-All & 2-22). The dominant vegetation is comprised of

Goldenrods, Grasses, Narrowleaf Plaintain, and Common Reed. The soils were screened and determined not to be hydric. The Albany County Soil Survey maps the soil type as Urban land (Ur), which is considered a miscellaneous area (Figure 5). Wetland hydrology was indicated by drainage patterns. The ditch receives runoff from the surrounding adjacent uplands and drainage from a swale along the southeast side of the I-87 northbound on-ramp. The ditch receives runoff from the surrounding adjacent uplands and outlets to ditch A via a culvert pipe in the northwest. Although Ditch B meets all three (3) wetland criteria the ditch appears to be maintained and constructed in upland soils. As such, the ditch will likely be considered exempt and non-jurisdictional by the USACE.

Ditch C

Ditch C is a 87 square foot (0.002 acre) naturalized ditch located between I-87 southbound and the I-87 southbound on-ramp, southwest of Albany Shaker Road (Figures 2-All & 2-20). The dominant vegetation is comprised primarily of a monoculture stand of Common Reed. The soils were screened and determined not to be hydric. The Albany County Soil Survey maps the soil type as Udipsamments smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by drainage patterns and the FAC-neutral test. The ditch receives runoff from the surrounding adjacent uplands and outlets to Wetland E in the northwest. Although Ditch C meets all three (3) wetland criteria the ditch appears to be maintained and constructed in upland soils. As such, the ditch will likely be considered exempt and non-jurisdictional by the USACE.

Ditch D

Ditch D is a 3,942 square foot (0.09 acre) naturalized ditch located to the south of I-87 northbound and north of the Best Western hotel property just southwest of Wetland I (Figures 2-All, 2-13 & 2-14). The ditch is bounded to the north by the toe of the backslope of I-87 northbound and to the south by the toe of the backslope of an upland berm. The dominant vegetation is comprised of Purple Loosestrife, Common Reed, Softrush, and Spikerush. A soil sample exhibited a depleted matrix and was determined to be hydric by criteria III.D (NEHSTC, 1998). The Albany County Soil Survey maps the soil type as Elnora loamy fine sand (EnA), which is moderately well drained and found on beach ridges and deltas (Figure 5). The soil survey further indicates that there is a seasonal zone of water saturation at 21 inches (0.53 meters) below the soil surface during the months of February through May. Wetland hydrology was indicated by a drainage pattern and the FAC-neutral test. The ditch receives runoff from the surrounding adjacent uplands and outlets in the northeast to Wetland I. Although Ditch D meets all three (3) of the wetland criteria, the ditch appears to be maintained and constructed in upland soils. As such, this ditch will likely be considered exempt and non-jurisdictional by the USACE.

Ditch E

Ditch E is a 2,245 square foot (0.05 acre) naturalized ditch located south of I-87 northbound, between Wetland J and Wetland K (Figures 2-All, 2-10 & 2-11). The ditch is generally absent of vegetation; however, small colonized areas of Common Reed exist. A soil sample appeared to exhibit redoxymorphic features which would meet the hydric criteria (NEHSTC, 1998). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained. Wetland hydrology was indicated by inundation and drainage patterns (Figure 5). Ditch E receives runoff from the surrounding adjacent uplands and drainage from Wetland K via a culvert pipe that inlets in the south from Wetland K. A swale, which appears to be maintained and constructed in upland soils, also inlets from the west near boundary flag DE-10. The ditch outlets in the north to Shaker's Creek, which drains northwest to Wetland P, providing a hydrologic connection between two (2) wetlands; therefore, the ditch might be considered jurisdictional by the USACE.

Ditch F

Ditch F is a 649 square foot (0.01 acre) naturalized ditch located northwest of the Hess gas station on Wolf Road (Figures 2-All & 2-41). The ditch is bounded to the southeast by the toe of the backslope of the Hess property and to the northwest by the toe of the backslope of the Burger King rear parking lot. The dominant vegetation is comprised primarily of a monoculture stand of Common Reed. A soil sample appeared to exhibit redoxymorphic features which would meet the hydric criteria (NEHSTC, 1998). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by a drainage pattern. The ditch receives runoff from the surrounding adjacent uplands and outlets in the southwest to Wetland S. Although Ditch F meets all three (3) wetland criteria the ditch appears to be maintained and constructed in upland soils. As such, the ditch will likely be considered exempt and non-jurisdictional by the USACE.

Ditch G

Ditch G is a 487 square foot (0.01 acre) naturalized ditch located southeast of the Courtyard Marriot Inn front parking lot, northwest of Wolf Road (Figures 2-All & 2-40). The ditch is bounded to the southeast by the toe of the backslope of the Burger King rear parking lot and to the northwest by the toe of the backslope of the Courtyard Marriot Inn front parking lot. The dominant vegetation is comprised primarily of Wrinkle-leaf Goldenrod (*Solidago rugosa*). A soil sample appeared to exhibit redoxymorphic features which would meet the hydric criteria

(NEHSTC, 1998). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by a drainage pattern. The ditch receives runoff from the surrounding adjacent uplands and outlets in the southwest to Wetland S. Although Ditch G meets all three (3) wetland criteria the ditch appears to be maintained and constructed in upland soils. As such, the ditch will likely be considered exempt and non-jurisdictional by the USACE.

Ditch H

Ditch H is a 3,914 square foot (0.09 acre) naturalized ditch located in the median between the I-87 southbound/Old Wolf Road on-ramp and I-87 southbound in the northeastern portion of the PSA between Wetlands W and X (Figures 2-All & 2-27). The ditch is bounded to the northwest by the toe of the backslope of the I-87 southbound/Old Wolf Road on-ramp. The southwestern most portion of the ditch area is identified on the NWI Map as a PFO1E wetland (Figure 4). Black Walnut (*Juglans nigra*) is dominant in the southwestern portion of the ditch. Reed Canarygrass and Purple Loosestrife are dominant in the northeastern portion of the ditch. No soil sample was collected due to ponding and was determined to be hydric by criteria I (NEHSTC, 1998). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by inundation, drainage patterns and the FAC-neutral test. The ditch receives runoff from the surrounding adjacent uplands and drainage from Wetland W. The ditch outlets in the southwest to Wetland X and centrally to Wetland UU, providing a hydrologic connection between three (3) wetlands; therefore, the ditch might be considered jurisdictional by the USACE.

Ditch I

Ditch I is a 14,231.720 square foot (0.327 acre) naturalized ditch located in the median between the I-87 southbound and I-87 northbound in the southern most portion of the PSA between Wetlands M and MX (Figures 2-All & 2-1). The ditch is bounded to the northwest by the toe of the backslope of the I-87 southbound. The dominant plant species inhabiting the ditch is Common Reed with Purple Loosestrife, mostly in and along the upper edges No soil sample was collected due to ponding and was determined to be hydric by criteria I (NEHSTC, 1998). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was indicated by inundation and drainage patterns. The ditch receives runoff from the surrounding adjacent uplands and drainage from Wetland M/MX. The ditch outlets to the east to Wetland OX, providing a hydrologic connection between two (2) wetlands; therefore, the ditch might be considered jurisdictional by the USACE.

Ditches within Project Study Area - Table 2

DITCH ID	Total Area within Project Study Area (Acres)
DA	0.056
DB	0.044
DC	0.002
DD	0.091
DE	0.052
DF	0.015
DG	0.011
DH	0.090
DI	0.327
DJ	0.081
TOTAL	0.769

NYSDOT Swales

Two (2) NYSDOT naturalized swale areas border Wetland U to the northeast and southwest. The dominant vegetation is comprised of Sensitive Fern, Purple Loosestrife, Softrush, Grass, and Narrow-leaved Plantain. A soil sample exhibited a depleted matrix with approximately 30% mottling and was determined to be hydric by criteria III.D (NEHSTC, 1998). The Albany County Soil Survey maps the soil type as Udipsamments, smoothed (Ud), which is well drained (Figure 5). Wetland hydrology was determined by saturation and oxidized root channels within the upper 12 inches (0.3 meters) of the soil surface, drainage patterns and the FAC-neutral test. Although the swales meet the three (3) wetland criteria and function as wet meadow, the swales are considered exempt and non-jurisdictional by the USACE, since they appear to be maintained and constructed in upland soils.

Stormwater Detention Basin Areas

Two (2) storm water detention basins were observed east of the intersection of Albany Shaker Road and Maxwell Road in the southeastern portion of the PSA. The dominant vegetation is comprised of Narrow-leaved Cattail and Purple Loosestrife. A soil sample appeared to exhibit redoximorphic features that would meet the hydric criteria (NEHSTC, 1998). The Albany County Soil Survey maps the soil type as Urban Land, (Ur), which is considered a miscellaneous area (Figure 5). Wetland hydrology was indicated by a drainage pattern. The storm

water detention basins receive runoff from the surrounding adjacent uplands and outlet in the southwest to Wetland D via a culvert pipe.

Although the storm water detention basins meet all three (3) wetland criteria, the areas are considered exempt and non-jurisdictional by the USACE, since they were built for storm water management purposes.

Wetland Summary - Table 3

Wetland ID (Approximate Center Coordinates)	NYSDEC Wetland ID	Total Wetland Area within Project Study Area (Acres)	Wetland Type	Cowardin Classification	Water Type	HGM Wetland Class
A 42° 43' 45.1194" 73° 47' 42"	N/A	0.855 (37,259 sf)	Shallow Emergent Marsh	R3EM	Section 404	Riverine
B 42° 43' 46.2" 73° 47' 45.24"	N/A	0.010 (57 sf)	Shallow Emergent Marsh	R3EM	Section 404	Riverine
C 42° 43' 42.5994" 73° 47' 41.6394"	N/A	0.020 (869 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
D 42° 43' 33.96" 73° 47' 42"	N/A	0.936 (40768 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
E 42° 43' 41.8794" 73° 47' 50.28"	N/A	0.117 (5,092sf)	Shallow Emergent Marsh	PEM1E	TBD	Depression
F 42° 43' 38.64" 73° 47' 51.72"	N/A	0.361 (15,717 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
G 42° 43' 32.52" 73° 47' 52.4394"	N/A	0.000 0.000	Shallow Emergent Marsh	R3EM	Outside PSA	Riverine
H 42° 43' 32.52" 73° 47' 51.36"	N/A	0.000 0.000	Shallow Emergent Marsh	PEM1E	Outside PSA	Depression
I 42° 43' 36.12" 73° 47' 52.0794"	N/A	0.766 (33,346 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
J 42° 43' 27.12" 73° 48' 14.4"	N/A	0.278 (12,123sf)	Palustrine forest/ Shallow Emergent Marsh	R3SB5	Section 404	Riverine
K 42° 43' 24.6" 73° 48' 17.28"	N/A	0.024 (1035 sf)	Palustrine forest	PFO1E	Section 404	Depression
L 42° 43' 19.92" 73° 48' 19.44"	N/A	0.223 (9,727.sf)	Palustrine forest	PFO1E	TBD	Depression

Wetland Summary - Table 3

Wetland ID (Approximate Center Coordinates)	NYSDEC Wetland ID	Total Wetland Area within Project Study Area (Acres)	Wetland Type	Cowardin Classification	Water Type	HGM Wetland Class
M 42° 43' 13.4394" 73° 48' 41.04"	N/A	0.013 (566 sf)	Palustrine forest	PFO1E	Section 404	Depression
MX North 42° 43' 13.08" 73° 48' 44.2794"	N/A	0.260 (11,326 sf)	Palustrine forest	PFO1E	Section 404	Depression
MX South 42° 43' 13.08" 73° 48' 44.2794"	N/A	0.430 (18,745sf)	Palustrine Forest/ Shallow Emergent Marsh	PFO1E/PEM1E	Section 404	Depression
N 42° 43' 19.2" 73° 48' 32.3994"	N/A	0.066 (2,857. sf)	Shallow Emergent Marsh	R4SB4	Section 404	Riverine
O 42° 43' 17.3994" 73° 48' 31.32"	N/A	0.095 (4,134. sf)	Palustrine Forest	R4SB4	Section 404	Riverine
OX 42° 43' 6.5994" 73° 48' 46.8"	N/A	0.495 (21,583sf)	Palustrine Forest	PFO1E	Section 404	Depression
P 42° 43' 27.4794" 73° 48' 16.5594"	N/A	0.434 (18,910sf)	Shallow Emergent Marsh/ Palustrine forest	PEM1E/ PFO1E	Section 404	Depression
Q 42° 43' 30.3594" 73° 48' 11.16"	N/A	0.157 (6,837 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
R 42° 43' 48.36" 73° 47' 31.2"	N/A	0.902 (39,293 sf)	Shallow Emergent Marsh/ Palustrine forest	R3EM	Section 404	Riverine
S 42° 43' 16.6794" 73° 48' 19.08"	N/A	0.719 (31,330sf)	Shallow Emergent Marsh/ Palustrine forest	PEM1E/ PFO1E	Section 404	Depression

Wetland Summary - Table 3

Wetland ID (Approximate Center Coordinates)	NYSDEC Wetland ID	Total Wetland Area within Project Study Area (Acres)	Wetland Type	Cowardin Classification	Water Type	HGM Wetland Class
SX	N/A	0.403 (17,571sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
T 42° 43' 18.48" 73° 48' 18.3594"	N/A	0.038 (1,642 sf)	Shallow Emergent Marsh	PEM1E	TBD	Depression
U 42° 43' 56.28" 73° 47' 21.4794"	N/A	0.068 (2,949 sf)	Shallow Emergent Marsh	PEM1C	Section 404	Depression
V 42° 44' 1.68" 73° 47' 16.08"	N/A	0.314 (13,693. sf)	Palustrine forest	PFO1F	Section 404	Depression
VX 42° 44' 13.5594" 73° 47' 7.7994"	N/A	0.145 (6,331 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
W 42° 44' 2.7594" 73° 47' 18.5994"	N/A	0.824 (35,903. sf)	Palustrine forest	PFO1E	Section 404	Depression
WX 42° 44' 5.64" 73° 47' 16.08"	N/A	0.743 (32,366 sf)	Palustrine forest	PFO1E	Section 404	Depression
X 42° 43' 58.7994" 73° 47' 23.64"	N/A	1.404 (61,150sf)	Palustrine forest/ Wet Meadow	PFO1E/ PEM1E	Section 404	Depression
Y 42° 43' 50.5194" 73° 47' 24.3594"	N/A	0.199 (8,659 sf)	Shallow Emergent Marsh/ Palustrine forest	PEM1E/ PFO1E	Section 404	Depression
Z 42° 43' 46.2" 73° 47' 30.12"	N/A	0.000 (0.00 sf)	Shallow Emergent Marsh	R3EM	Outside PSA	Riverine
AA 42° 43' 54.4794" 73° 47' 19.6794"	N/A	0.006 (2574 sf)	Palustrine forest/ Wet Meadow	PFO1E/ PEM1E	Section 404	Depression

Wetland Summary - Table 3

Wetland ID (Approximate Center Coordinates)	NYSDEC Wetland ID	Total Wetland Area within Project Study Area (Acres)	Wetland Type	Cowardin Classification	Water Type	HGM Wetland Class
BB 42° 44' 0.96" 73° 47' 12.84"	N/A	0.096 (4,201sf)	Palustrine forest/ Shallow Emergent Marsh	PFO1E/ PEM1E	Section 404	Depression
CC 42° 43' 48.36" 73° 47' 59.9994"	A-10	3.378 (147,157 sf)	Shallow Emergent Marsh	PEM1E	Article 24/Section 404	Depression
CCX 42° 43' 49.0794" 73° 48' 37.0794"	N/A	INCLUDED WITH CC	Shallow Emergent Marsh	PEM1E	Section 404	Depression
DD 42° 44' 7.8" 73° 47' 6.72"	N/A	0.186 (8,091sf)	Shallow Emergent Marsh	R3SB5	Section 404	Riverine
DDX 42° 44' 10.3194" 73° 47' 7.4394"	N/A	0.389 (16,935sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
EE 42° 43' 21.72" 73° 48' 32.3994"	A-10	0.543 (23,639sf)	Palustrine forest	R4SB4	Article 24/Section 404	Riverine
FF 42° 43' 38.64" 73° 48' 1.0794"	A-10	0.614 (26,738 sf)	Shallow Emergent Marsh	R3EM	Article 24/Section 404	Riverine
GG 42° 43' 37.56" 73° 48' 4.3194"	A-10	0.115 (5,018 sf)	Shallow Emergent Marsh	PEM1F	TBD	Depression
HH 42° 43' 32.52" 73° 48' 14.4"	A-10	0.050 (2,183 sf)	Palustrine forest	PFO1E	Article 24/Section 404	Depression
HHX 42° 43' 34.68" 73° 48' 16.9194"	A-10	0.162 (7,047sf)	Palustrine forest	PFO1E	Article 24/Section 404	Depression
II 42° 43' 29.6394" 73° 48' 23.0394"	A-10	5.394 (235,002sf)	Palustrine forest	R3SB5	Article 24/Section 404	Riverine
JJ 42° 43' 29.6394" 73° 48' 17.64"	A-10	0.156 (6,800 sf)	Shallow Emergent Marsh	PEM1E	Article 24/Section 404	Depression

Wetland Summary - Table 3

Wetland ID (Approximate Center Coordinates)	NYSDEC Wetland ID	Total Wetland Area within Project Study Area (Acres)	Wetland Type	Cowardin Classification	Water Type	HGM Wetland Class
KK 42° 43' 47.64" 73° 48' 24.12"	A-10	0.000 (0.000 sf)	Wet Meadow	PEM1E	Outside PSA	Depression
KKX 42° 43' 44.04" 73° 48' 17.28"	A-10	0.900 (39,185.712 sf)	Wet Meadow	PEM1E	Article 24/Section 404	Depression
LL 42° 43' 46.5594" 73° 48' 24.12"	A-10	0.000 (0.00 sf)	Wet Meadow	PEM1E	Outside PSA	Depression
MM 42° 43' 45.1194" 73° 48' 24.12"	A-10	0.000 (0.000 sf)	Shallow Emergent Marsh	PEM2F	Outside PSA	Depression
NN 42° 43' 42.5994" 73° 48' 24.12"	A-10	0.000 (0.000 sf)	Wet Meadow	PEM1E	Outside PSA	Depression
OO 42° 43' 39.36" 73° 48' 23.0394"	A-10	0.000 (0.000 sf)	Shallow Emergent Marsh	PEM1E	Outside PSA	Depression
PP 42° 43' 35.0394" 73° 48' 22.32"	A-10	0.280 (12,216.832 sf)	Shallow Emergent Marsh	PEM1E	Article 24/Section 404	Depression
PPX 42° 43' 34.3194" 73° 48' 20.1594"	A-10	INCLUDED WITH PP	Palustrine forest	PFO1E	Article 24/Section 404	Depression
QQ 42° 43' 55.1994" 73° 48' 23.3994"	A-10	0.000 (0.000 sf)	Wet Meadow	PEM1E	Outside PSA	Depression
RR 42° 43' 44.04" 73° 48' 8.28"	A-10	1.740 (75,781.38 sf)	Shallow Emergent Marsh	R3EM	Article 24/Section 404	Riverine
RRX 42° 43' 45.48" 73° 48' 9.3594"	A-10	INCLUDED WITH RR	Shallow Emergent Marsh	R3EM	Article 24/Section 404	Riverine
SS 42° 43' 56.28" 73° 48' 22.32"	A-10	0.000 (0.000 sf)	Shallow Emergent Marsh	PEM1E	Outside PSA	Depression

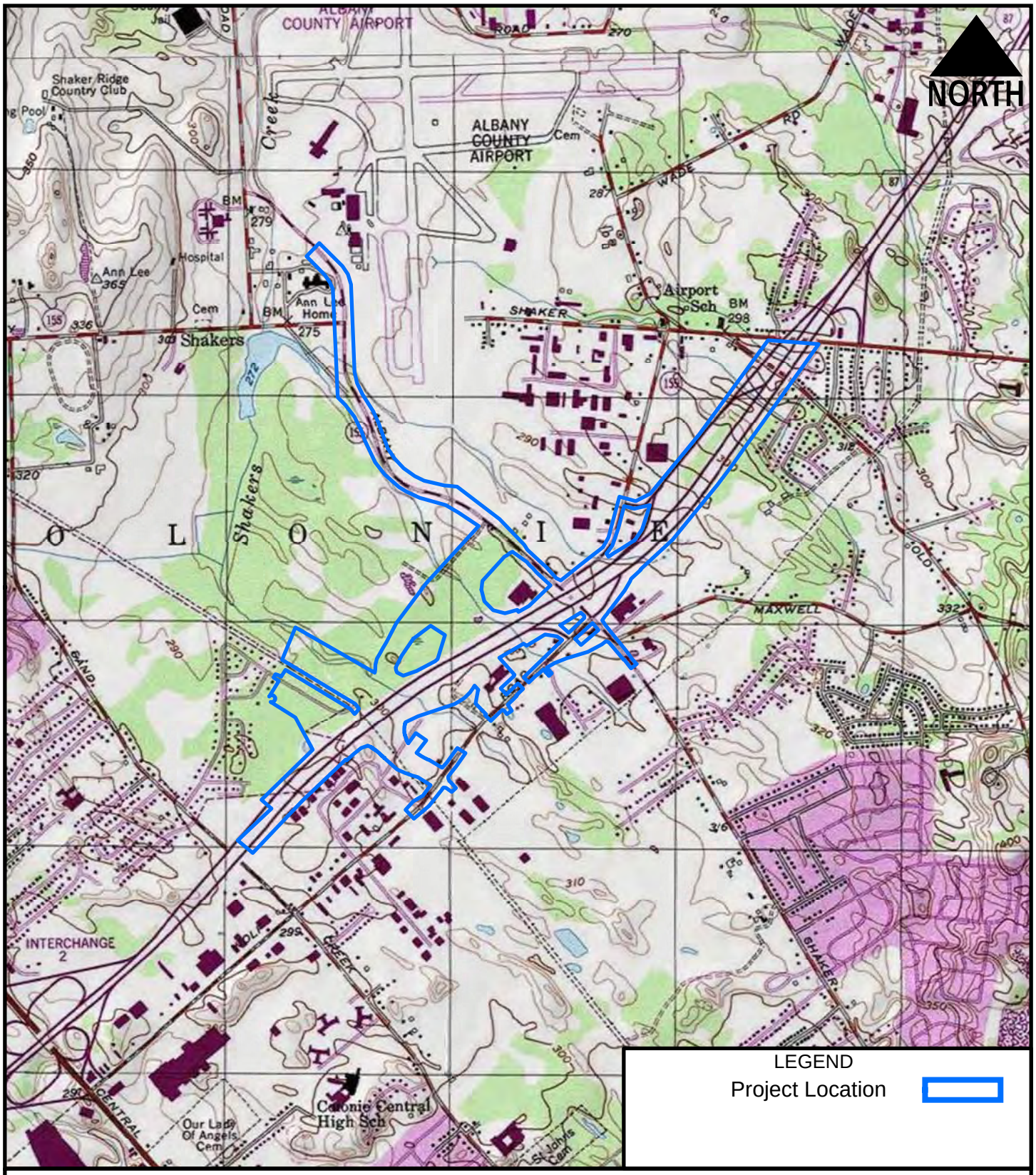
Wetland Summary - Table 3

Wetland ID (Approximate Center Coordinates)	NYSDEC Wetland ID	Total Wetland Area within Project Study Area Acres	Wetland Type	Cowardin Classification	Water Type	HGM Wetland Class
TT 42° 43' 57.72" 73° 48' 19.7994"	N/A	1.609 (70,085.374 sf)	Shallow Emergent Marsh/ Scrub Shrub	PEM1E/ PSS1E	Section 404	Depression
TTX 42° 44' 10.3194" 73° 48' 31.32"	N/A	0.167 (7295.765 sf)	Shallow Emergent Marsh/ Palustrine forest	PEM1E/PSS1E	Section 404	Depression
UU 42° 44' 3.84" 73° 47' 21.1194"	N/A	0.191 (8,309.374 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
UUX 42° 44' 13.5594" 73° 47' 10.3194"	N/A	0.288 (12,527.865 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
VV 42° 44' 16.7994" 73° 48' 31.32"	N/A	0.132 (5,754.450 sf)	Palustrine forest	PFO1E	Section 404	Depression
WW 42° 44' 16.44" 73° 47' 6.72"	N/A	0.073 (3,159.321 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
XX 42° 44' 10.3194" 73° 47' 14.28"	N/A	0.076 (3,311.649 sf)	Palustrine forest	PFO1E	TBD	Depression
WMA 42° 44' 14.64" 73° 48' 32.76"	N/A	0.205 (8,914.767 sf)	Shallow Emergent Marsh	PEM1E	Section 404	Depression
NYSDEC wetland (ac) in PSA		13.330				
NYSDEC wetland (sf) in PSA		580,654.800				
Federal wetland (ac) in PSA		14.750				
Federal wetland (sf) in PSA		642,510.000				
Total delineated wetland Acres in PSA		28.08				

FIGURES

Wetland Assessment and Delineation Report
Interstate 87 (I-87) Exit 4 Access Improvements

January 2014



LEGEND

Project Location

PROJECT LOCATION MAP
ALBANY, NY QUADRANGLE

SHUMAKER
Consulting Engineering & Land Surveying, P.C.

FIGURE NO.1

1" = 2,000'

INTERSTATE 87 EXIT 3
AIRPORT CONNECTOR
PIN 1721.51
TOWN OF COLONIE
ALBANY COUNTY, NY

NOTE 1: WETLANDS WITHIN THIS PORTION OF THE PROJECT STUDY AREA HAVE NOT BEEN DELINEATED.

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	SHUMAKER
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. KEY MAP
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-2

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	
SIGNATURE / DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-1
DOCUMENT NAME: $FILE$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILE$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-2A

MATCH TO DWG. NO. FIG 2-1

MATCH TO DWG. NO. FIG 2-3

LEGEND

SOIL TYPE	PROJECT STUDY AREA
SCE DELINEATED WETLANDS	STREAM
MAPPED NWI WETLANDS	HYDROLOGIC CONNECTION
MAPPED NYSDEC WETLANDS	PHOTOGRAPH LOCATION (XX)
DELINEATED NYSDEC 100' ADJACENT AREA	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-2
SIGNATURE / DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DRAFTED BY ____ CHECKED BY ____
ESTIMATED BY ____ CHECKED BY ____
DESIGNED BY ____
JOB MANAGER ____
DESIGN SUPERVISOR ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-3B

MATCH TO DWG. NO. FIG 2-3A

MATCH TO DWG. NO. FIG 2-2

NOTE: WETLANDS WITHIN THIS PORTION OF THE PROJECT STUDY AREA HAVE NOT BEEN DELINEATED.

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

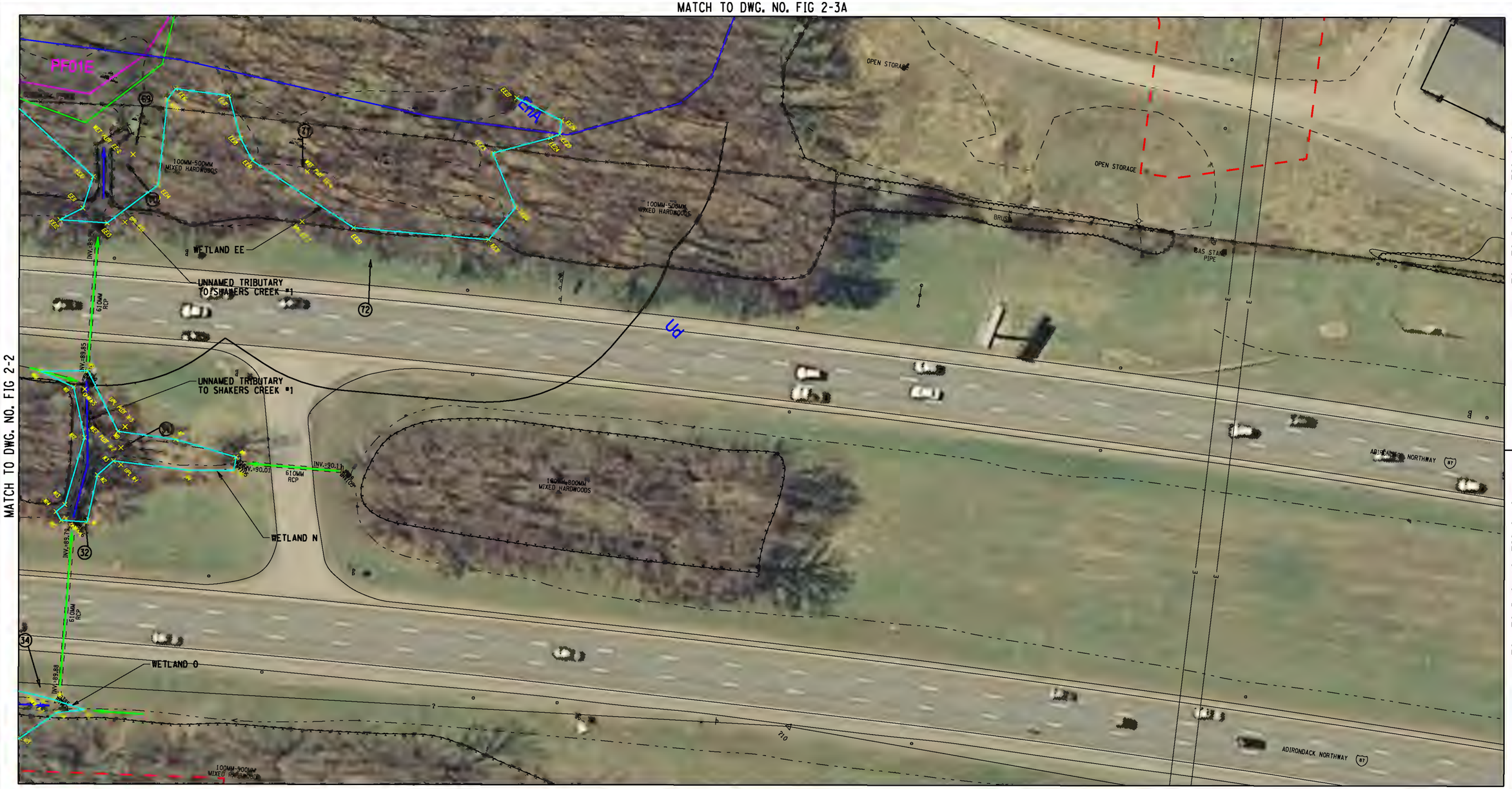
AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-2A
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILE$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

CHUMAKER

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-3A



MATCH TO DWG. NO. FIG 2-41

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	HUMMEL
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-3
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-3B

MATCH TO DWG. NO. FIG 2-2A

MATCH TO DWG. NO. FIG 2-4

MATCH TO DWG. NO. FIG 2-3

NOTE: WETLANDS WITHIN THIS PORTION OF THE PROJECT STUDY AREA HAVE NOT BEEN DELINEATED.

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-3A
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILE$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

DESIGNED BY ____ CHECKED BY ____

JOB MANAGER ____

DESIGN SUPERVISOR ____

FILE NAME = $FILE$ DATE/TIME = $DATE$ /$TIME$ USER = $NAME$

MATCH TO DWG. NO. FIG 2-3C

MATCH TO DWG. NO. FIG 2-2A

MATCH TO DWG. NO. FIG 2-4A

MATCH TO DWG. NO. FIG 2-4

MATCH TO DWG. NO. FIG 2-3A

NOTE: WETLANDS WITHIN THIS PORTION OF THE PROJECT STUDY AREA HAVE NOT BEEN DELINEATED.

LEGEND	
SOIL TYPE	PROJECT STUDY AREA
SCE DELINEATED WETLANDS	STREAM
MAPPED NWI WETLANDS	HYDROLOGIC CONNECTION
MAPPED NYSDEC WETLANDS	PHOTOGRAPH LOCATION
DELINEATED NYSDEC 100' ADJACENT AREA	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-3B
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

NOTE: WETLANDS WITHIN THIS PORTION OF THE PROJECT STUDY AREA HAVE NOT BEEN DELINEATED.

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

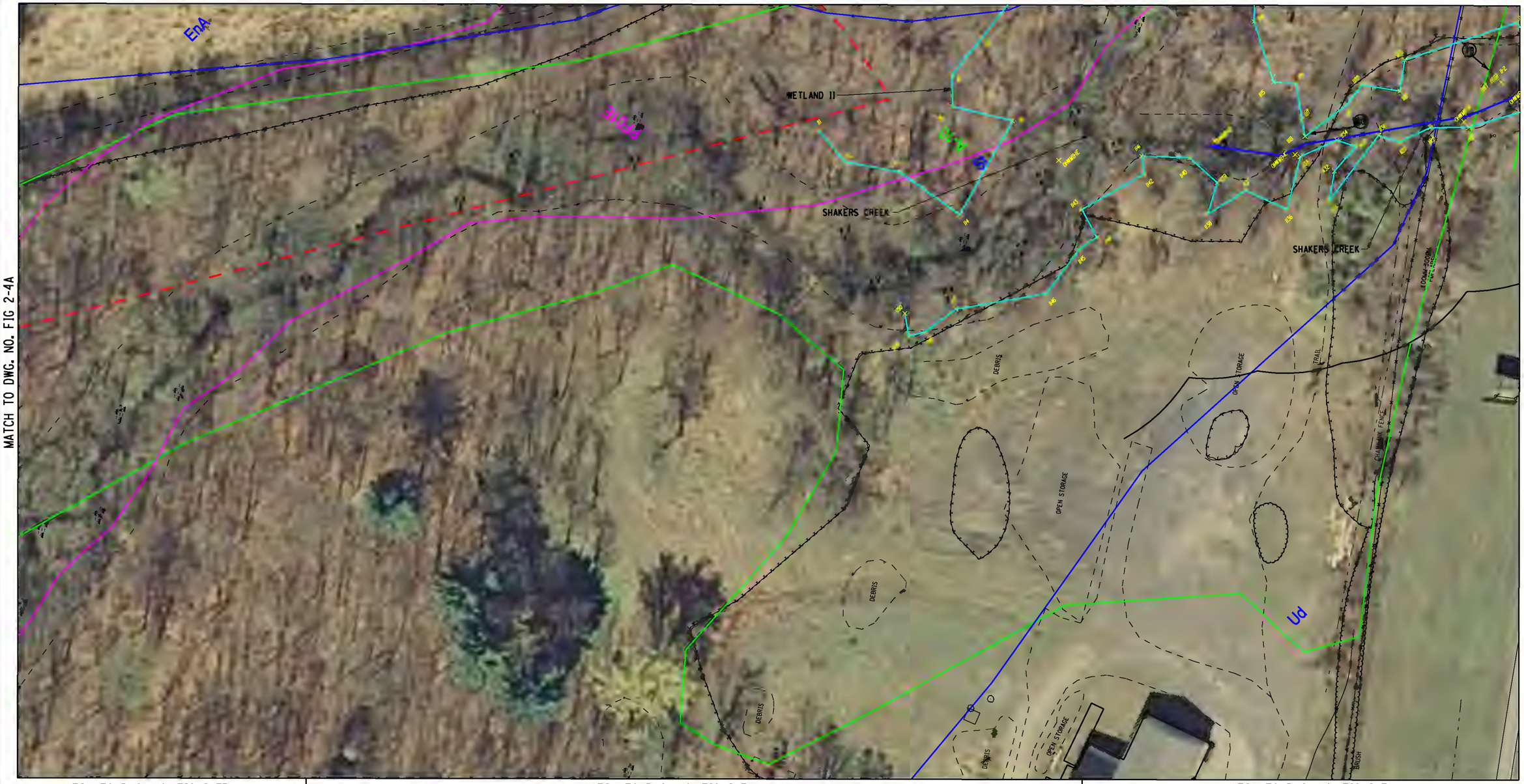
AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-3C
SIGNATURE / DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-5

MATCH TO DWG. NO. FIG 2-4A



MATCH TO DWG. NO. FIG 2-10

MATCH TO DWG. NO. FIG 2-3B

MATCH TO DWG. NO. FIG 2-3A

MATCH TO DWG. NO. FIG 2-3

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-4
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

NOTE: WETLANDS WITHIN THIS PORTION OF THE PROJECT STUDY AREA HAVE NOT BEEN DELINEATED.

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

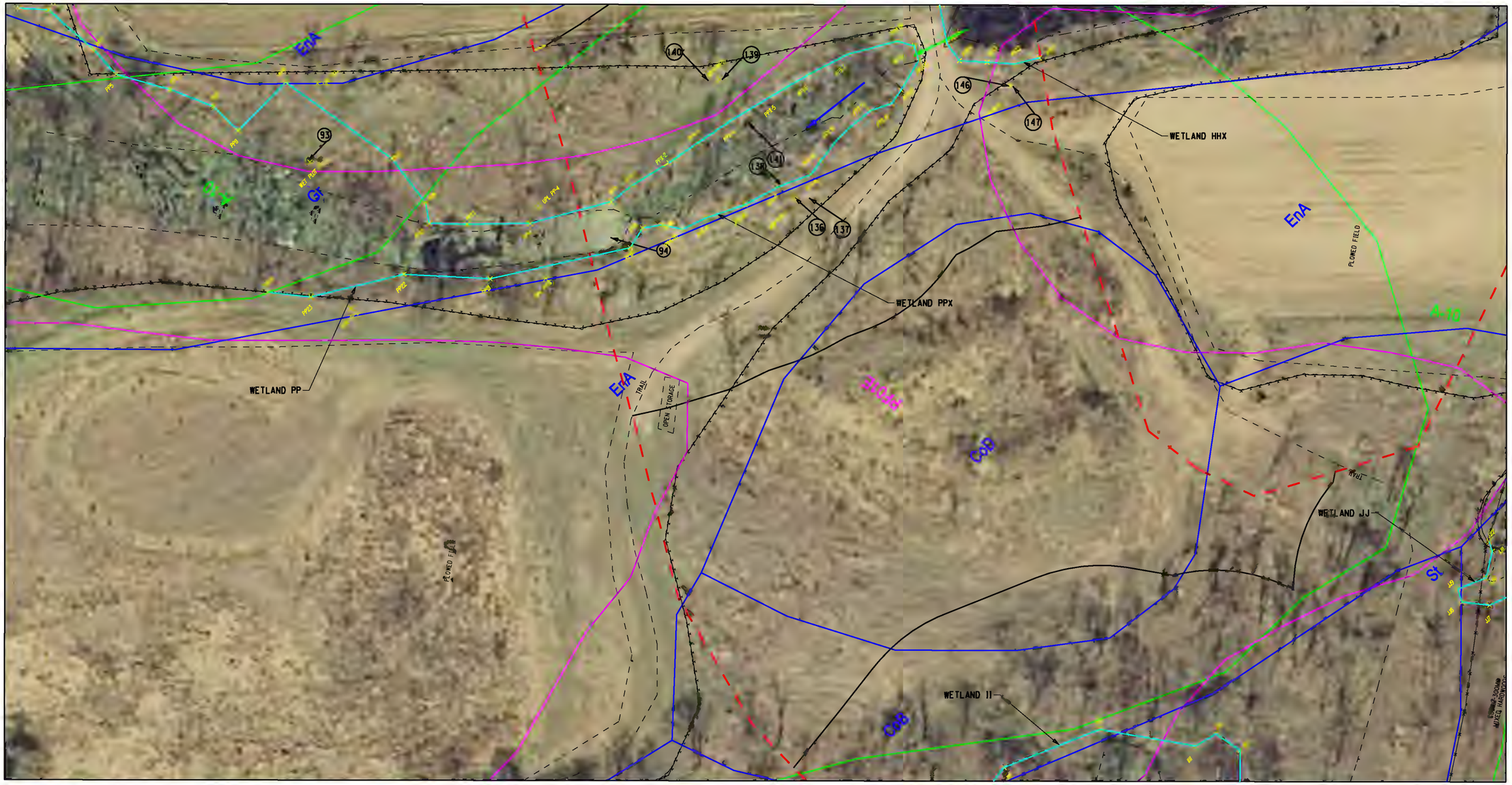
30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-4A
SIGNATURE / DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-6



MATCH TO DWG. NO. FIG 2-4

MATCH TO DWG. NO. FIG 2-11

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

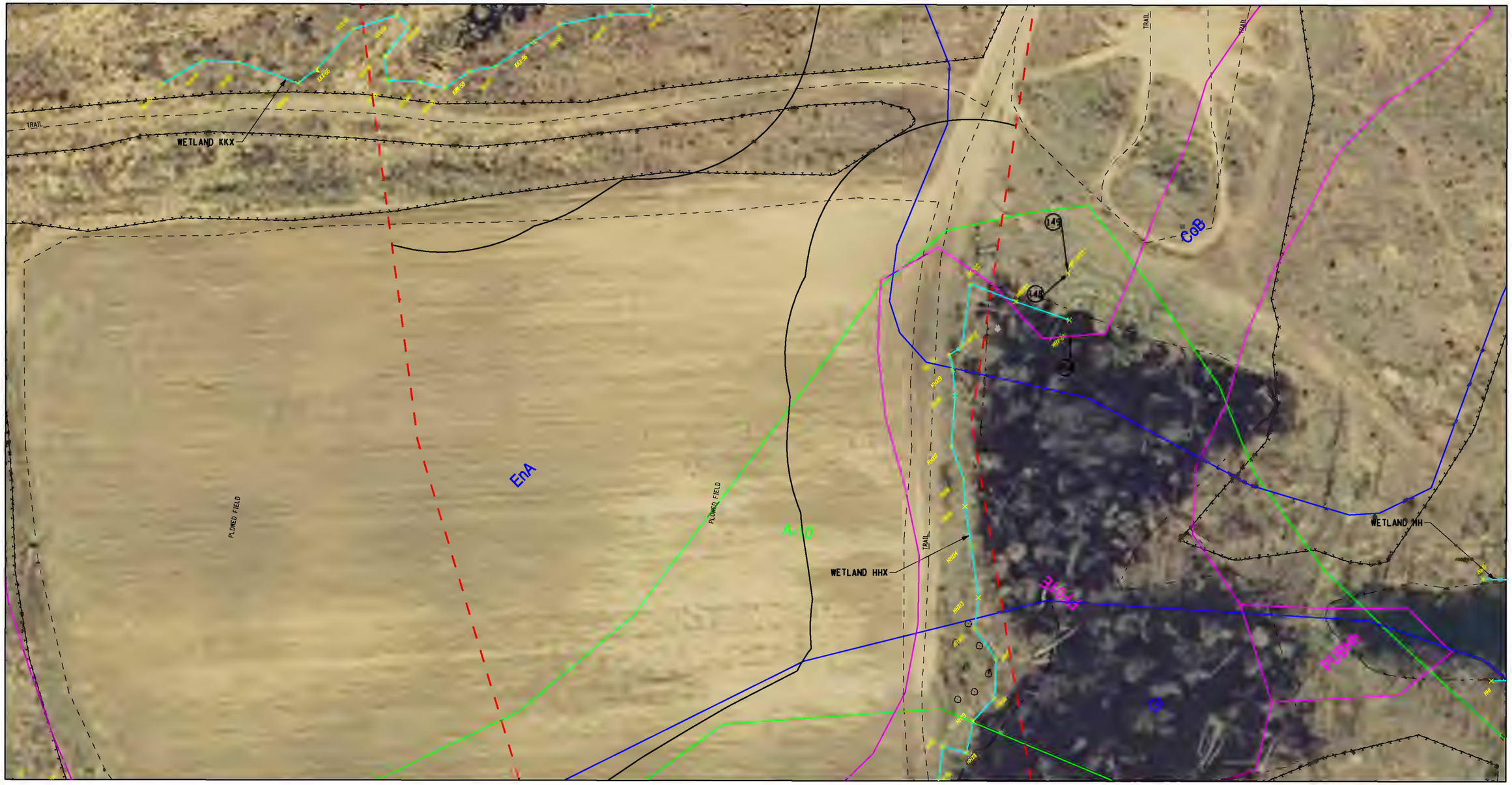
30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-5
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILE1$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-7



MATCH TO DWG. NO. FIG 2-5

MATCH TO DWG. NO. FIG 2-12

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

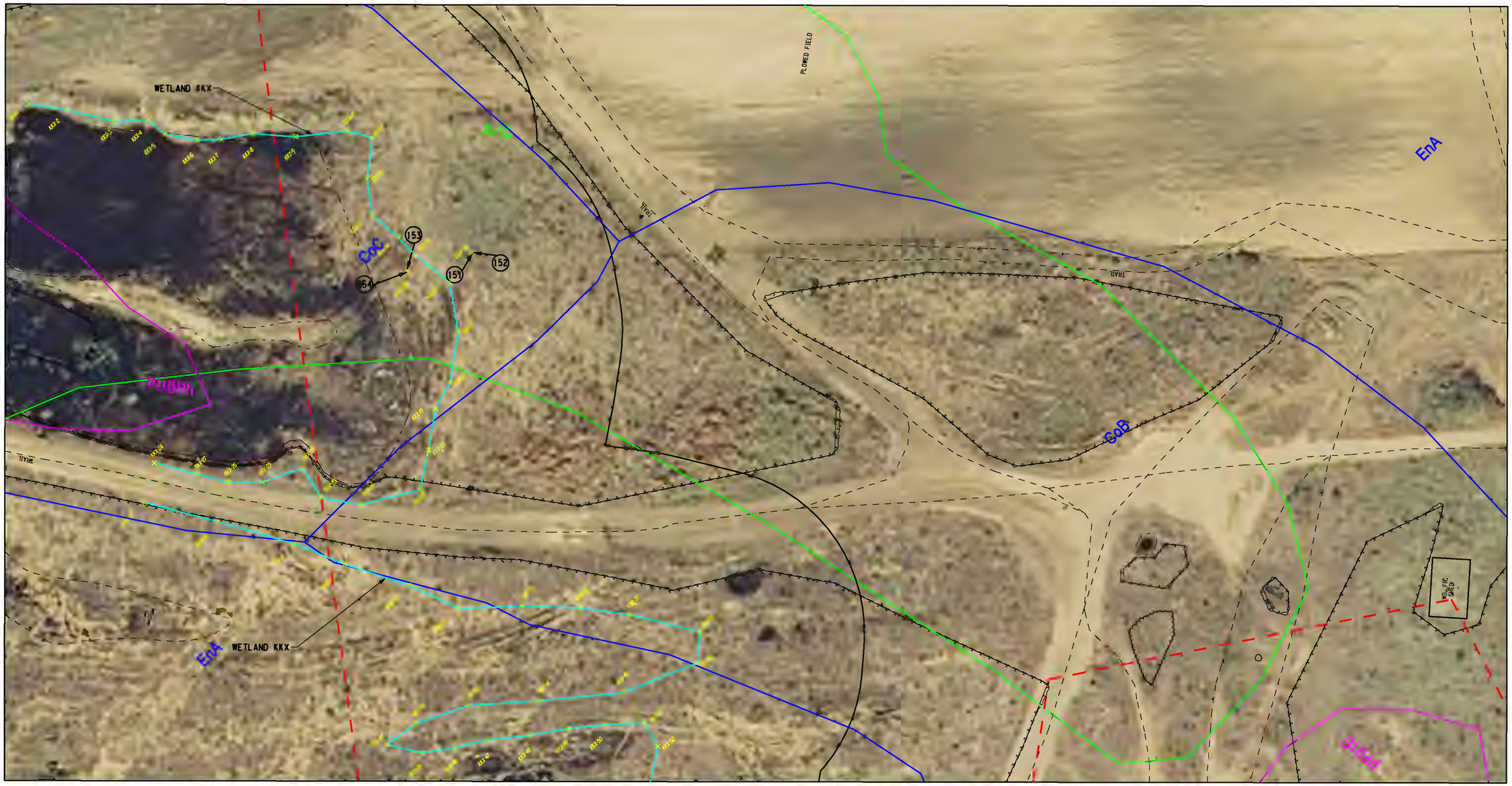
30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-6
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-8



MATCH TO DWG. NO. FIG 2-13

MATCH TO DWG. NO. FIG 2-6

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

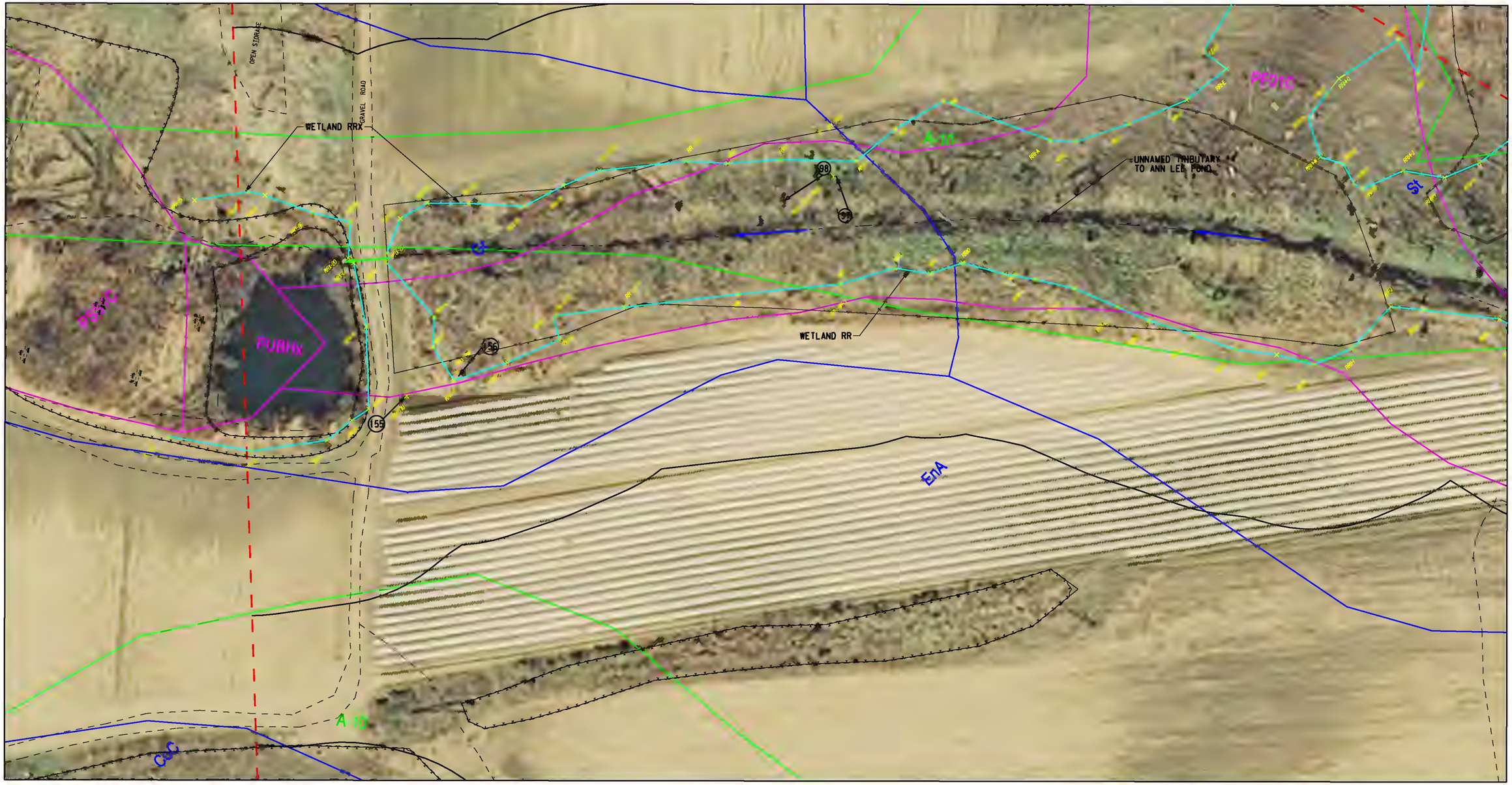
30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-7
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-9



MATCH TO DWG. NO. FIG 2-14

MATCH TO DWG. NO. FIG 2-7

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

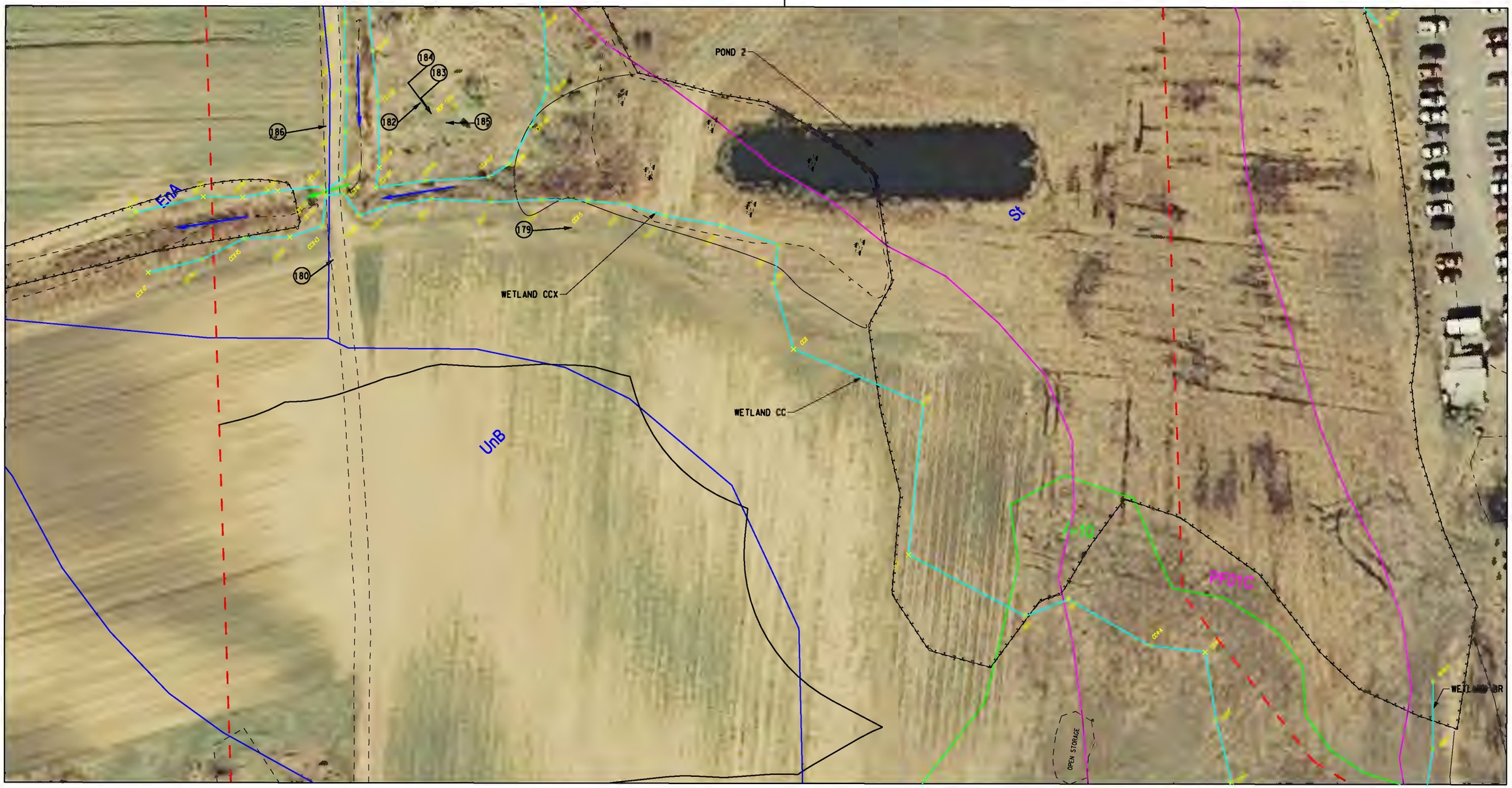
AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-8
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-34

MATCH TO DWG. NO. FIG 2-21



MATCH TO DWG. NO. FIG 2-15

MATCH TO DWG. NO. FIG 2-8

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

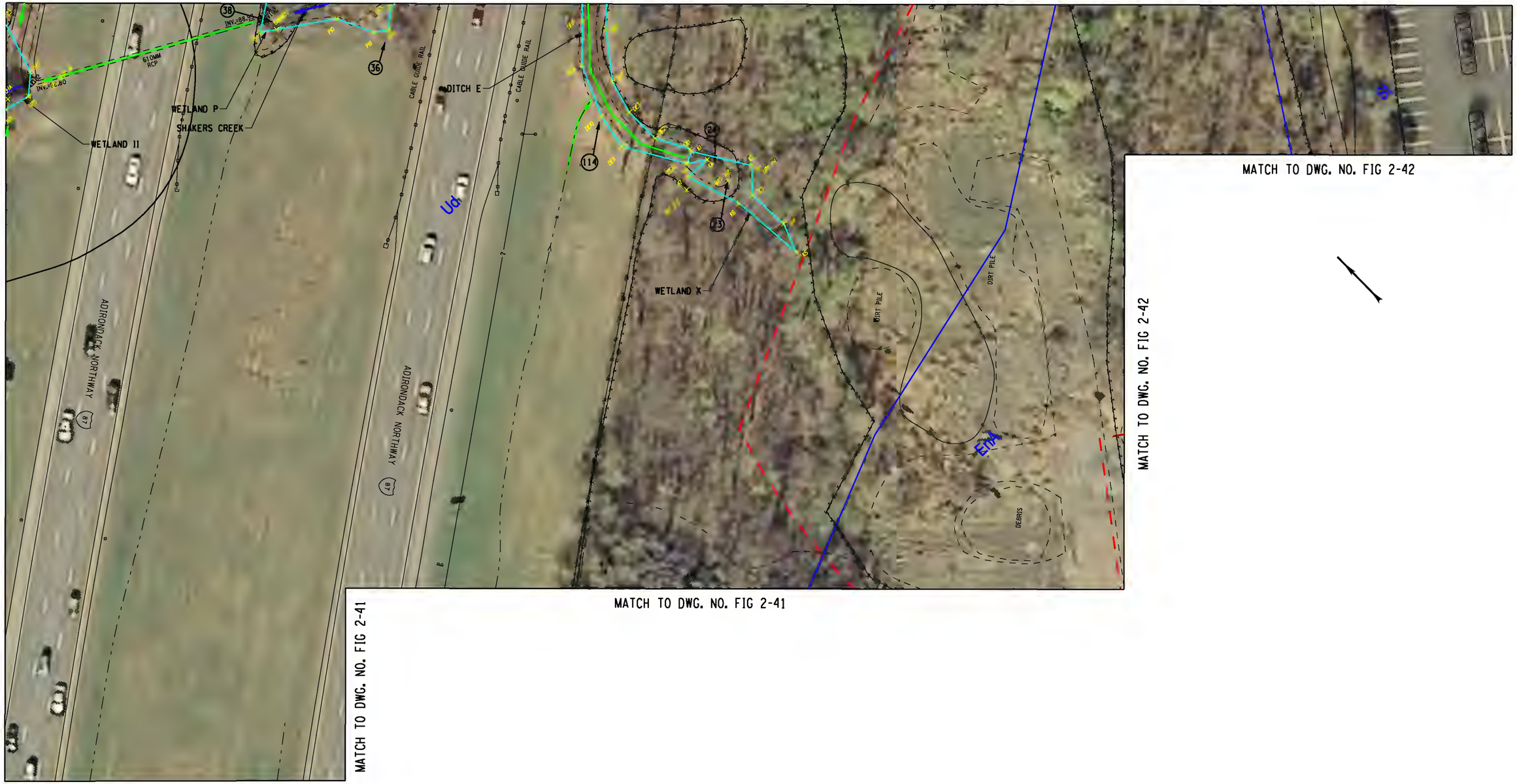
30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	SHUMAKER
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-9
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-11



MATCH TO DWG. NO. FIG 2-42

MATCH TO DWG. NO. FIG 2-4

MATCH TO DWG. NO. FIG 2-41

MATCH TO DWG. NO. FIG 2-41

MATCH TO DWG. NO. FIG 2-3

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-10
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILE$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-12

MATCH TO DWG. NO. FIG 2-10

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-11
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

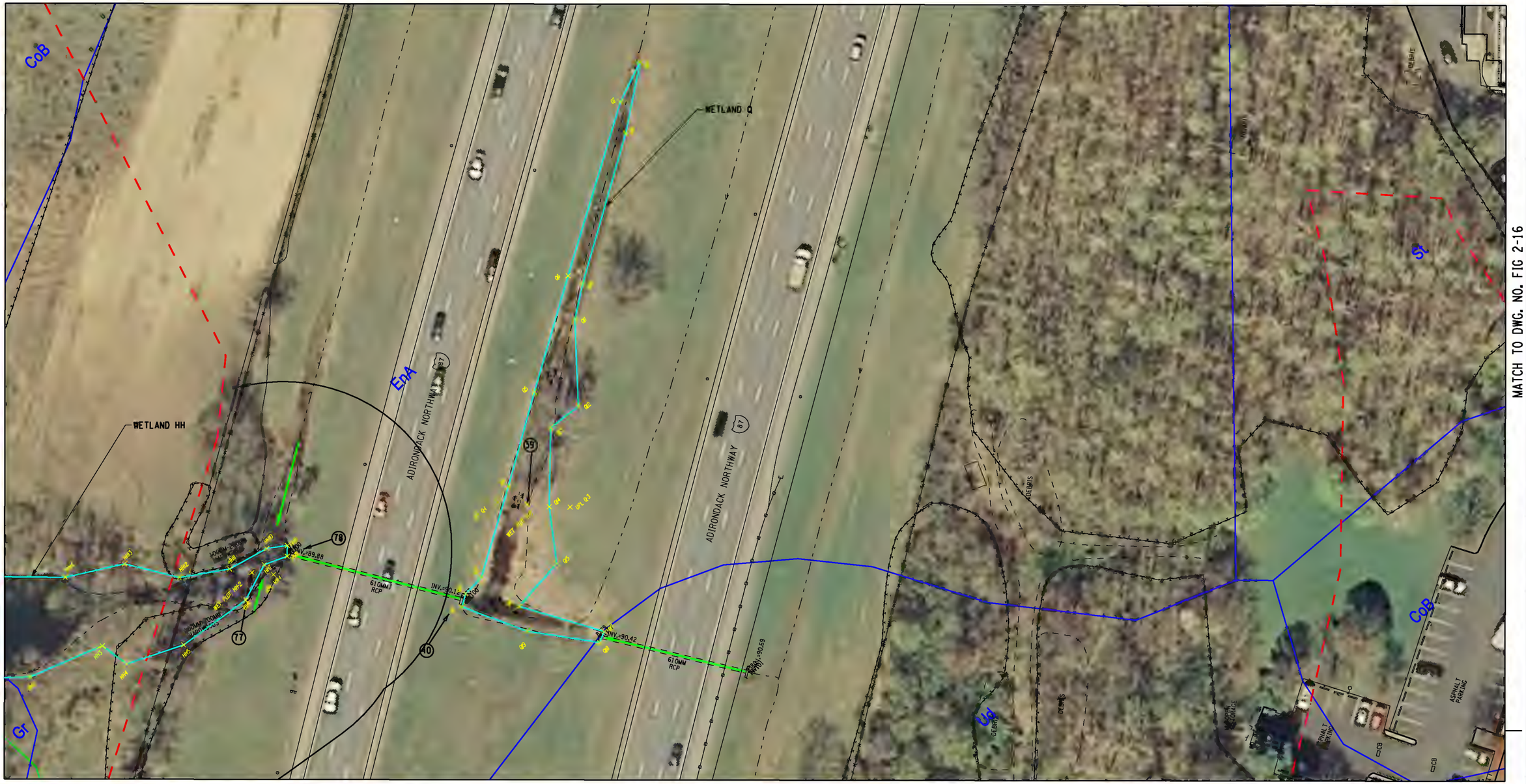
MATCH TO DWG. NO. FIG 2-5

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-13

MATCH TO DWG. NO. FIG 2-6



MATCH TO DWG. NO. FIG 2-16

MATCH TO DWG. NO. FIG 2-11

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP
SIGNATURE DATE	COUNTY: ALBANY				
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

CONTRACT NUMBER

HUMMAKER

DRAWING NO. FIG 2-12

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-14

MATCH TO DWG. NO. FIG 2-7

MATCH TO DWG. NO. FIG 2-16

MATCH TO DWG. NO. FIG 2-12

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-13
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

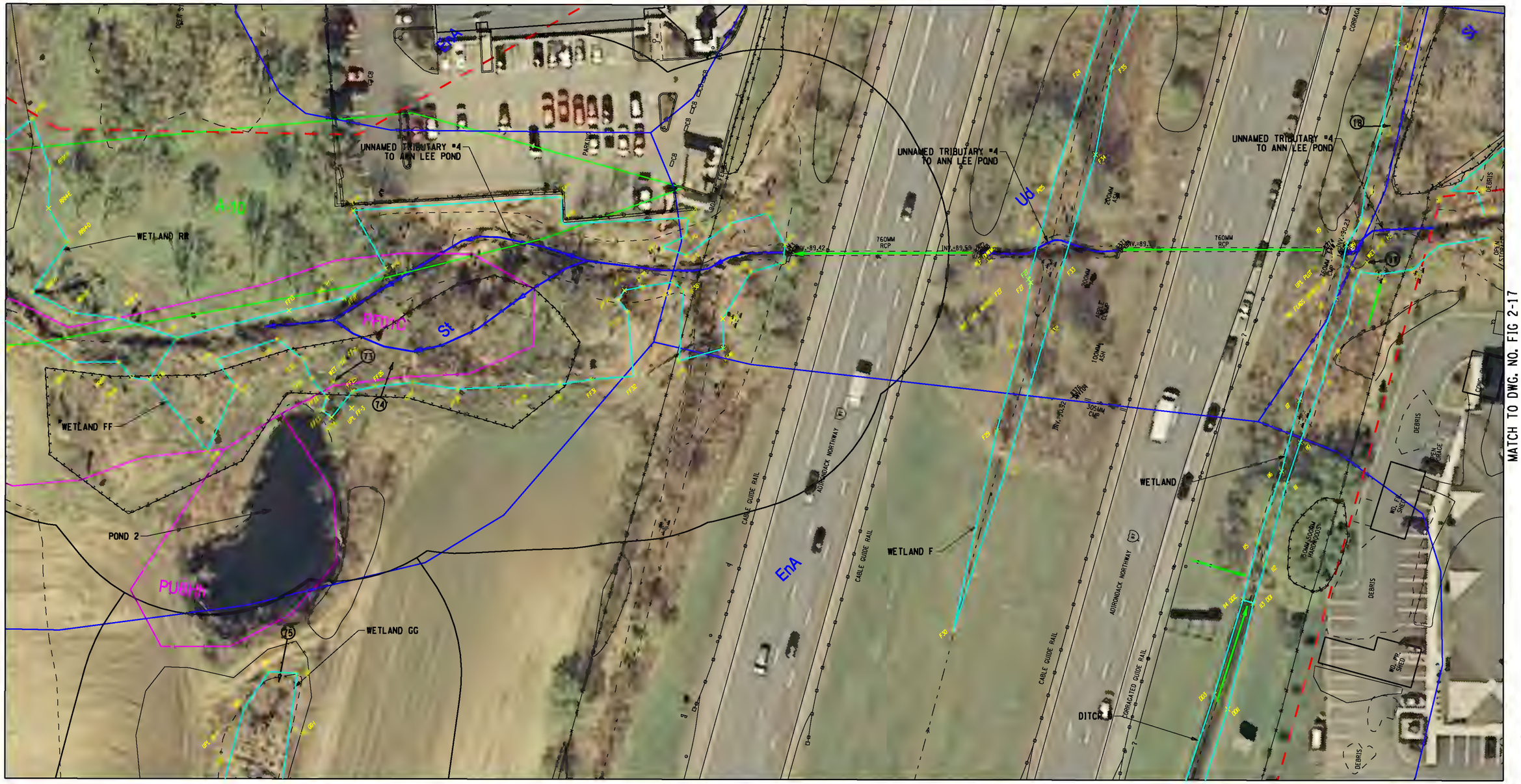
ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-15

MATCH TO DWG. NO. FIG 2-8



MATCH TO DWG. NO. FIG 2-17

MATCH TO DWG. NO. FIG 2-13

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	(XX)
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-14
SIGNATURE / DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-21

MATCH TO DWG. NO. FIG 2-20

MATCH TO DWG. NO. FIG 2-9

MATCH TO DWG. NO. FIG 2-18

MATCH TO DWG. NO. FIG 2-14

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	HUMMAKER
SIGNATURE / DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-15
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

LEGEND

SOIL TYPE	PROJECT STUDY AREA
SCE DELINEATED WETLANDS	STREAM
MAPPED NWI WETLANDS	HYDROLOGIC CONNECTION
MAPPED NYSDEC WETLANDS	PHOTOGRAPH LOCATION
DELINEATED NYSDEC 100' ADJACENT AREA	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	HUMMAKER
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-16
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-18

MATCH TO DWG. NO. FIG 2-16

MATCH TO DWG. NO. FIG 2-14

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP
SIGNATURE DATE	COUNTY: ALBANY				DRAWING NO. FIG 2-17
DOCUMENT NAME: $FILE$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

CONTRACT NUMBER

HUMMAKER

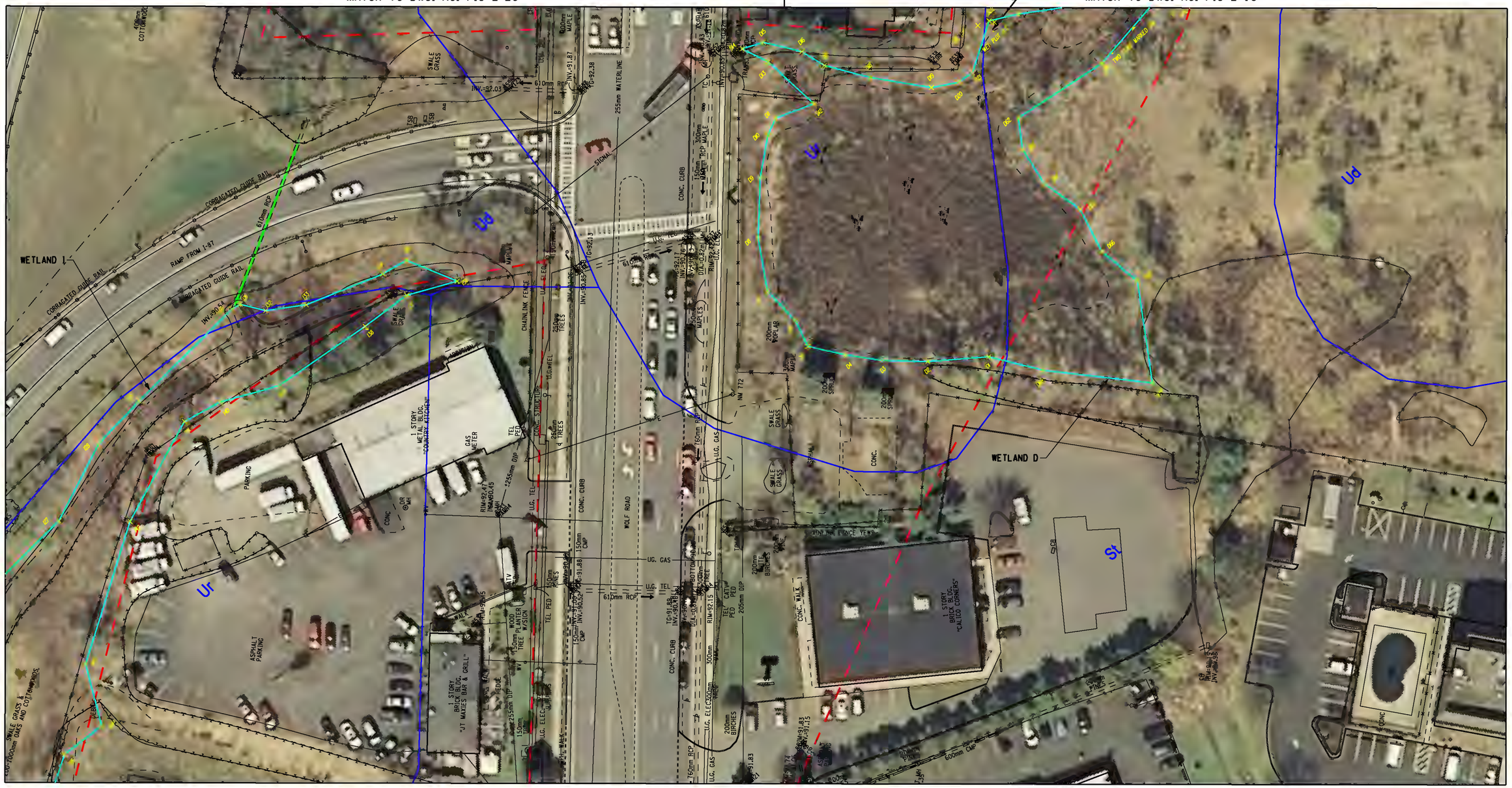
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILE$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-20

MATCH TO DWG. NO. FIG 2-19

MATCH TO DWG. NO. FIG 2-15



MATCH TO DWG. NO. FIG 2-17

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	SHUMAKER
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-18
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-22

MATCH TO DWG. NO. FIG 2-20

MATCH TO DWG. NO. FIG 2-18

LEGEND	
SOIL TYPE	PROJECT STUDY AREA
SCE DELINEATED WETLANDS	STREAM
MAPPED NWI WETLANDS	HYDROLOGIC CONNECTION
MAPPED NYSDEC WETLANDS	PHOTOGRAPH LOCATION
DELINEATED NYSDEC 100' ADJACENT AREA	

30 0 30 60'

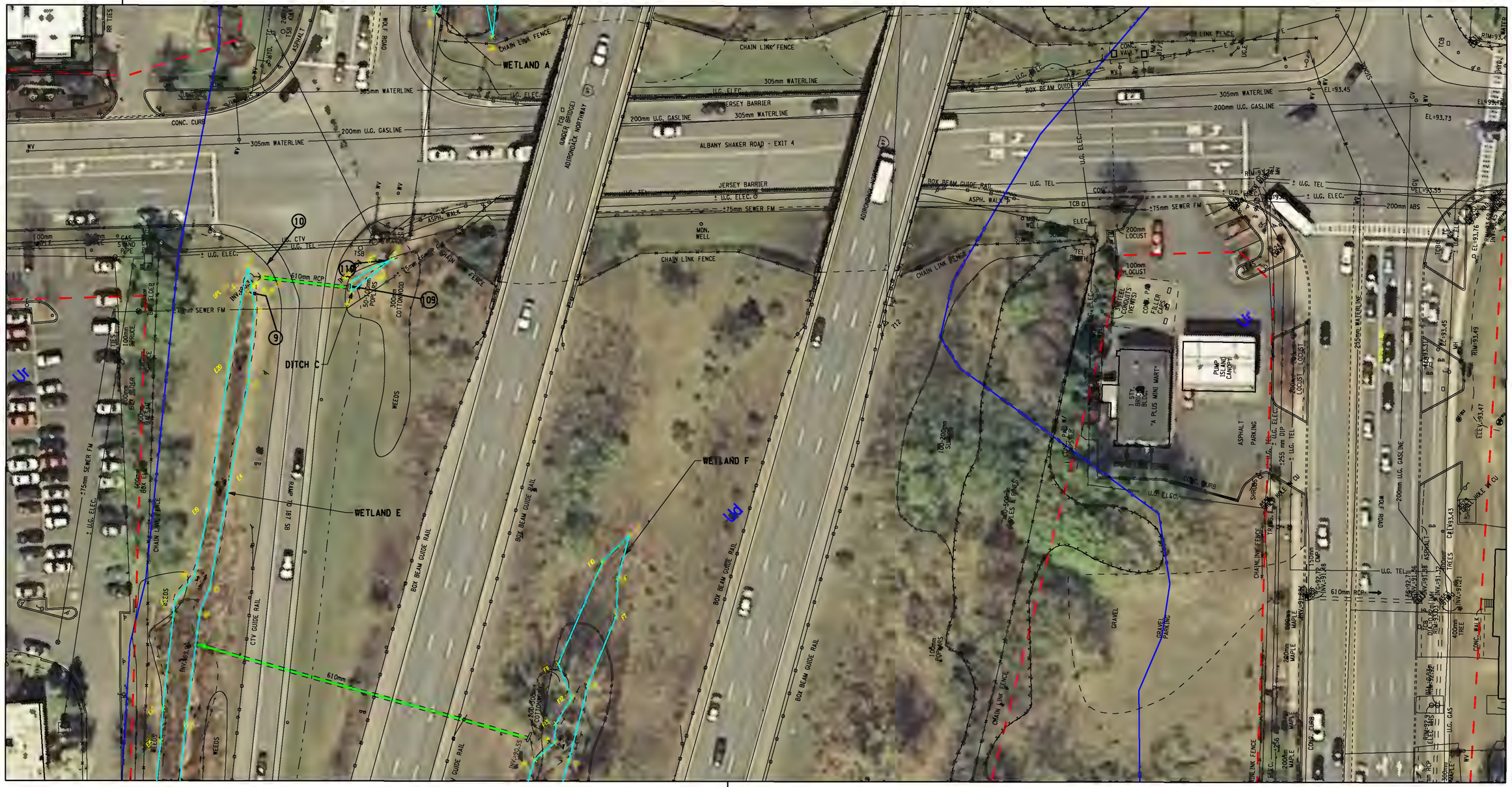
AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	
SIGNATURE / DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-19
DOCUMENT NAME: $FILE$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE$ DATE/TIME = $DATE$ /$TIME$ USER = $NAME$

MATCH TO DWG. NO. FIG 2-22

MATCH TO DWG. NO. FIG 2-21



MATCH TO DWG. NO. FIG 2-19

MATCH TO DWG. NO. FIG 2-15

MATCH TO DWG. NO. FIG 2-18

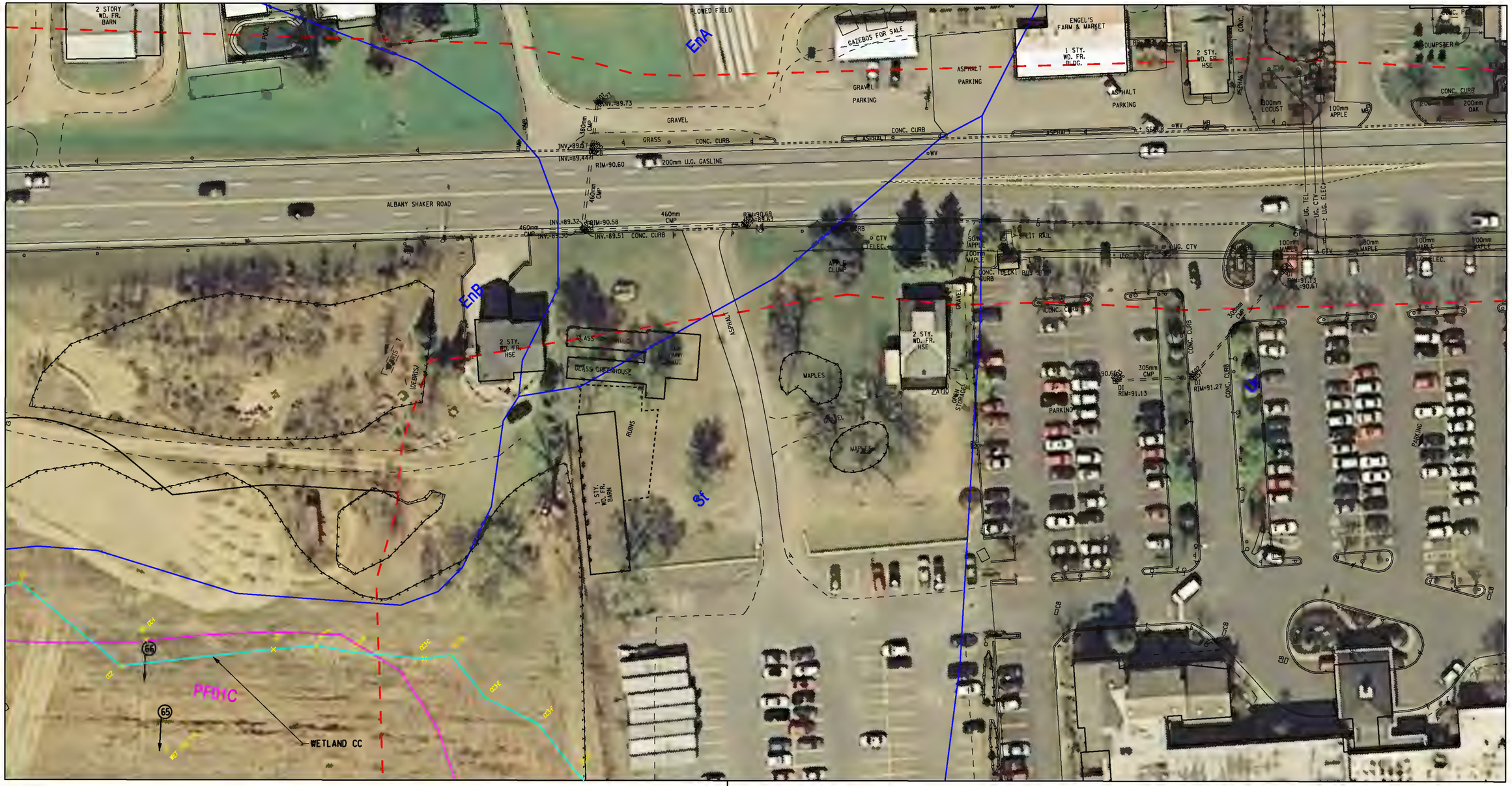
LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-20
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$



LEGEND

SOIL TYPE	PROJECT STUDY AREA
SCE DELINEATED WETLANDS	STREAM
MAPPED NWI WETLANDS	HYDROLOGIC CONNECTION
MAPPED NYSDEC WETLANDS	PHOTOGRAPH LOCATION (XX)
DELINEATED NYSDEC 100' ADJACENT AREA	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP
SIGNATURE / DATE	COUNTY: ALBANY				CONTRACT NUMBER / DRAWING NO. FIG 2-21
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-23

MATCH TO DWG. NO. FIG 2-20

MATCH TO DWG. NO. FIG 2-19

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	
SIGNATURE / DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-22
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-24

MATCH TO DWG. NO. FIG 2-33

MATCH TO DWG. NO. FIG 2-22

LEGEND	
SOIL TYPE	PROJECT STUDY AREA
SCE DELINEATED WETLANDS	STREAM
MAPPED NWI WETLANDS	HYDROLOGIC CONNECTION
MAPPED NYSDEC WETLANDS	PHOTOGRAPH LOCATION
DELINEATED NYSDEC 100' ADJACENT AREA	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-23
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-25

MATCH TO DWG. NO. FIG 2-23

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-24
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-26

MATCH TO DWG. NO. FIG 2-33

MATCH TO DWG. NO. FIG 2-24

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP
SIGNATURE / DATE	COUNTY: ALBANY				CONTRACT NUMBER / DRAWING NO. FIG 2-25
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-27

MATCH TO DWG. NO. FIG 2-25

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-26
SIGNATURE / DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-28

MATCH TO DWG. NO. FIG 2-26

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-27
SIGNATURE / DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-29

MATCH TO DWG. NO. FIG 2-27

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP
SIGNATURE DATE	COUNTY: ALBANY				
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

CONTRACT NUMBER

DRAWING NO.
FIG 2-28

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-30

MATCH TO DWG. NO. FIG 2-28

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

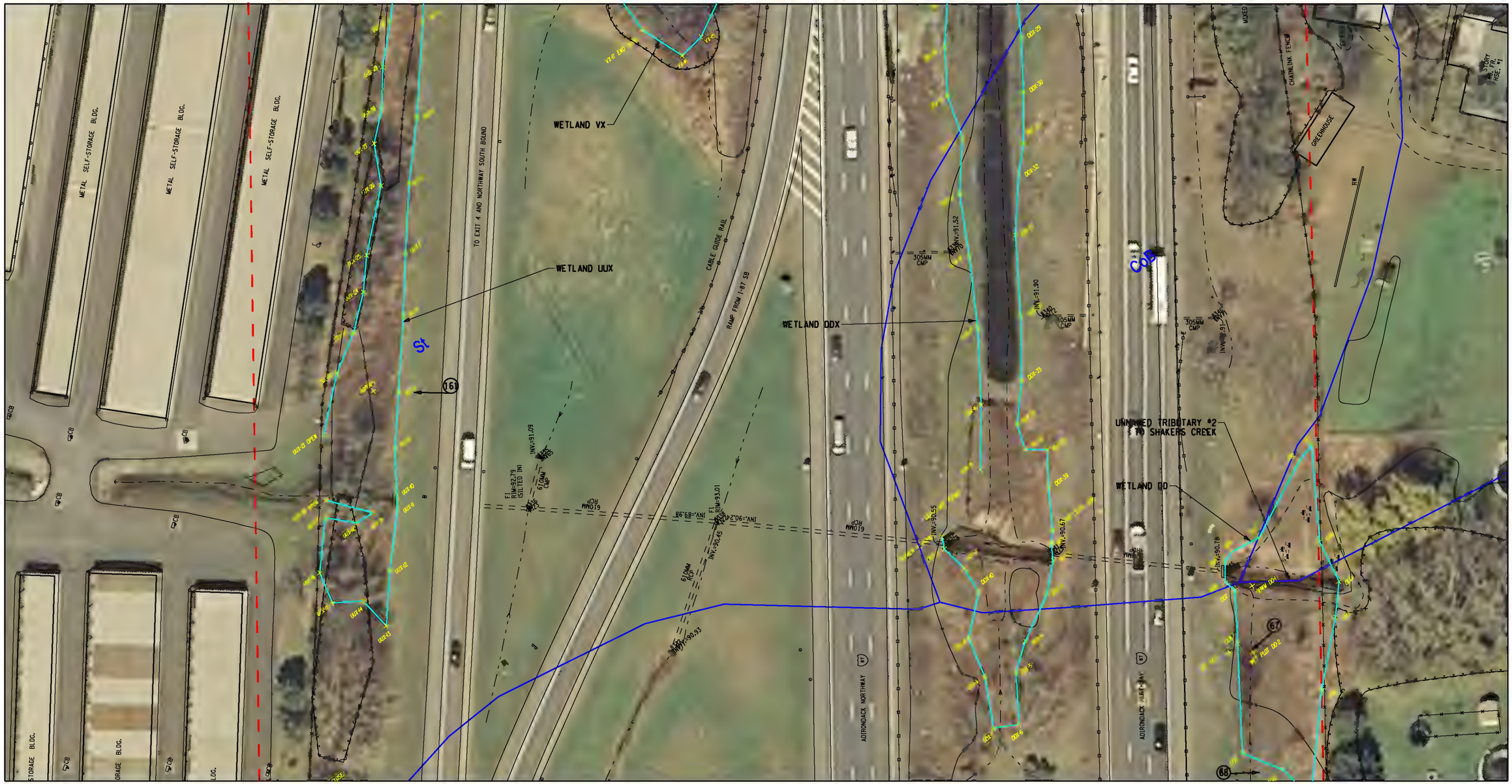
30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	SHUMAKER
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-29
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-31



MATCH TO DWG. NO. FIG 2-29

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP
SIGNATURE DATE	COUNTY: ALBANY				DRAWING NO. FIG 2-30
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

CONTRACT NUMBER

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-32

MATCH TO DWG. NO. FIG 2-30

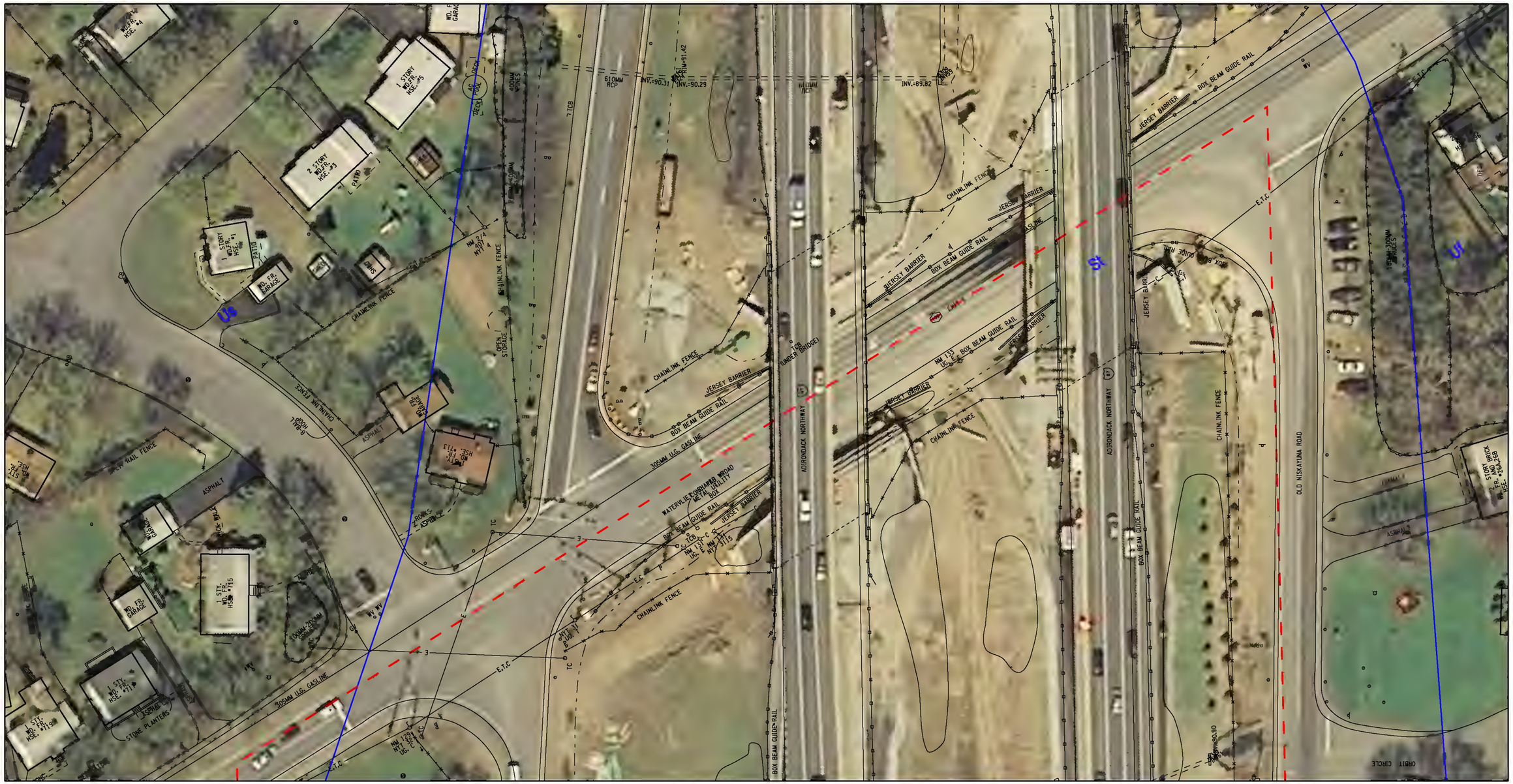
LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	SHUMAKER
SIGNATURE / DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-31
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$



MATCH TO DWG. NO. FIG 2-31

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-32
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILE$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	HUMMAKER
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 2-33
DOCUMENT NAME: $FILES$						NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ ESTIMATED BY ____

FILE NAME = $FILE$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

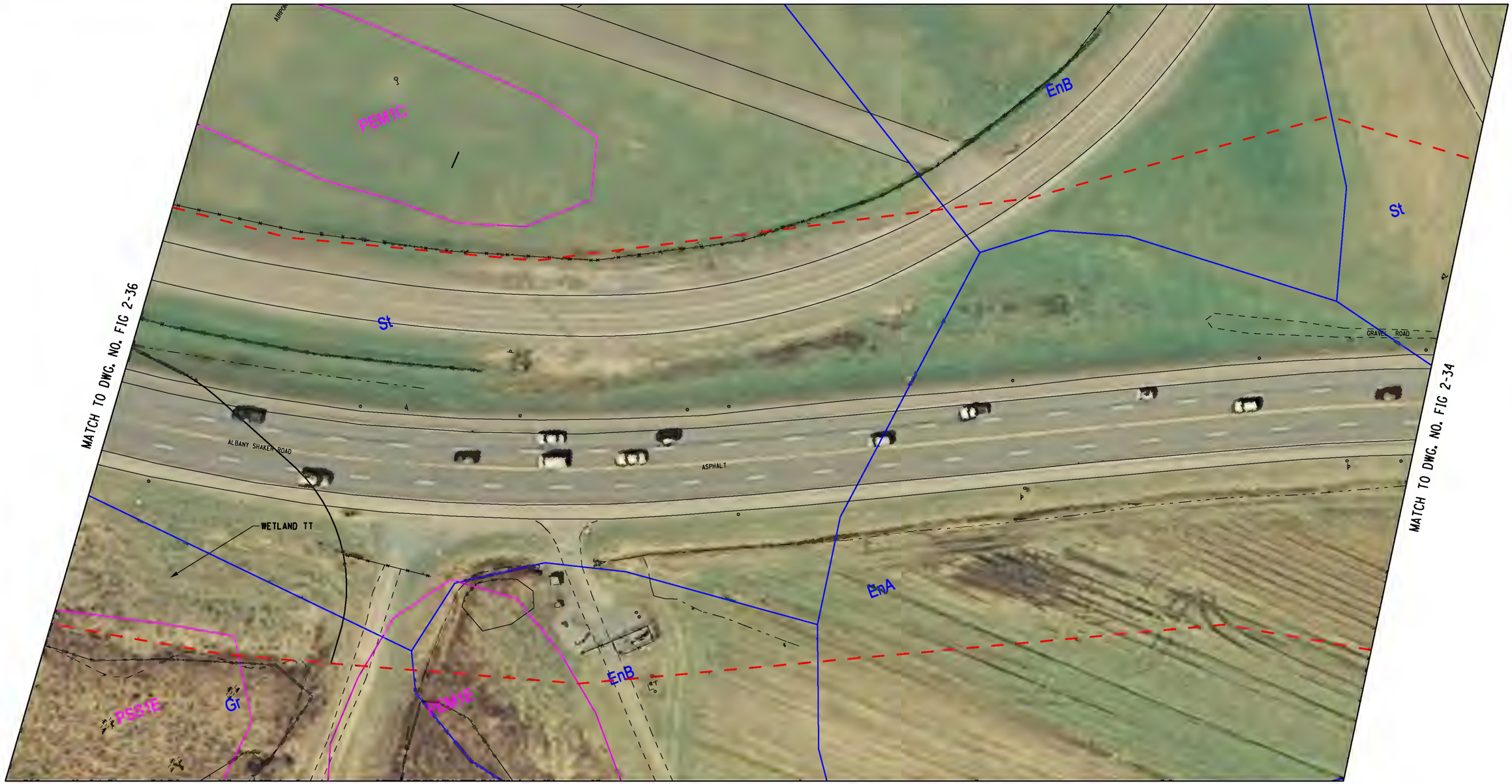
LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-34
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$



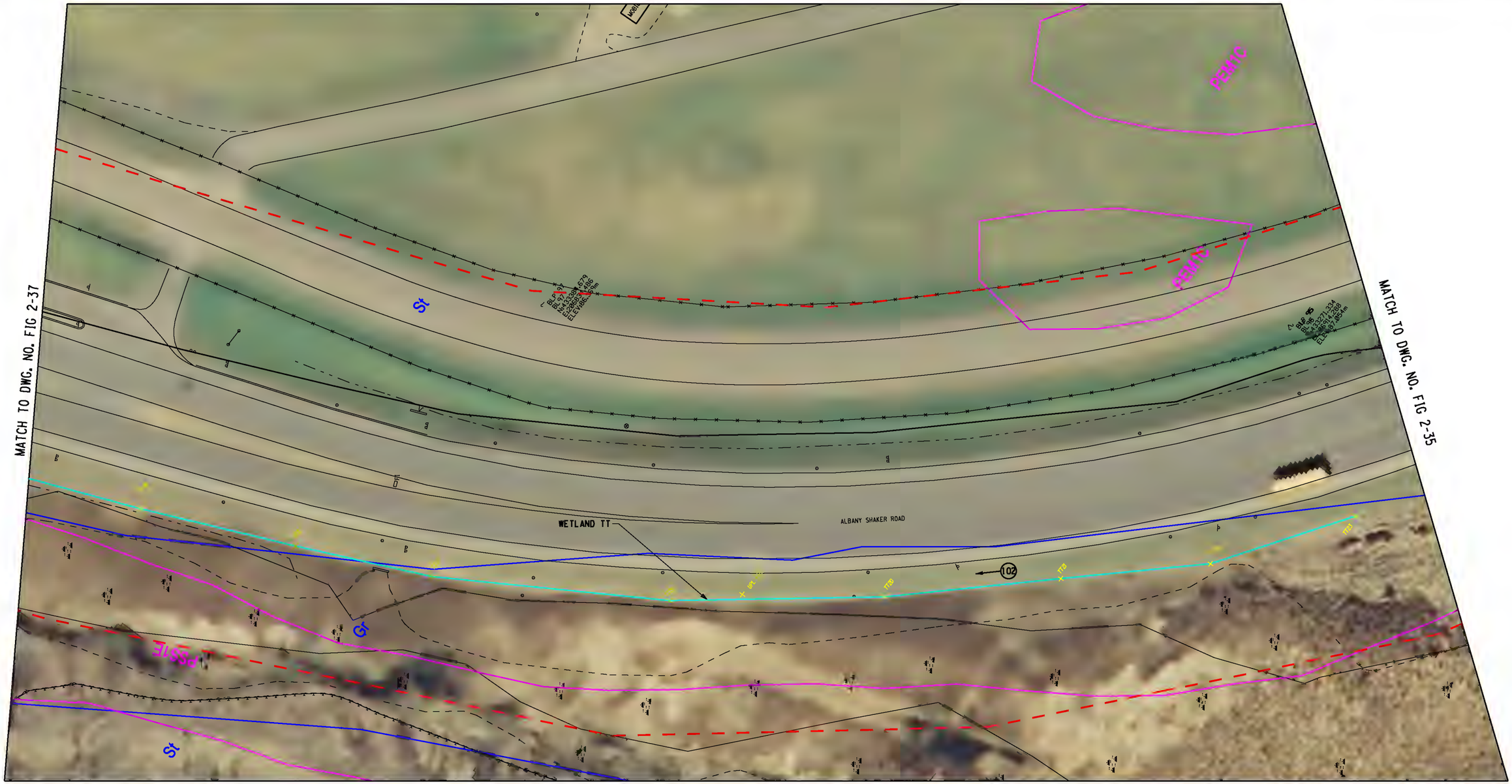
LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-35
SIGNATURE / DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$



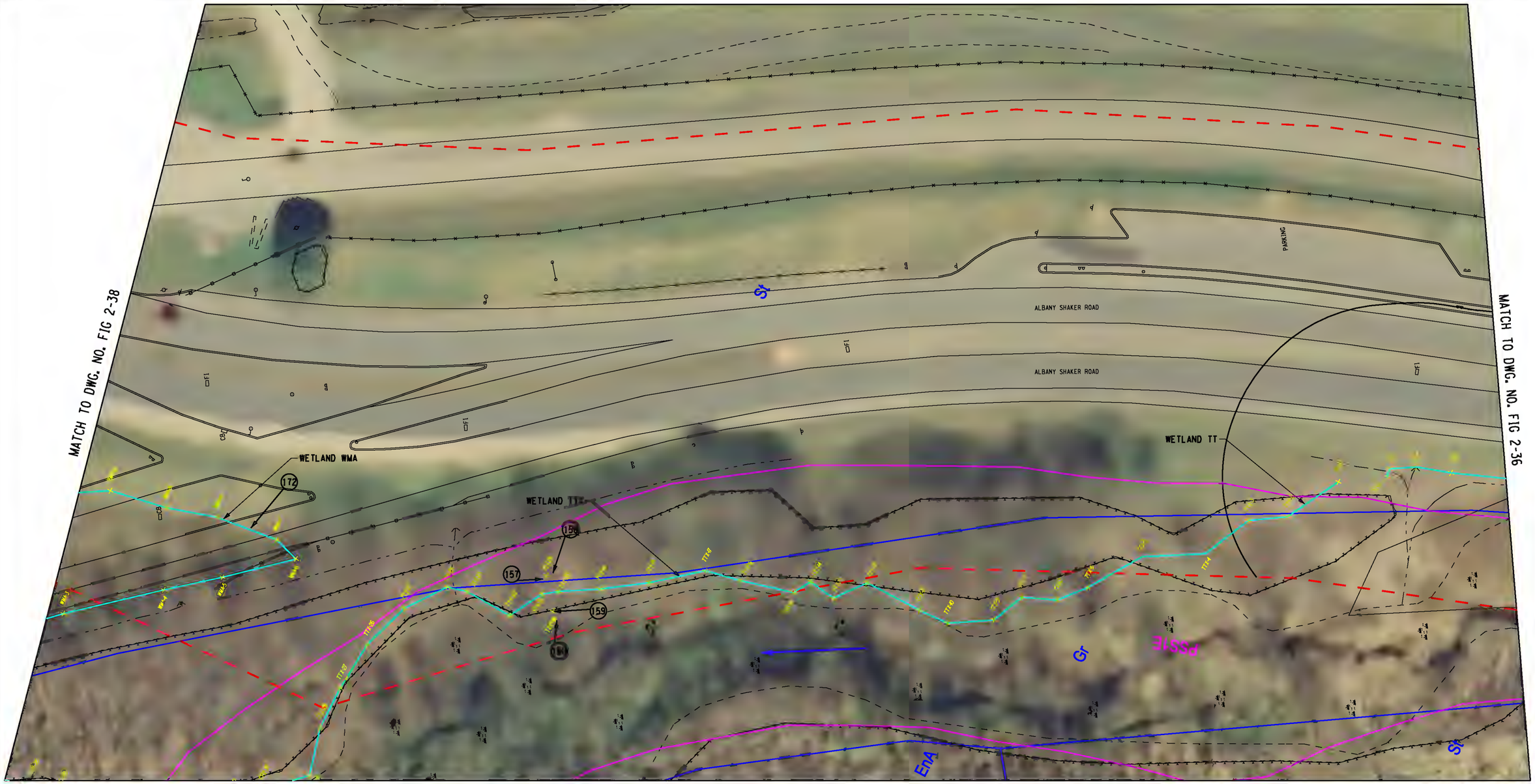
LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-36
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$



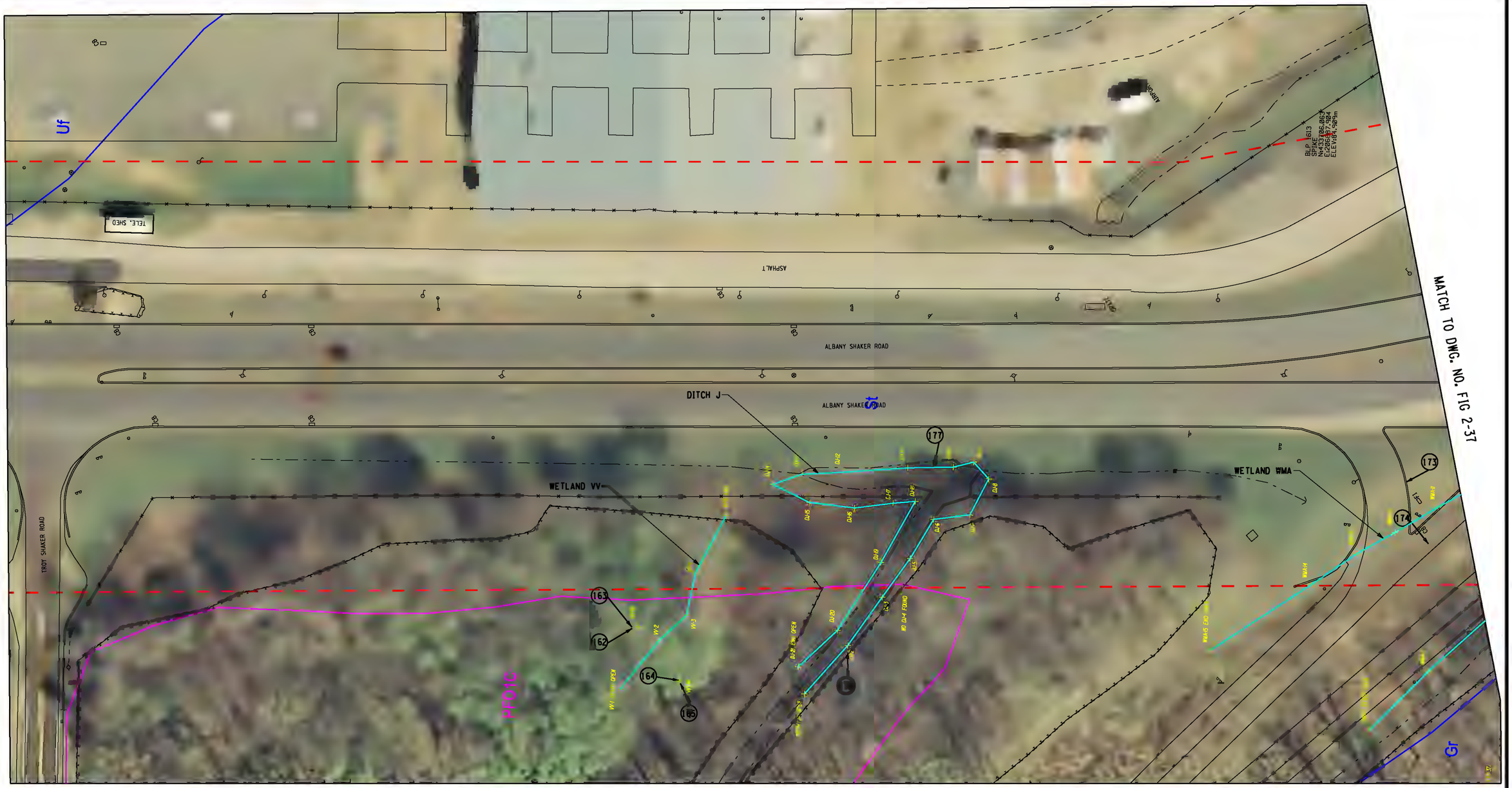
LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-37
SIGNATURE / DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$



LEGEND

SOIL TYPE	PROJECT STUDY AREA
SCE DELINEATED WETLANDS	STREAM
MAPPED NWI WETLANDS	HYDROLOGIC CONNECTION
MAPPED NYSDEC WETLANDS	PHOTOGRAPH LOCATION
DELINEATED NYSDEC 100' ADJACENT AREA	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-38
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-40

MATCH TO DWG. NO. FIG 2-38

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-39
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILE$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ ESTIMATED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

LEGEND

SOIL TYPE	PROJECT STUDY AREA
SCE DELINEATED WETLANDS	STREAM
MAPPED NWI WETLANDS	HYDROLOGIC CONNECTION
MAPPED NYSDEC WETLANDS	PHOTOGRAPH LOCATION
DELINEATED NYSDEC 100' ADJACENT AREA	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK: SIGNATURE DATE	EXIT 3/4 ACCESS IMPROVEMENT TOWN OF COLONIE COUNTY: ALBANY	PIN 1721.51 PS&E DATE	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED FIGURE 2 WETLAND BOUNDARY MAP	CONTRACT NUMBER DRAWING NO. FIG 2-40

DOCUMENT NAME: $FILES$

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-3

MATCH TO DWG. NO. FIG 2-10

MATCH TO DWG. NO. FIG 2-10

MATCH TO DWG. NO. FIG 2-42

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP
SIGNATURE DATE	COUNTY: ALBANY				DRAWING NO. FIG 2-41
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

CONTRACT NUMBER

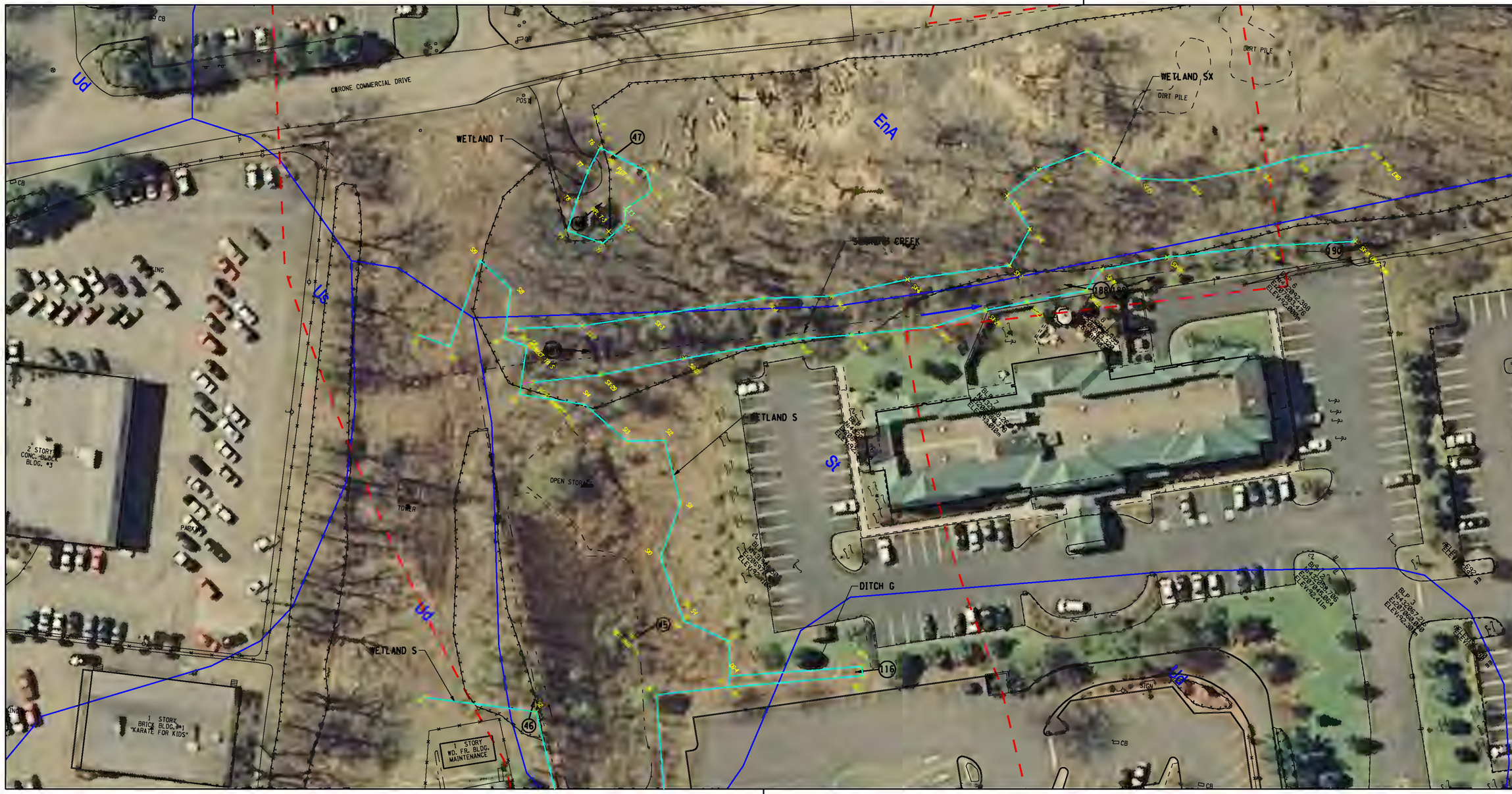
CHUMAKER

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILEL$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-41

MATCH TO DWG. NO. FIG 2-10



MATCH TO DWG. NO. FIG 2-43

MATCH TO DWG. NO. FIG 2-44

MATCH TO DWG. NO. FIG 2-10

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

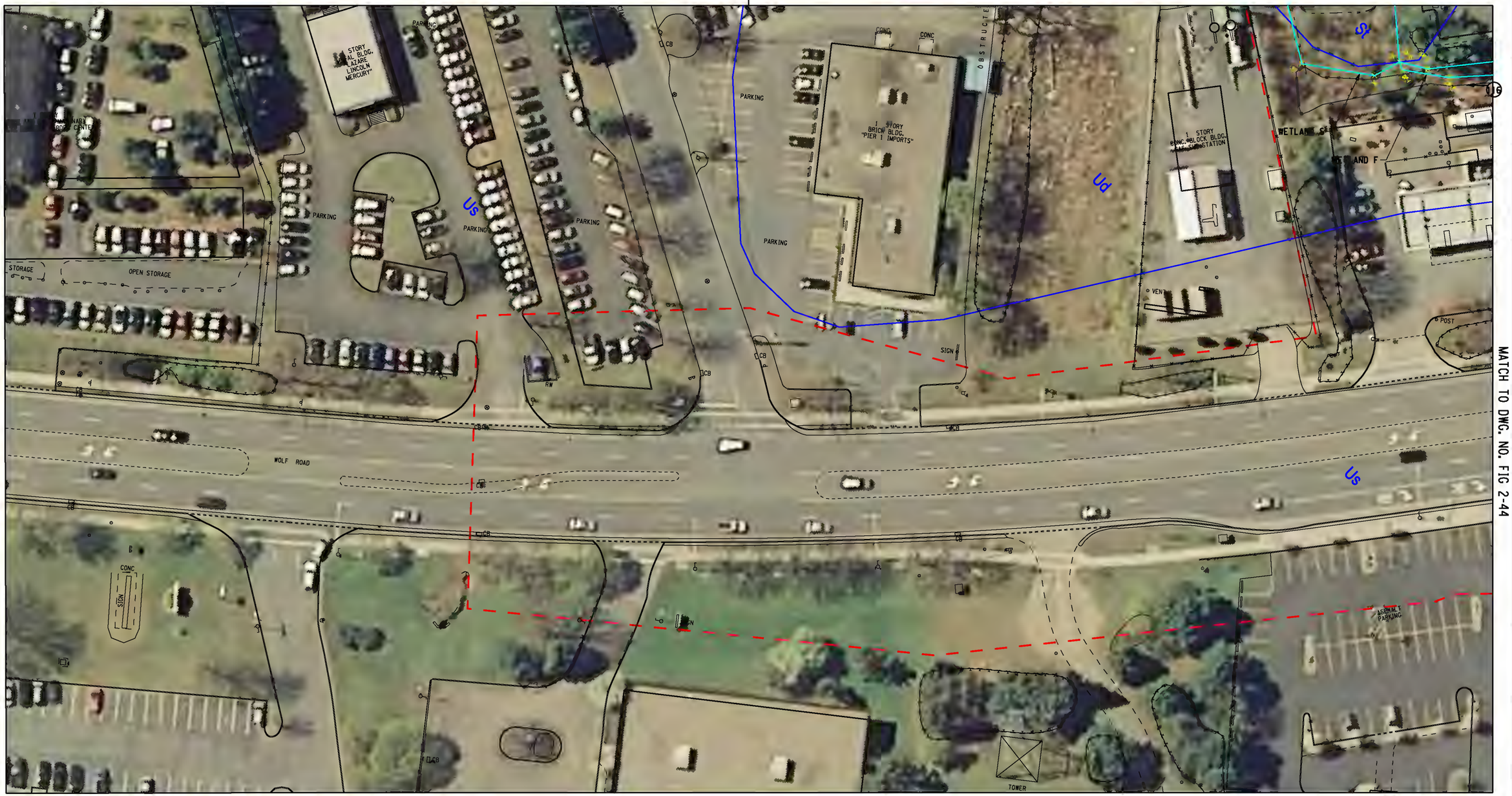
30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-42
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILE1$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-42



MATCH TO DWG. NO. FIG 2-44

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

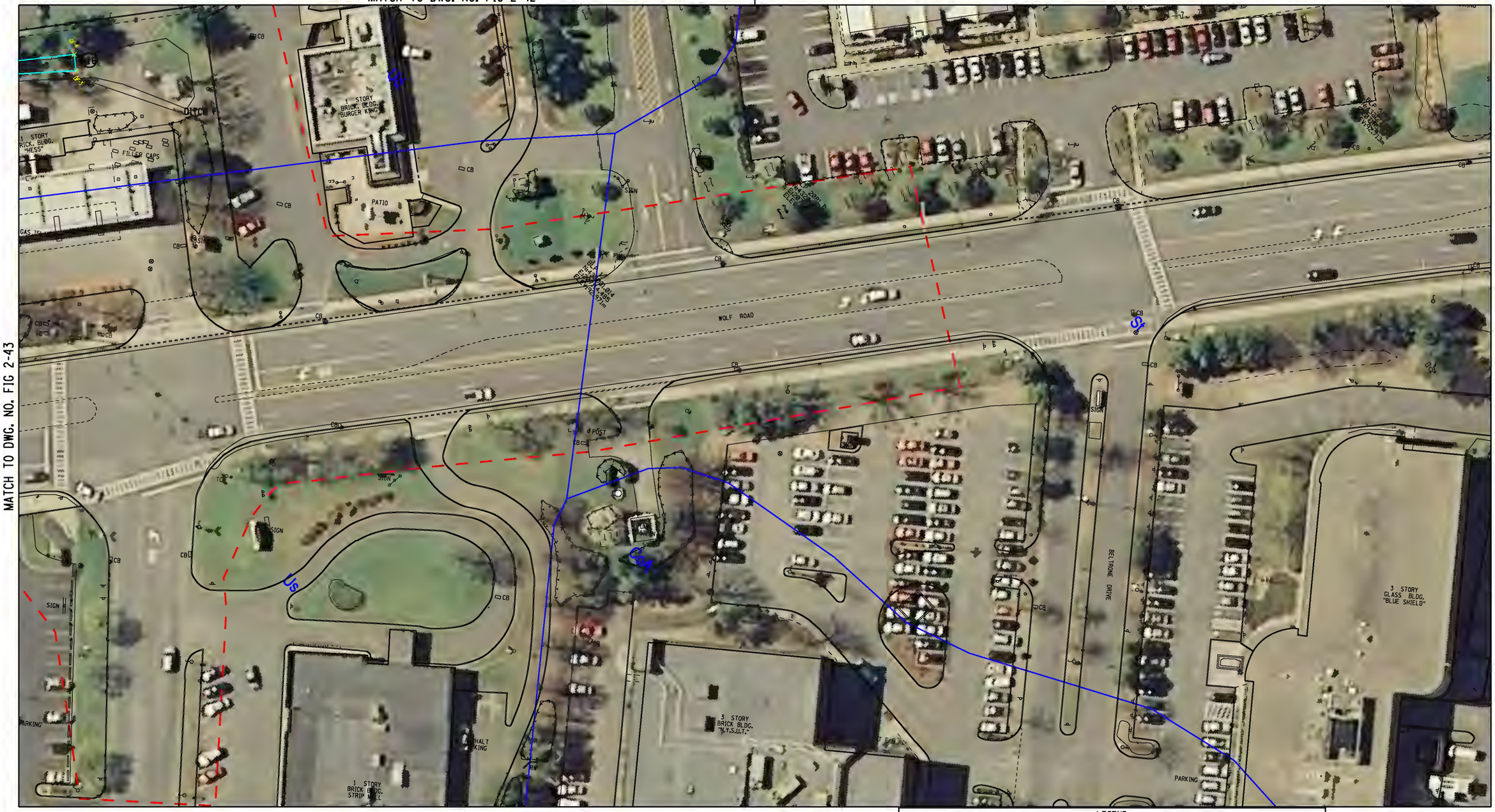
30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP	DRAWING NO. FIG 2-43
SIGNATURE / DATE	COUNTY: ALBANY					
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = $FILE$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$

MATCH TO DWG. NO. FIG 2-42



MATCH TO DWG. NO. FIG 2-43

LEGEND			
SOIL TYPE		PROJECT STUDY AREA	
SCE DELINEATED WETLANDS		STREAM	
MAPPED NWI WETLANDS		HYDROLOGIC CONNECTION	
MAPPED NYSDEC WETLANDS		PHOTOGRAPH LOCATION	XX
DELINEATED NYSDEC 100' ADJACENT AREA			

30 0 30 60'

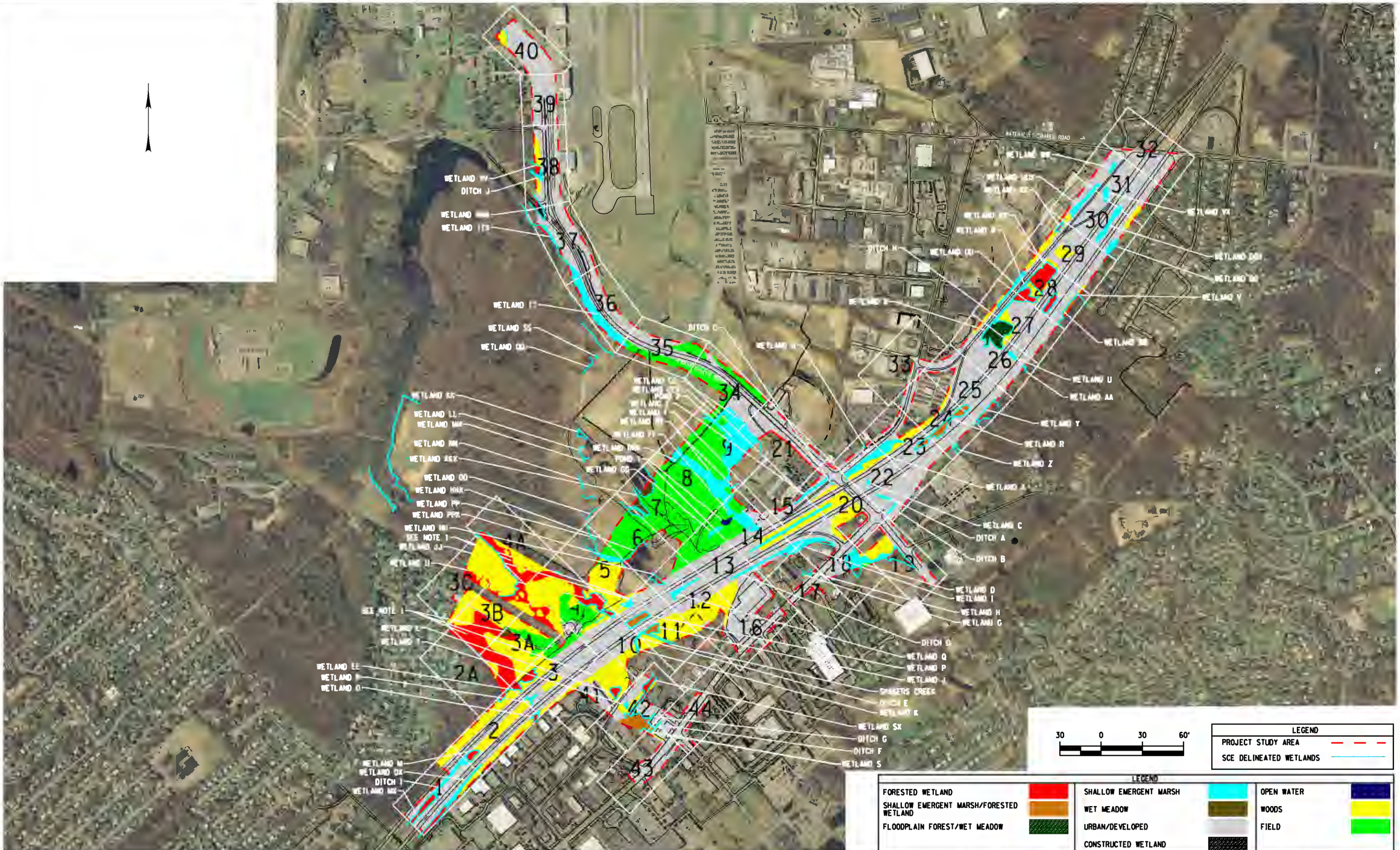
AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 2 WETLAND BOUNDARY MAP
SIGNATURE / DATE	COUNTY: ALBANY				DRAWING NO. FIG 2-44
DOCUMENT NAME: $FILES$					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

CONTRACT NUMBER

SHUMAKER

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = $FILE1$
DATE/TIME = $DATE$ /$TIME$
USER = $NAME$



NOTE 1: WETLANDS IN THIS AREA HAVE NOT BEEN DELINEATED. WETLAND AREA HATCHING IS BASED ON NWI WETLANDS.

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE / DATE	COUNTY: ALBANY				CONTRACT NUMBER / DRAWING NO. 3 - ALL KEY MAP

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = E:\2004\0458\Design\Env_figures\Figure 3\172151_env_fig_3.dgn
DATE/TIME = 1/21/2014 /2:09:17 PM
USER = USER jch

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	
SIGNATURE / DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-1
DOCUMENT NAME: 172151_env_fig_3.dgn					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ ESTIMATED BY ____

FILE NAME = E:\2004\0458\Design\Env_figures\Figure 3\172151_env_fig_3.dgn
DATE/TIME = 1/21/2014 2:09:34 PM
USER = USER jch

MATCH TO DWG. NO. FIG 3-2A

MATCH TO DWG. NO. FIG 3-1

MATCH TO DWG. NO. FIG 3-3

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-2

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____

FILE NAME = E:\2004\04580\Design\Env_figures\Figure 3\172151_env_fig_3.dgn
DATE/TIME = 1/21/2014 /2:09:44 PM
USER = USER jch

MATCH TO DWG. NO. FIG 3-3B

MATCH TO DWG. NO. FIG 3-3A

MATCH TO DWG. NO. FIG 3-2

NOTE 1: WETLANDS IN THIS AREA HAVE NOT BEEN DELINEATED. WETLAND AREA HATCHING IS BASED ON NWI WETLANDS.

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY MAP

CONTRACT NUMBER

DRAWING NO.
FIG 3-2A

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

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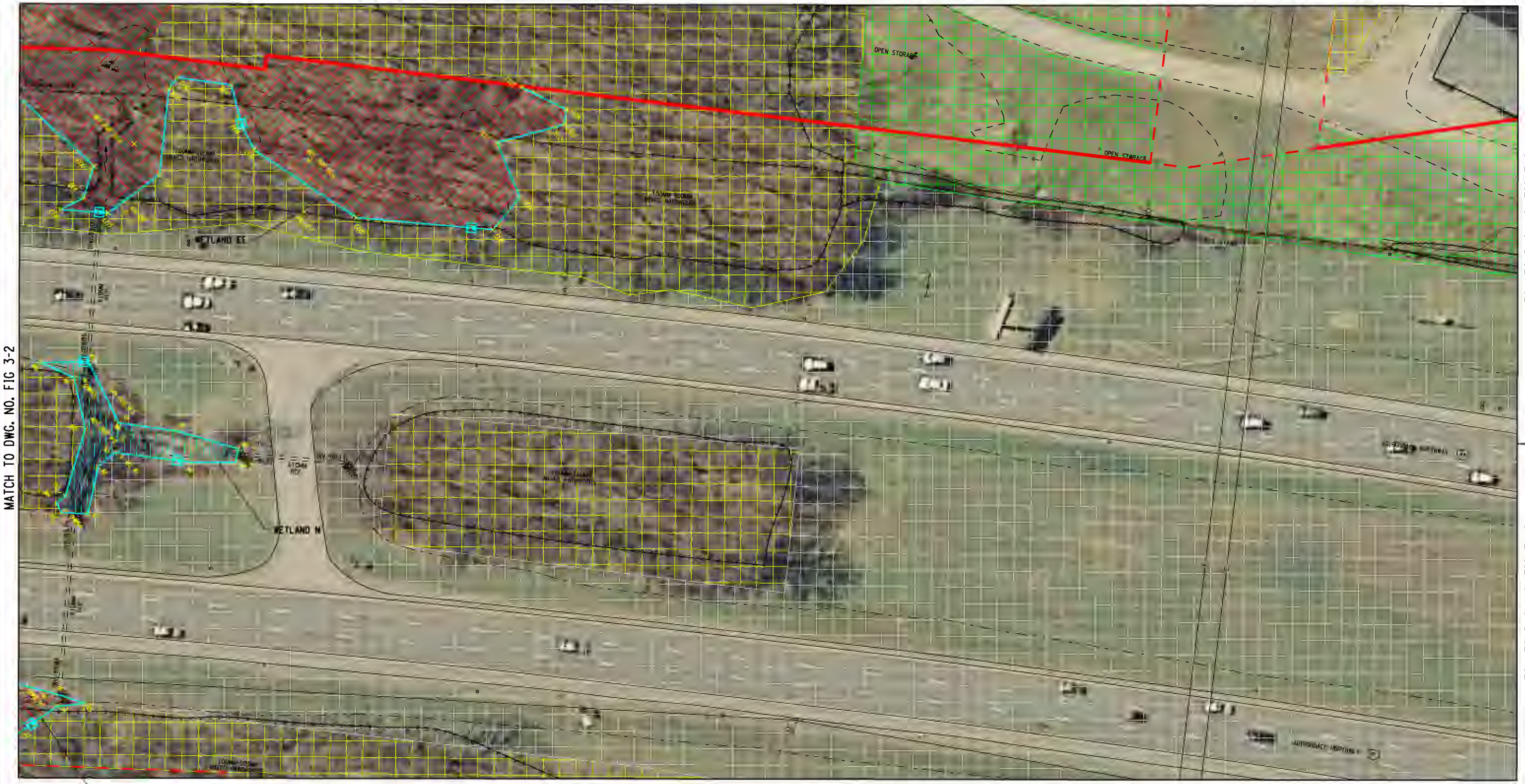
MATCH TO DWG. NO. FIG 3-3A

MATCH TO DWG. NO. FIG 3-2



MATCH TO DWG. NO. FIG 3-4

MATCH TO DWG. NO. FIG 3-10

MATCH TO DWG. NO. FIG 3-41

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	HUMMAYER
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-3
DOCUMENT NAME: 172151_env_fig_3.dgn					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

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USER = USER jch

MATCH TO DWG. NO. FIG 3-3B

MATCH TO DWG. NO. FIG 3-2A

MATCH TO DWG. NO. FIG 3-4

MATCH TO DWG. NO. FIG 3-3

NOTE 1: WETLANDS IN THIS AREA HAVE NOT BEEN DELINEATED. WETLAND AREA HATCHING IS BASED ON NWI WETLANDS.

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY MAP

CONTRACT NUMBER

HUMMAUER

DRAWING NO. FIG 3-3A

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ ESTIMATED BY ____

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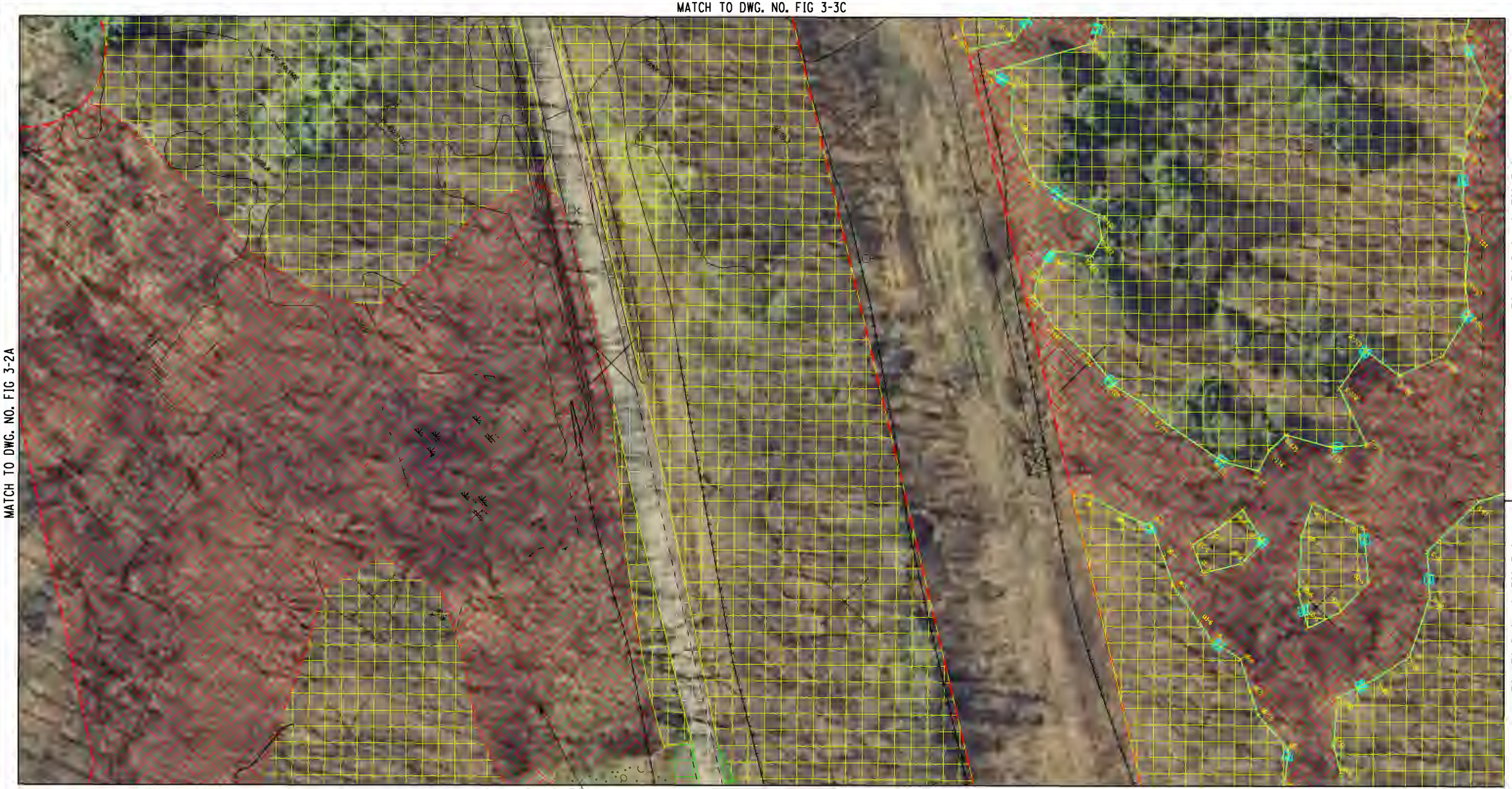
USER = USER jch

MATCH TO DWG. NO. FIG 3-3C

MATCH TO DWG. NO. FIG 3-2A



MATCH TO DWG. NO. FIG 3-4A

MATCH TO DWG. NO. FIG 3-4

SEE NOTE 1

MATCH TO DWG. NO. FIG 3-3A

NOTE 1: WETLANDS IN THIS AREA HAVE NOT BEEN DELINEATED. WETLAND AREA HATCHING IS BASED ON NWI WETLANDS.

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY MAP

CONTRACT NUMBER

HUMMAKER

DRAWING NO.
FIG 3-3B

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

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USER = USER jch

NOTE 1: WETLANDS IN THIS AREA HAVE NOT BEEN DELINEATED. WETLAND AREA HATCHING IS BASED ON NWI WETLANDS.

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	DRAWING NO. FIG 3-3C
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: 172151_env_fig_3.dgn					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

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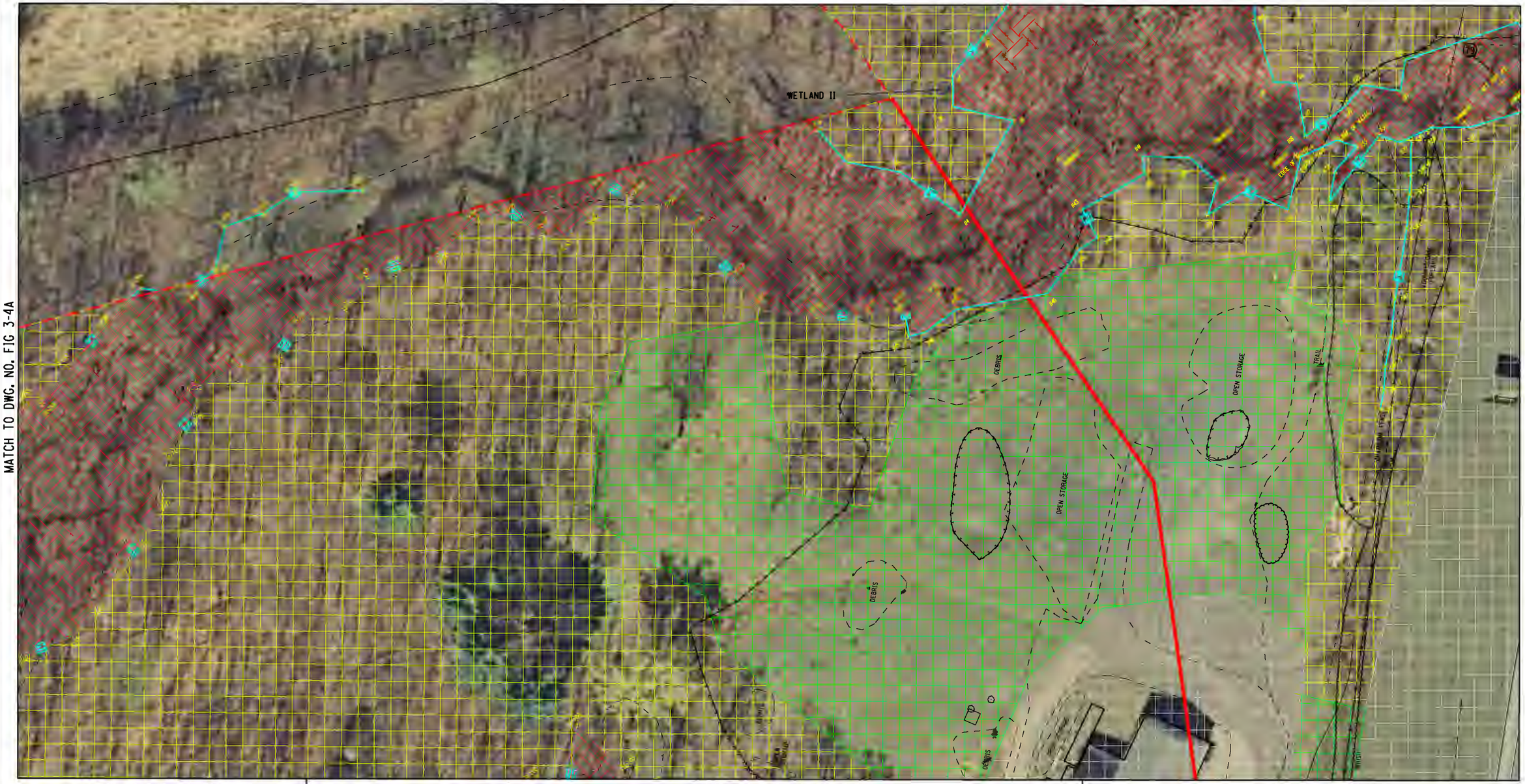
MATCH TO DWG. NO. FIG 3-5



MATCH TO DWG. NO. FIG 3-4A

MATCH TO DWG. NO. FIG 3-10

MATCH TO DWG. NO. FIG 3-3B

MATCH TO DWG. NO. FIG 3-3A

MATCH TO DWG. NO. FIG 3-3

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE DATE	COUNTY: ALBANY				DRAWING NO. FIG 3-4

CONTRACT NUMBER

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

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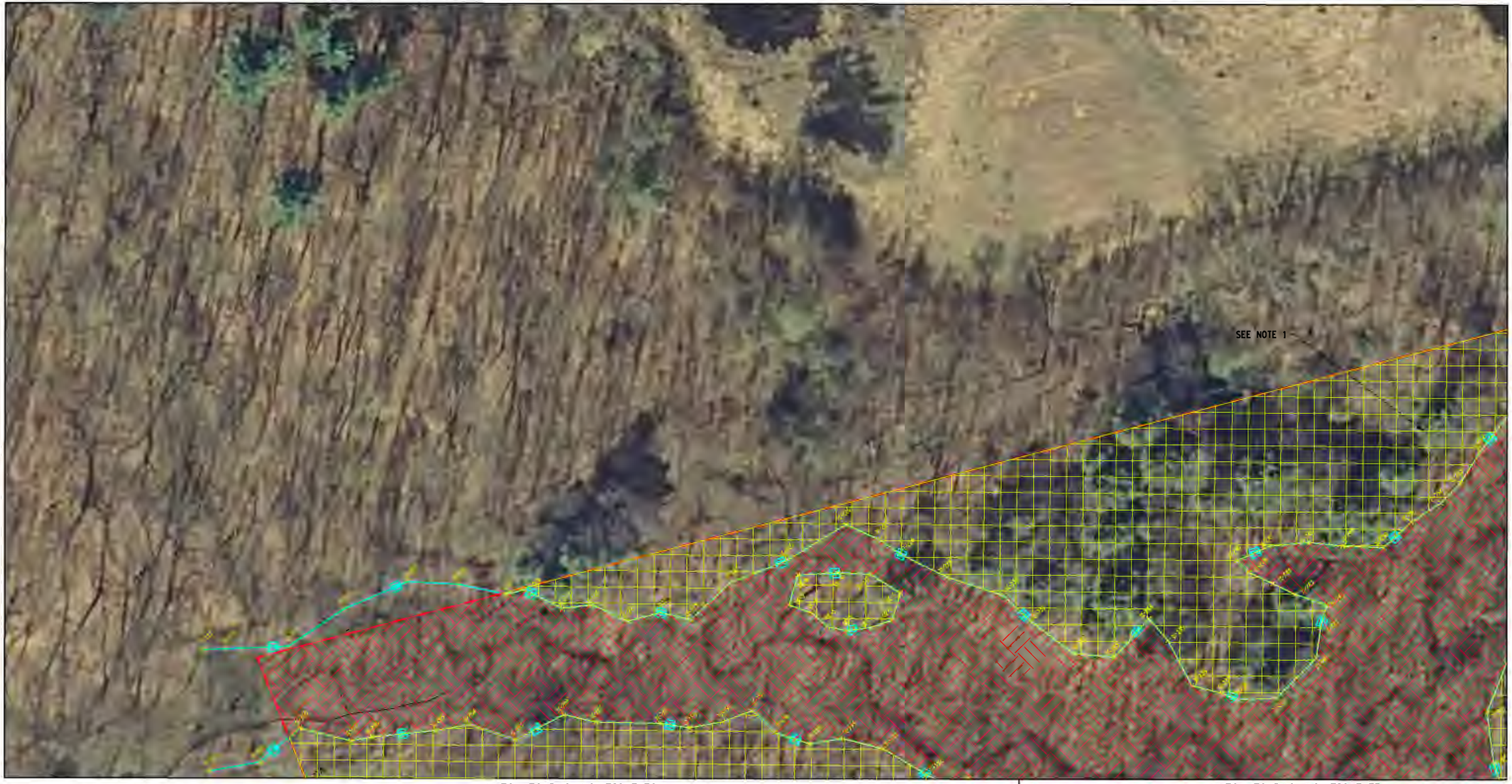
USER = USER jch



NOTE 1: WETLANDS IN THIS AREA HAVE NOT BEEN DELINEATED. WETLAND AREA HATCHING IS BASED ON NWI WETLANDS.

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-4A

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FILE NAME = E:\2004\0458\Design\Env_figures\Figure 3\172151_env_fig_3.dgn
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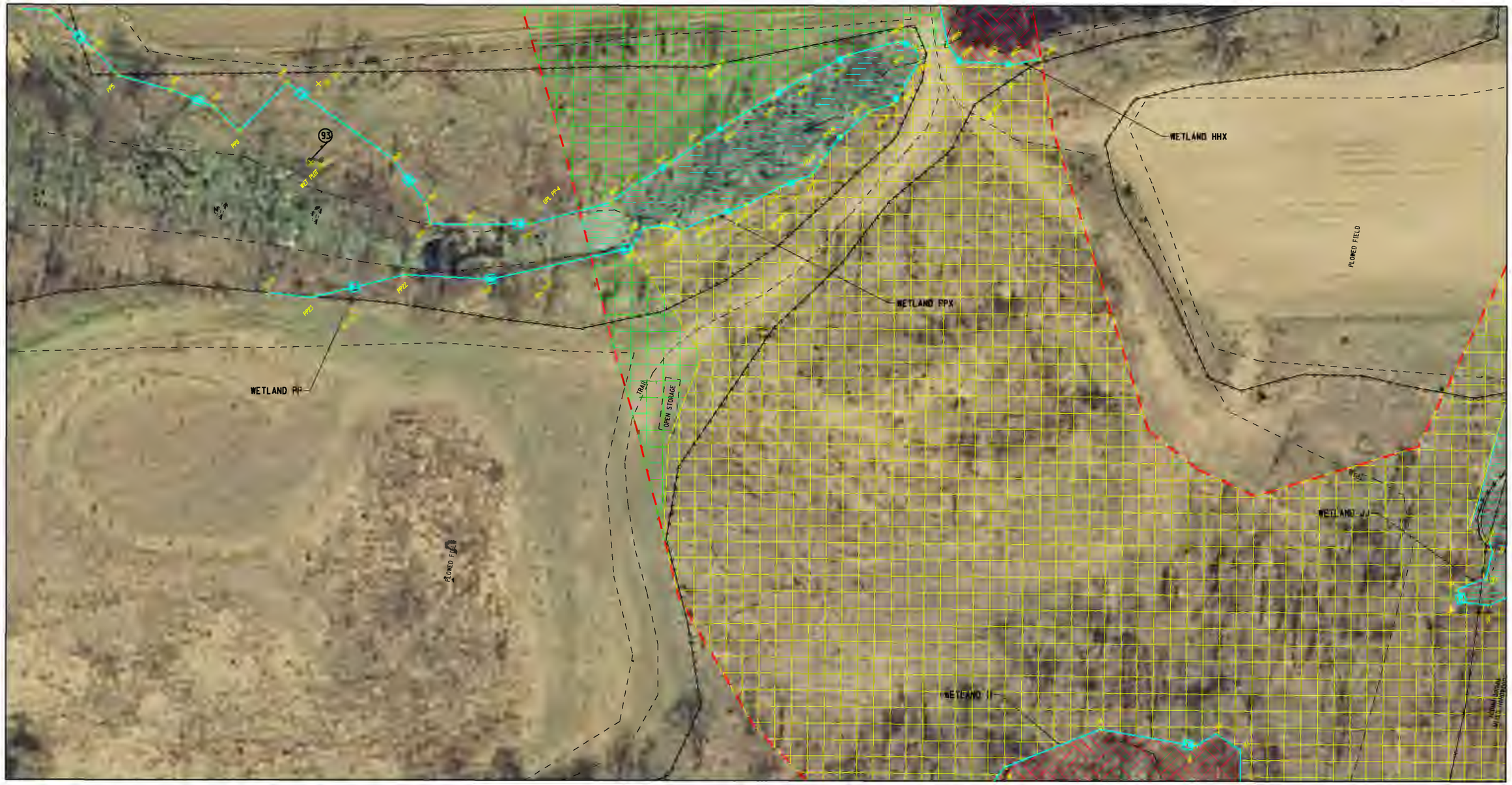
USER = USER jch

MATCH TO DWG. NO. FIG 3-6



MATCH TO DWG. NO. FIG 3-11

MATCH TO DWG. NO. FIG 3-4

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY MAP

CONTRACT NUMBER

DRAWING NO.
FIG 3-5

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FILE NAME = E:\2004\0458\Design\Env_figures\Figure 3\172151_env_fig_3.dgn
DATE/TIME = 1/21/2014 /2:10:34 PM
USER = USER jch

MATCH TO DWG. NO. FIG 3-7

MATCH TO DWG. NO. FIG 3-12

MATCH TO DWG. NO. FIG 3-5

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-6
DOCUMENT NAME: 172151_env_fig_3.dgn					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

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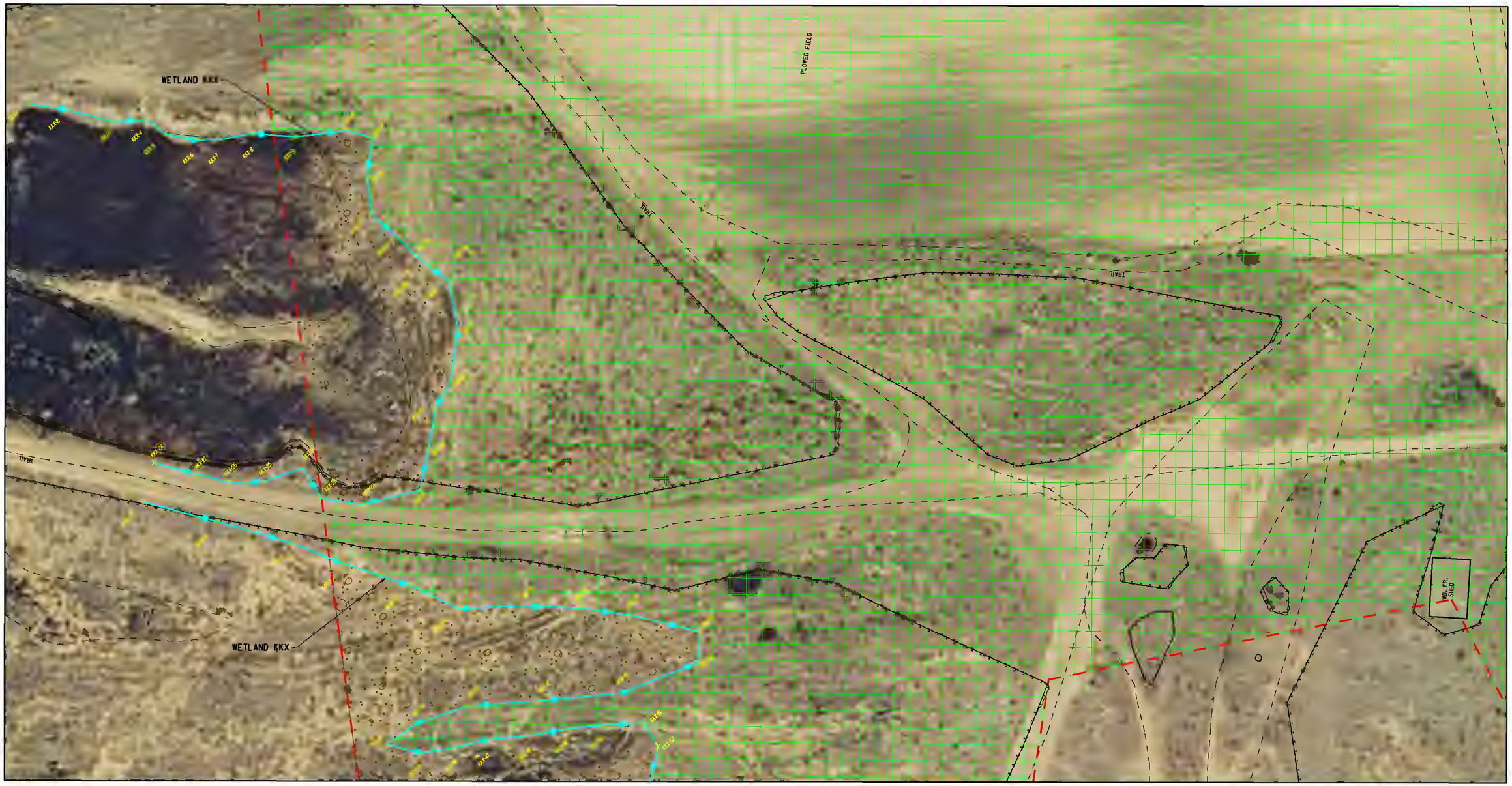
MATCH TO DWG. NO. FIG 3-8



MATCH TO DWG. NO. FIG 3-13

MATCH TO DWG. NO. FIG 3-6

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

HUMMAKER

DRAWING NO.
FIG 3-7

DOCUMENT NAME: 172151_env_fig_3.dgn

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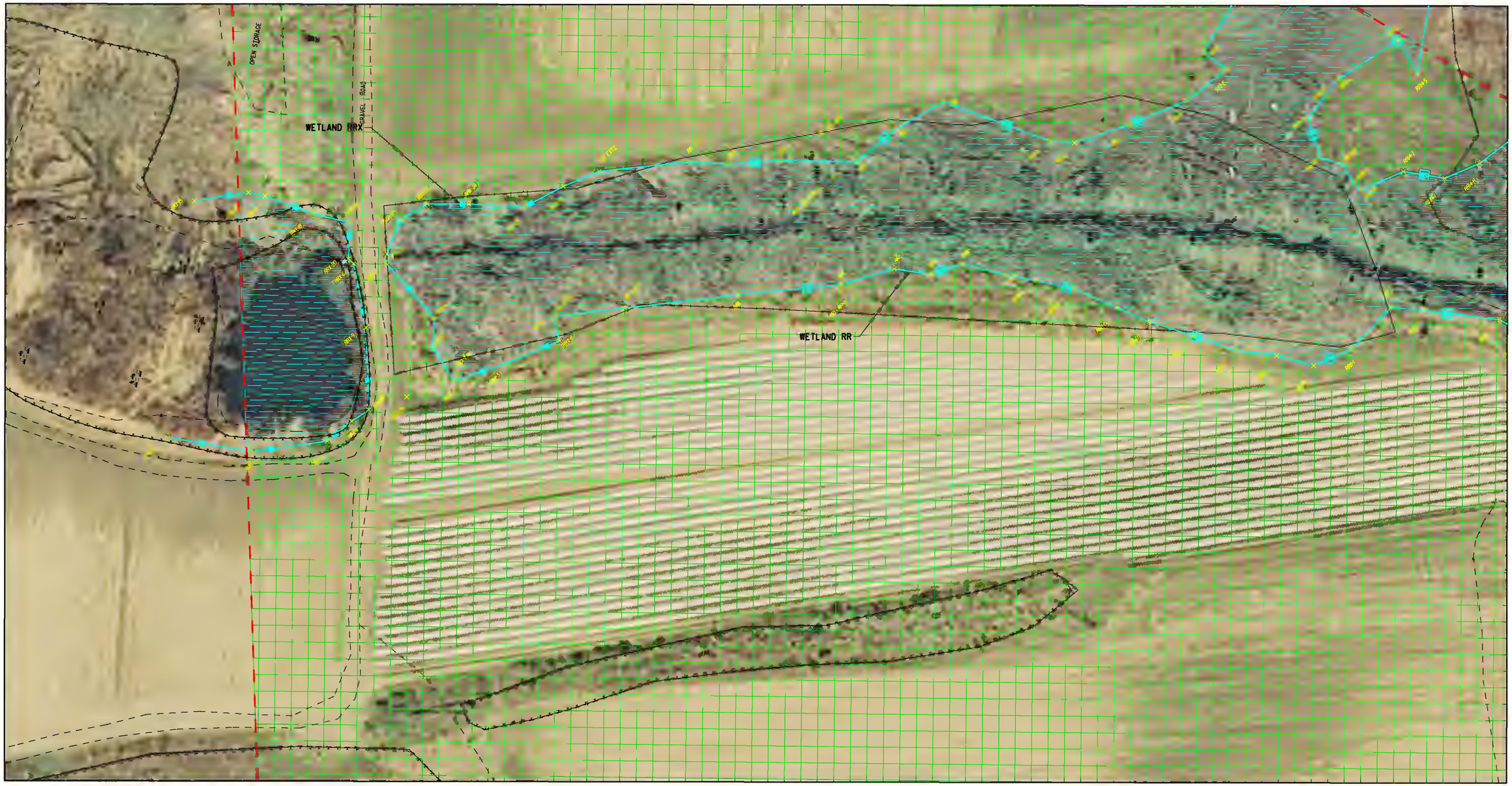
MATCH TO DWG. NO. FIG 3-9



MATCH TO DWG. NO. FIG 3-14

MATCH TO DWG. NO. FIG 3-7

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES
CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

DRAWING NO.
FIG 3-8

DOCUMENT NAME: 172151_env_fig_3.dgn

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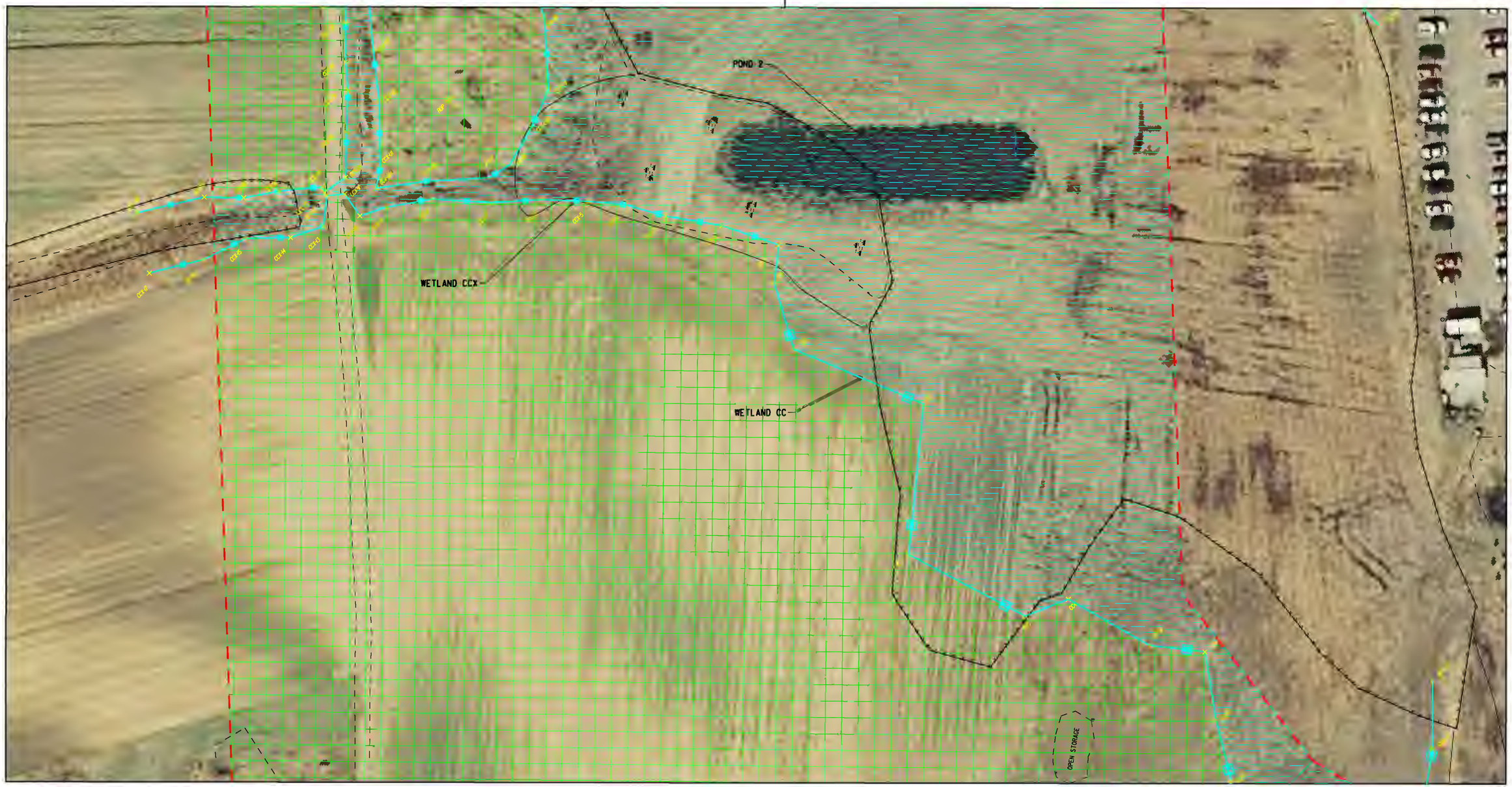
MATCH TO DWG. NO. FIG 3-34

MATCH TO DWG. NO. FIG 3-21



MATCH TO DWG. NO. FIG 3-15

MATCH TO DWG. NO. FIG 3-8

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

SHUMAKER

DRAWING NO.
FIG 3-9

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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MATCH TO DWG. NO. FIG 3-11

MATCH TO DWG. NO. FIG 3-40

MATCH TO DWG. NO. FIG 3-4

MATCH TO DWG. NO. FIG 3-40

MATCH TO DWG. NO. FIG 3-41

MATCH TO DWG. NO. FIG 3-3

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-10

DOCUMENT NAME: 172151_env_fig_3.dgn

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USER = USER jch

MATCH TO DWG. NO. FIG 3-12

MATCH TO DWG. NO. FIG 3-5

MATCH TO DWG. NO. FIG 3-10

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	DRAWING NO. FIG 3-11
SIGNATURE DATE	COUNTY: ALBANY					

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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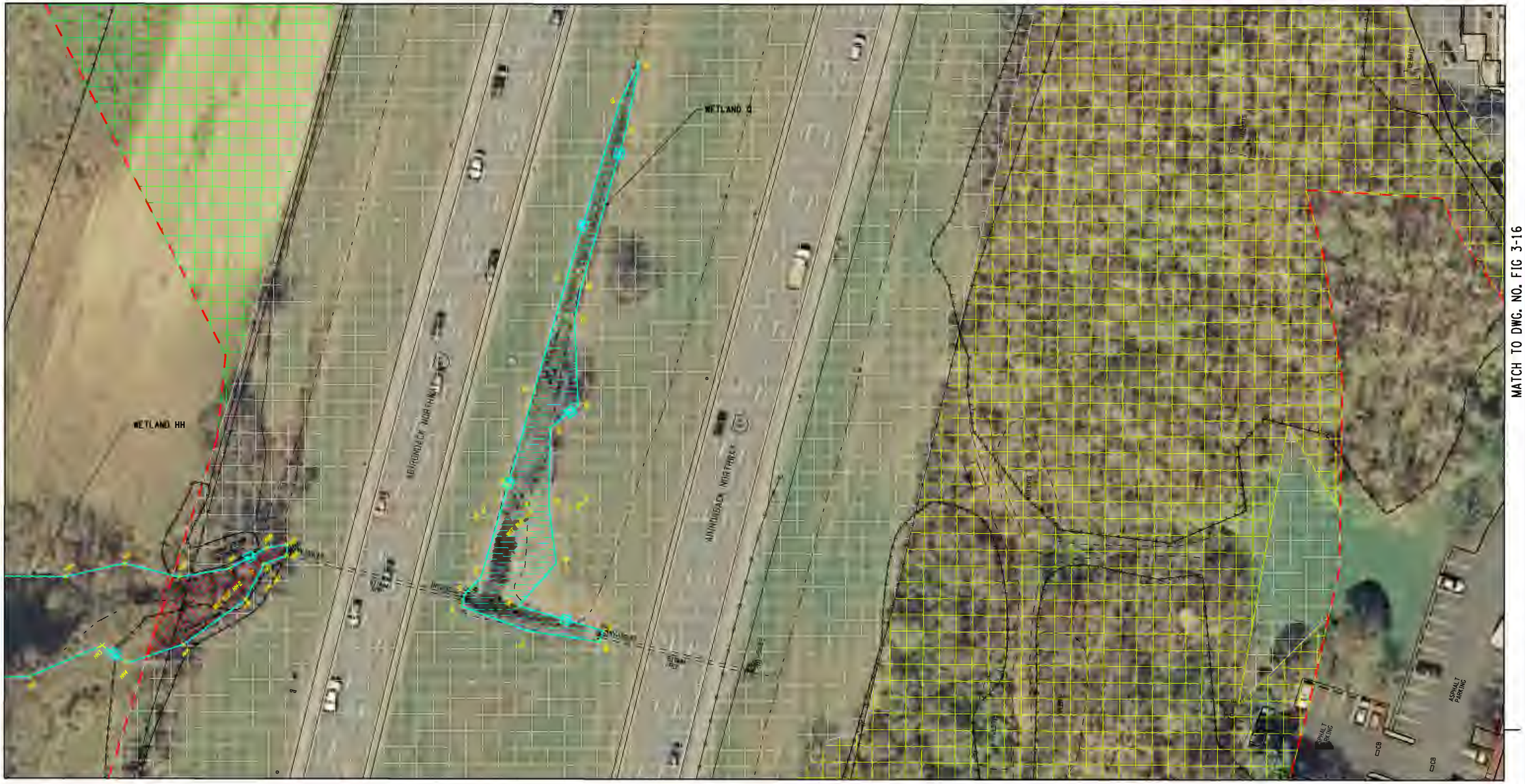
MATCH TO DWG. NO. FIG 3-13

MATCH TO DWG. NO. FIG 3-6



MATCH TO DWG. NO. FIG 3-16

MATCH TO DWG. NO. FIG 3-11

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-12

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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MATCH TO DWG. NO. FIG 3-14

MATCH TO DWG. NO. FIG 3-7

MATCH TO DWG. NO. FIG 3-16

MATCH TO DWG. NO. FIG 3-12

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	DRAWING NO. FIG 3-13
SIGNATURE DATE	COUNTY: ALBANY					

DOCUMENT NAME: 172151_env_fig_3.dgn

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MATCH TO DWG. NO. FIG 3-15

MATCH TO DWG. NO. FIG 3-8

MATCH TO DWG. NO. FIG 3-17

MATCH TO DWG. NO. FIG 3-13

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE DATE	COUNTY: ALBANY				

CONTRACT NUMBER

HUMMAKER

DRAWING NO. FIG 3-14

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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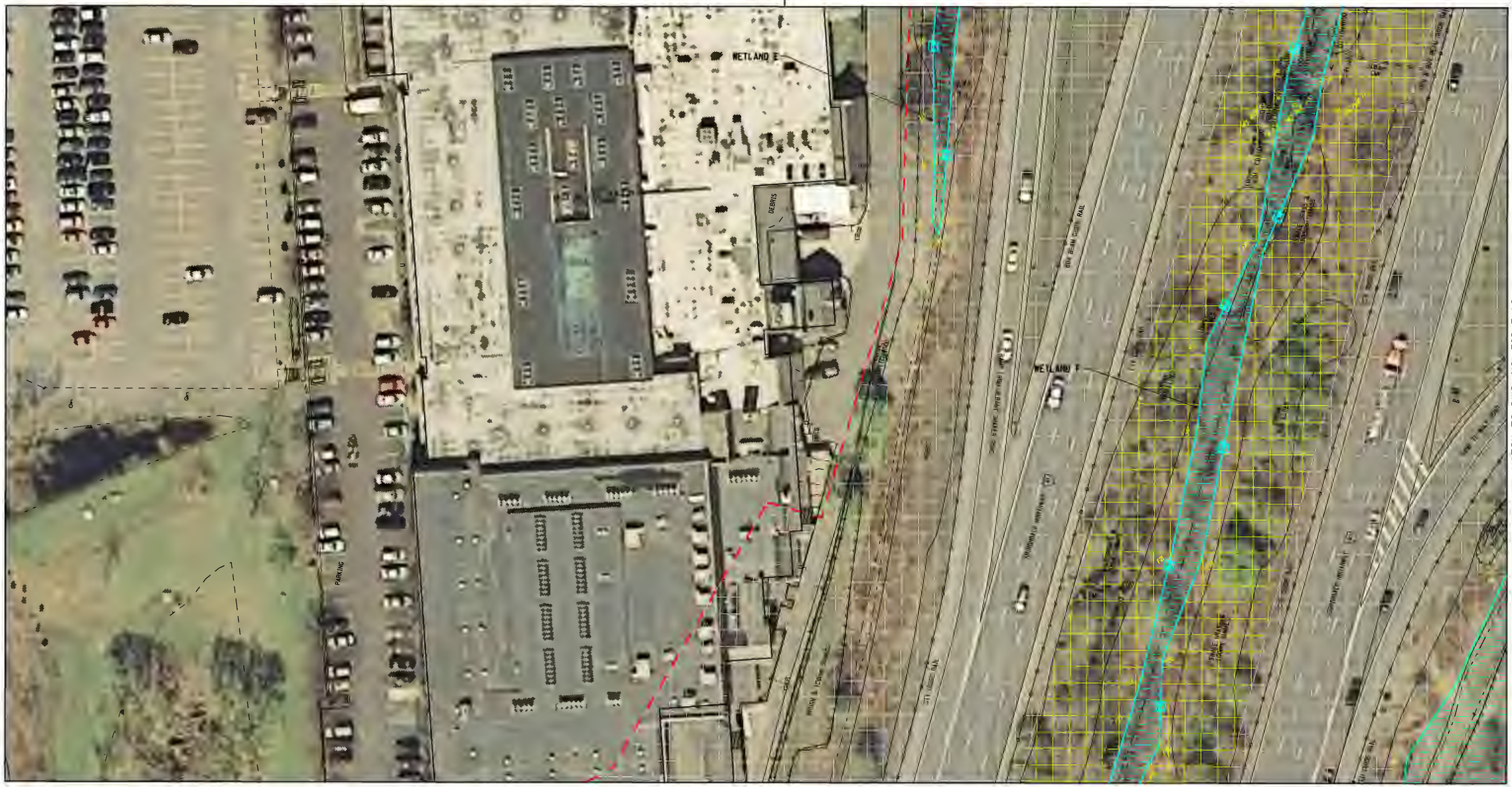
MATCH TO DWG. NO. FIG 3-21

MATCH TO DWG. NO. FIG 3-20

MATCH TO DWG. NO. FIG 3-9



MATCH TO DWG. NO. FIG 3-18

MATCH TO DWG. NO. FIG 3-14

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

SHUMAKER

DRAWING NO.
FIG 3-15

DOCUMENT NAME: 172151_env_fig_3.dgn

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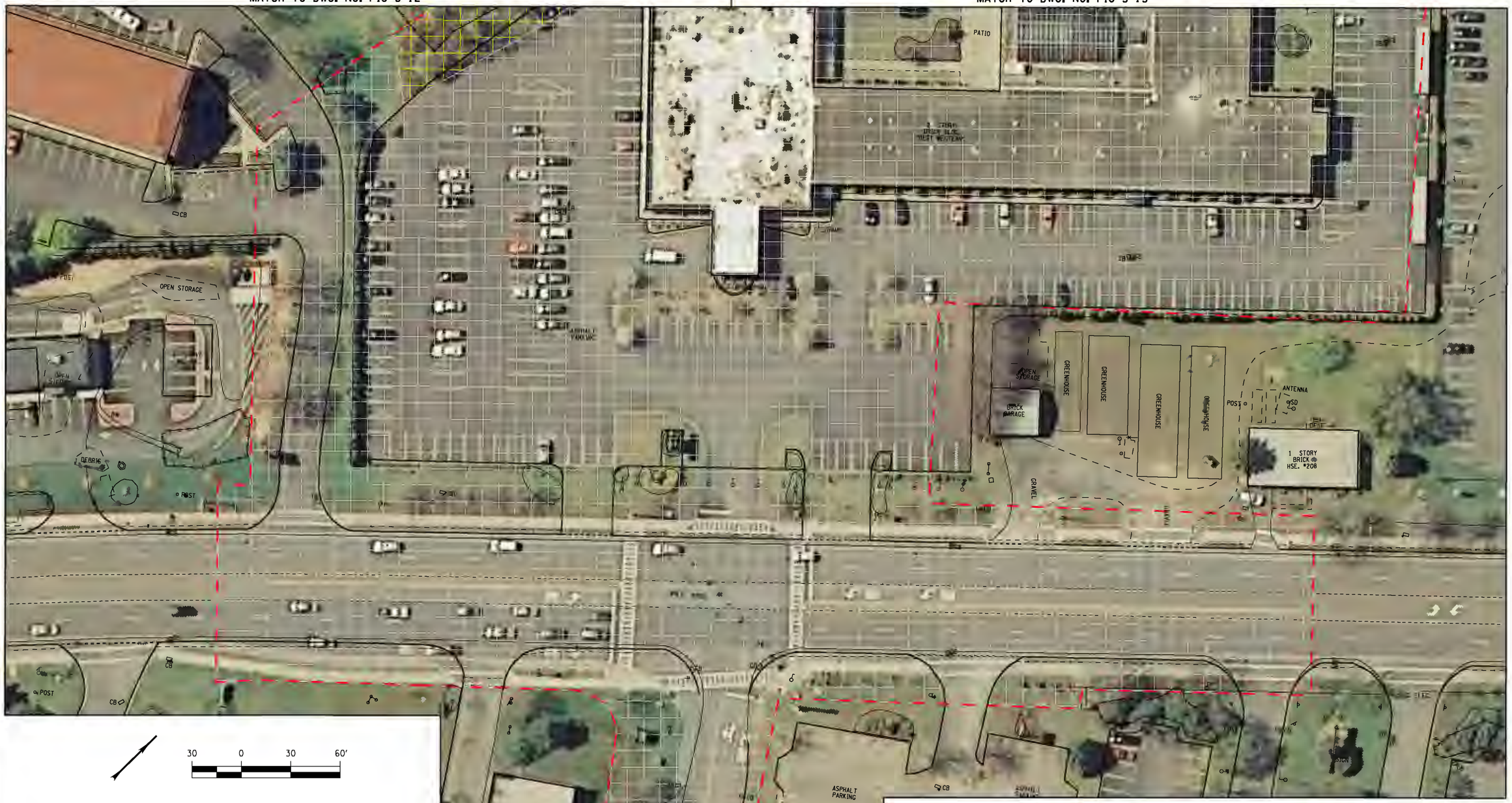
MATCH TO DWG. NO. FIG 3-12

MATCH TO DWG. NO. FIG 3-13



MATCH TO DWG. NO. FIG 3-17

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	DRAWING NO. FIG 3-16
SIGNATURE DATE	COUNTY: ALBANY					
DOCUMENT NAME: 172151_env_fig_3.dgn					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

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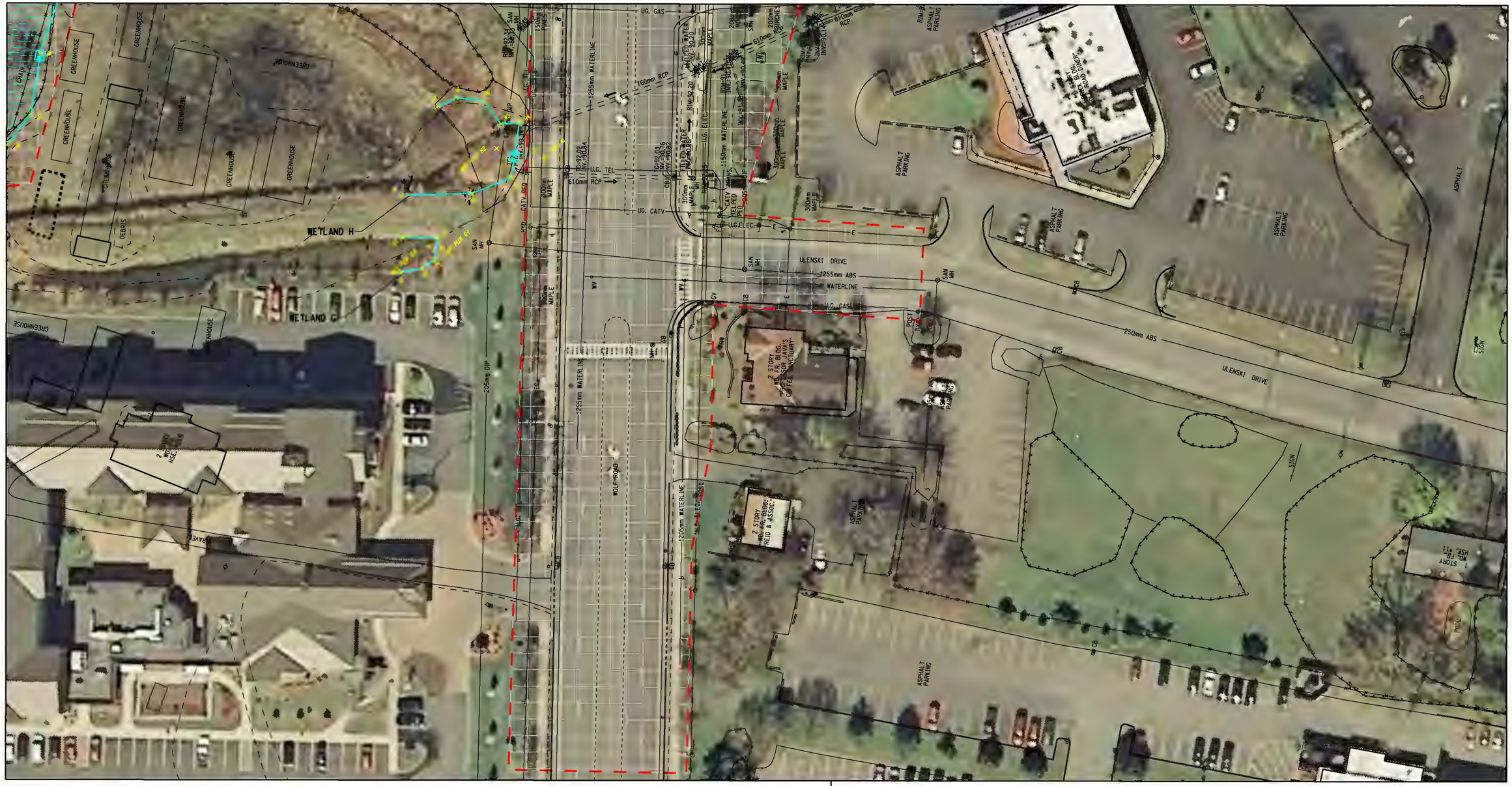
MATCH TO DWG. NO. FIG 3-18



MATCH TO DWG. NO. FIG 3-16

MATCH TO DWG. NO. FIG 3-14

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE DATE	COUNTY: ALBANY				CONTRACT NUMBER / DRAWING NO. FIG 3-17

DOCUMENT NAME: 172151_env_fig_3.dgn

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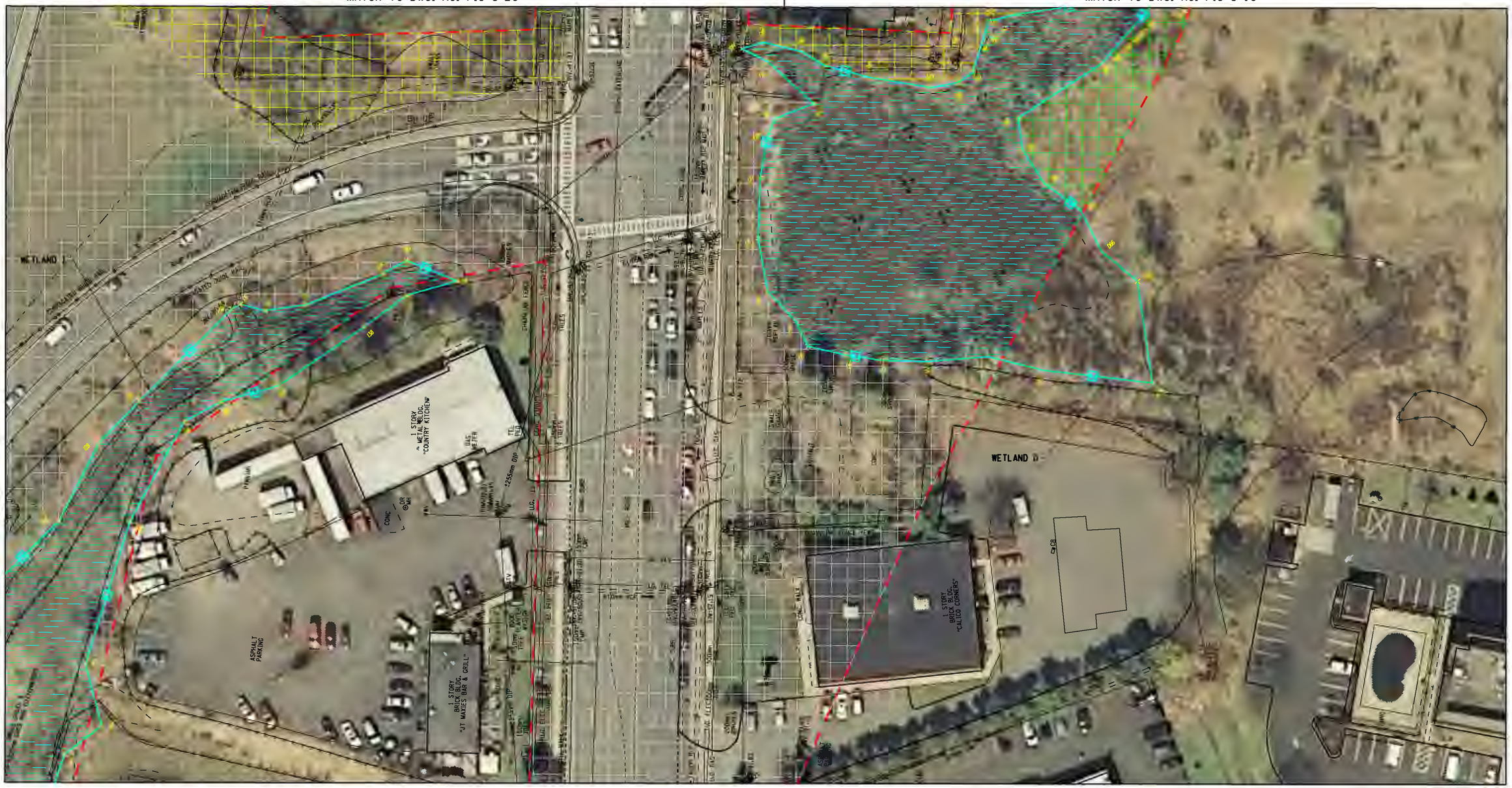
MATCH TO DWG. NO. FIG 3-20

MATCH TO DWG. NO. FIG 3-19

MATCH TO DWG. NO. FIG 3-15



MATCH TO DWG. NO. FIG 3-17

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	SHUMAKER
SIGNATURE / DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-18
DOCUMENT NAME: 172151_env_fig_3.dgn						NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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USER = USER jch

MATCH TO DWG. NO. FIG 3-22

MATCH TO DWG. NO. FIG 3-20

MATCH TO DWG. NO. FIG 3-18

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	SHUMAKER
SIGNATURE / DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-19
DOCUMENT NAME: 172151_env_fig_3.dgn						NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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MATCH TO DWG. NO. FIG 3-22

MATCH TO DWG. NO. FIG 3-21

MATCH TO DWG. NO. FIG 3-19

MATCH TO DWG. NO. FIG 3-15

MATCH TO DWG. NO. FIG 3-18

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY MAP

CONTRACT NUMBER

HUMMAKER

DRAWING NO.
FIG 3-20

DOCUMENT NAME: 172151_env_fig_3.dgn

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USER = USER_jch

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY MAP

CONTRACT NUMBER

HUMMAKER

DRAWING NO.
FIG 3-21

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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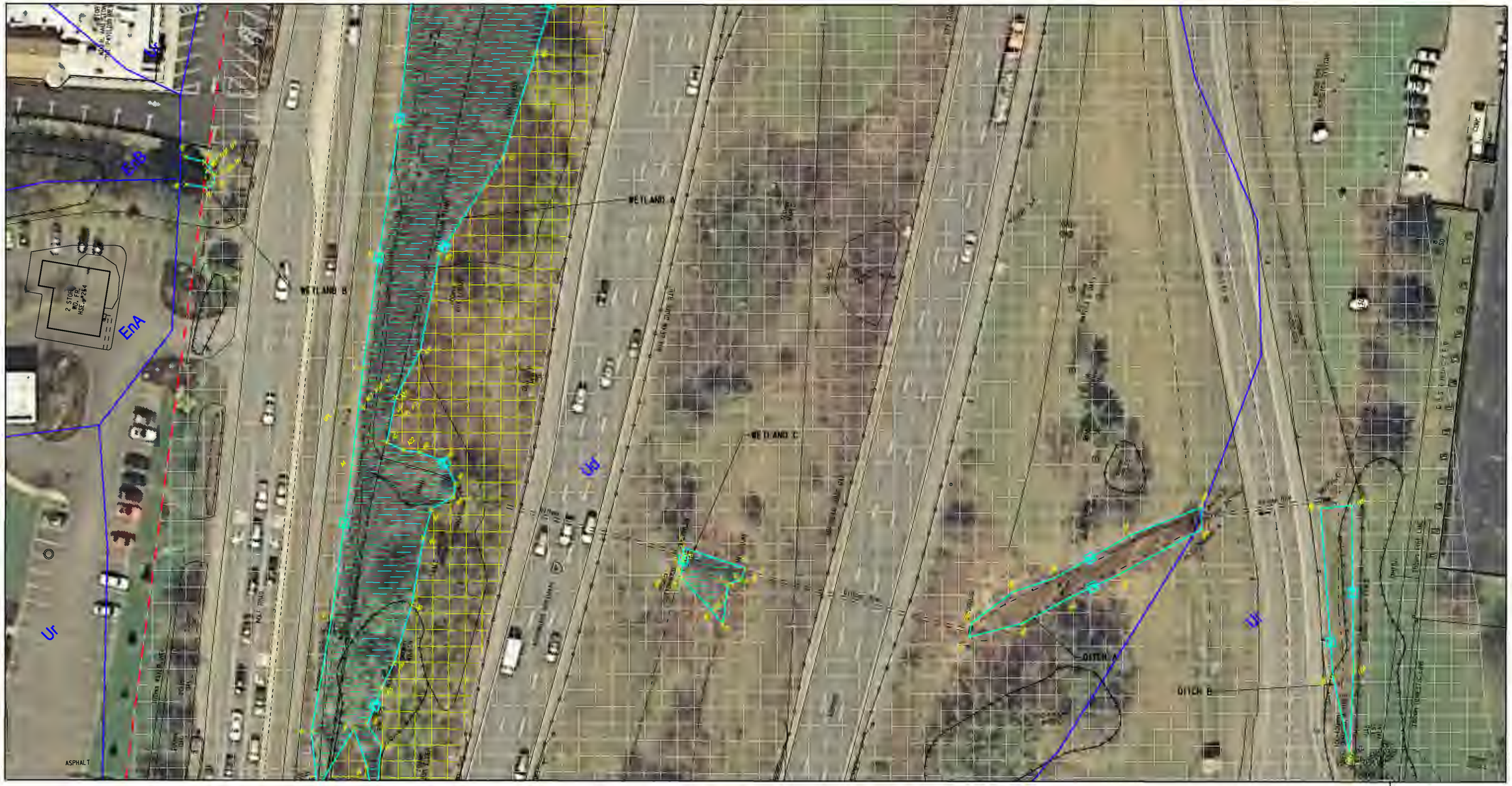
USER = USER jch

MATCH TO DWG. NO. FIG 3-23



MATCH TO DWG. NO. FIG 3-20

MATCH TO DWG. NO. FIG 3-19

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

SHUMAKER

DRAWING NO.
FIG 3-22

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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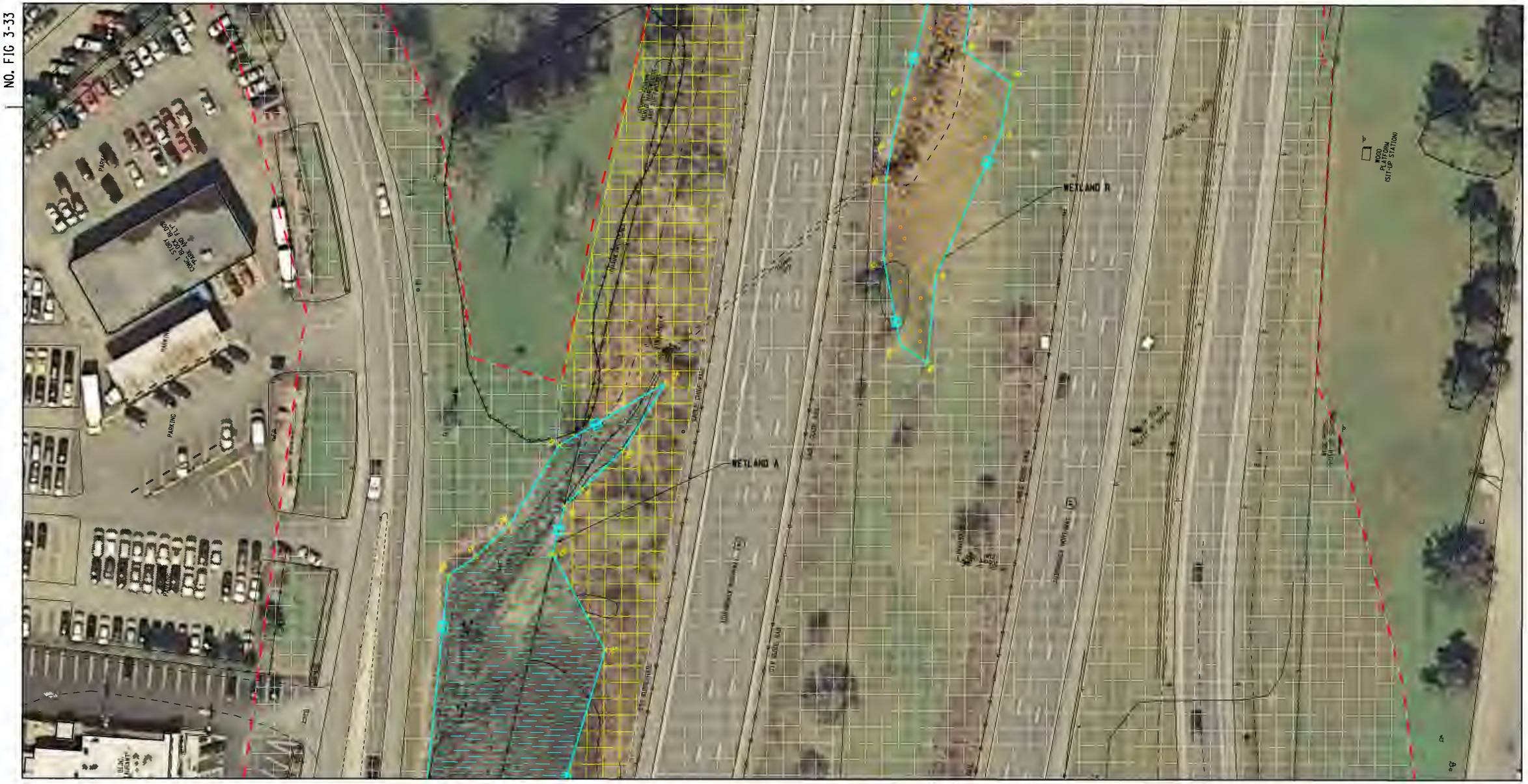
MATCH TO DWG. NO. FIG 3-24

MATCH TO DWG. NO. FIG 3-33



MATCH TO DWG. NO. FIG 3-22

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-23

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NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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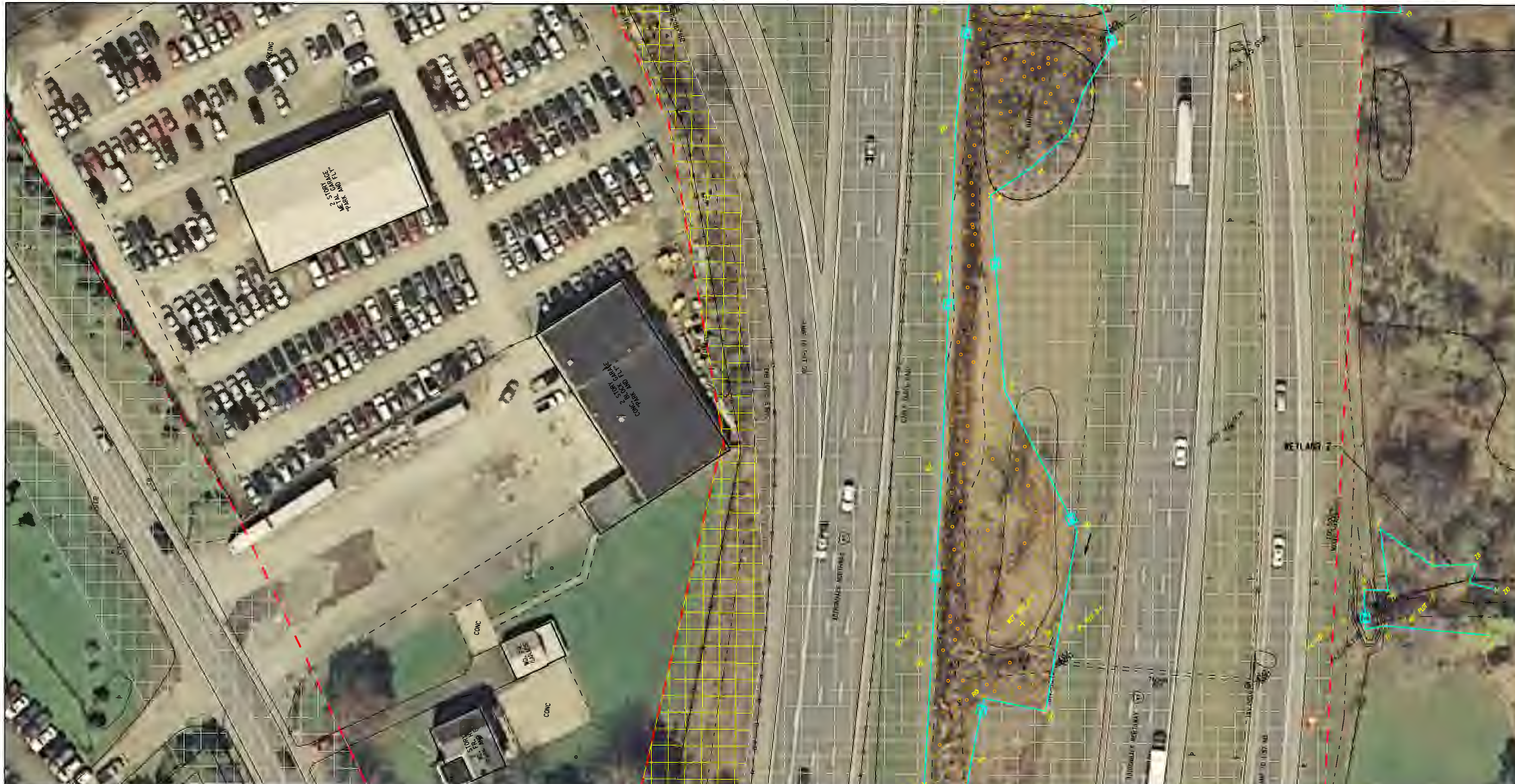
MATCH TO DWG. NO. FIG 3-25

MATCH TO DWG. NO. FIG 3-33



MATCH TO DWG. NO. FIG 3-23

LEGEND

FORESTED WETLAND		SHALLOW EMERGENT MARSH		OPEN WATER	
SHALLOW EMERGENT MARSH/FORESTED WETLAND		WET MEADOW		WOODS	
FLOODPLAIN FOREST/WET MEADOW		URBAN/DEVELOPED		FIELD	
		CONSTRUCTED WETLAND			

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK: SIGNATURE DATE	EXIT 3/4 ACCESS IMPROVEMENT TOWN OF COLONIE COUNTY: ALBANY	PIN 1721.51 PS&E DATE	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED FIGURE 3 VEGETATIVE COMMUNITY MAP	CONTRACT NUMBER DRAWING NO. FIG 3-24

DOCUMENT NAME: 172151_env_fig_3.dgn

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MATCH TO DWG. NO. FIG 3-26

MATCH TO DWG. NO. FIG 3-33

MATCH TO DWG. NO. FIG 3-24

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

DRAWING NO.
FIG 3-25

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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MATCH TO DWG. NO. FIG 3-27

MATCH TO DWG. NO. FIG 3-25

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES
CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

HUMMAKER

DRAWING NO.
FIG 3-26

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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USER = USER jch

MATCH TO DWG. NO. FIG 3-28

MATCH TO DWG. NO. FIG 3-26

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

SHUMAKER

DRAWING NO.
FIG 3-27

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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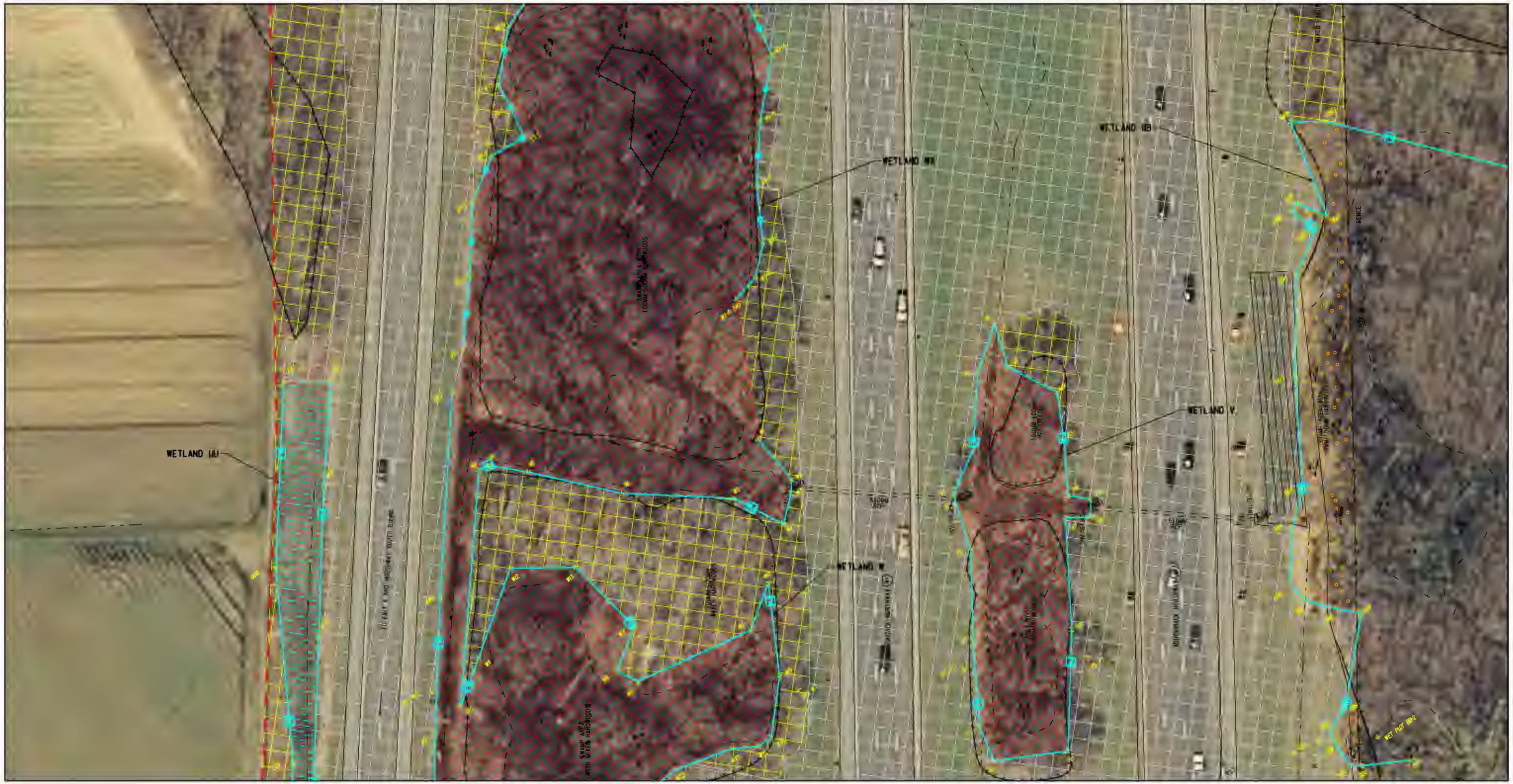
MATCH TO DWG. NO. FIG 3-29



MATCH TO DWG. NO. FIG 3-27

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

DRAWING NO.
FIG 3-28

DOCUMENT NAME: 172151_env_fig_3.dgn

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MATCH TO DWG. NO. FIG 3-30

MATCH TO DWG. NO. FIG 3-28

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

SHUMAKER

DRAWING NO.
FIG 3-29

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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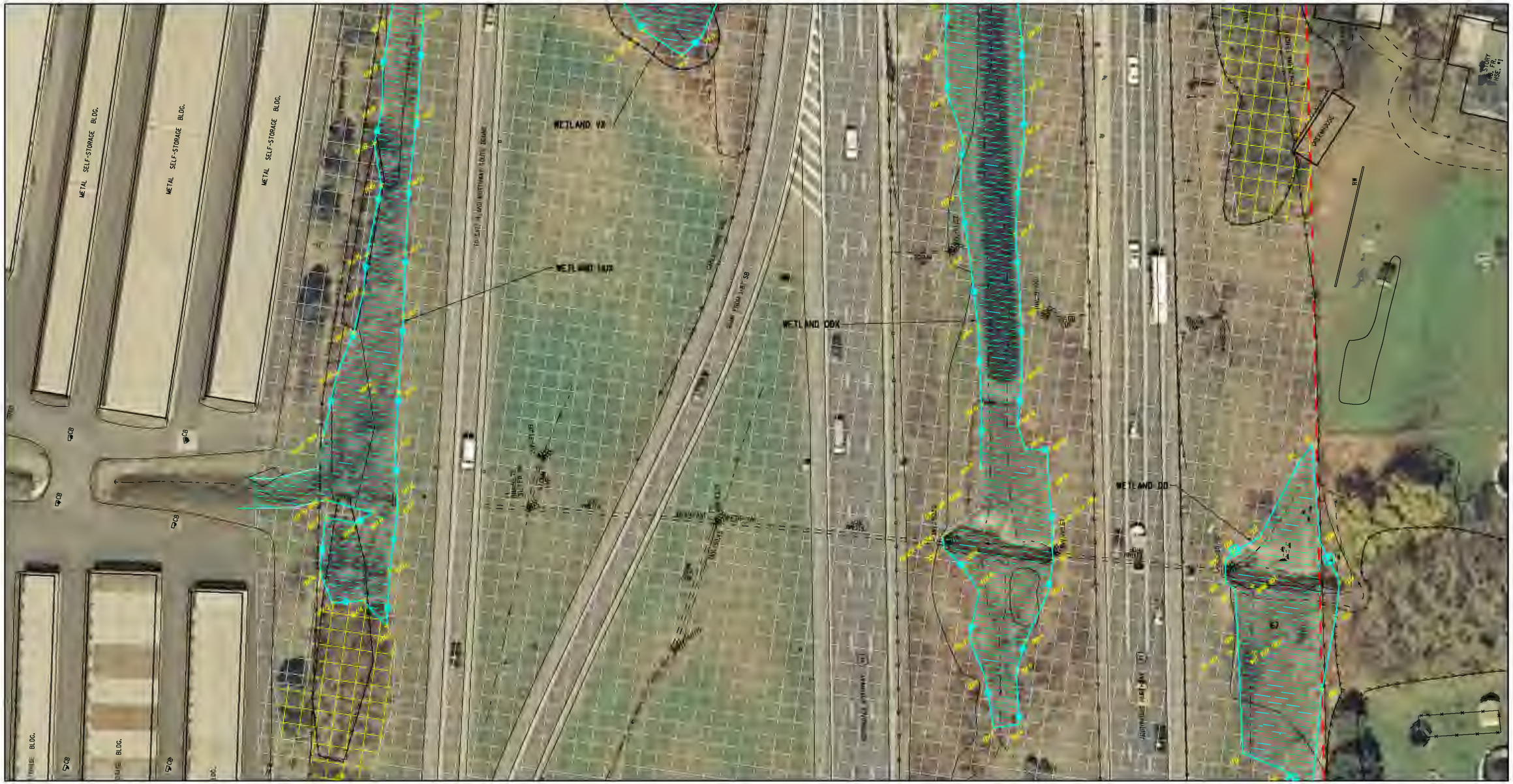
MATCH TO DWG. NO. FIG 3-31



MATCH TO DWG. NO. FIG 3-29

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-30
DOCUMENT NAME: 172151_env_fig_3.dgn					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

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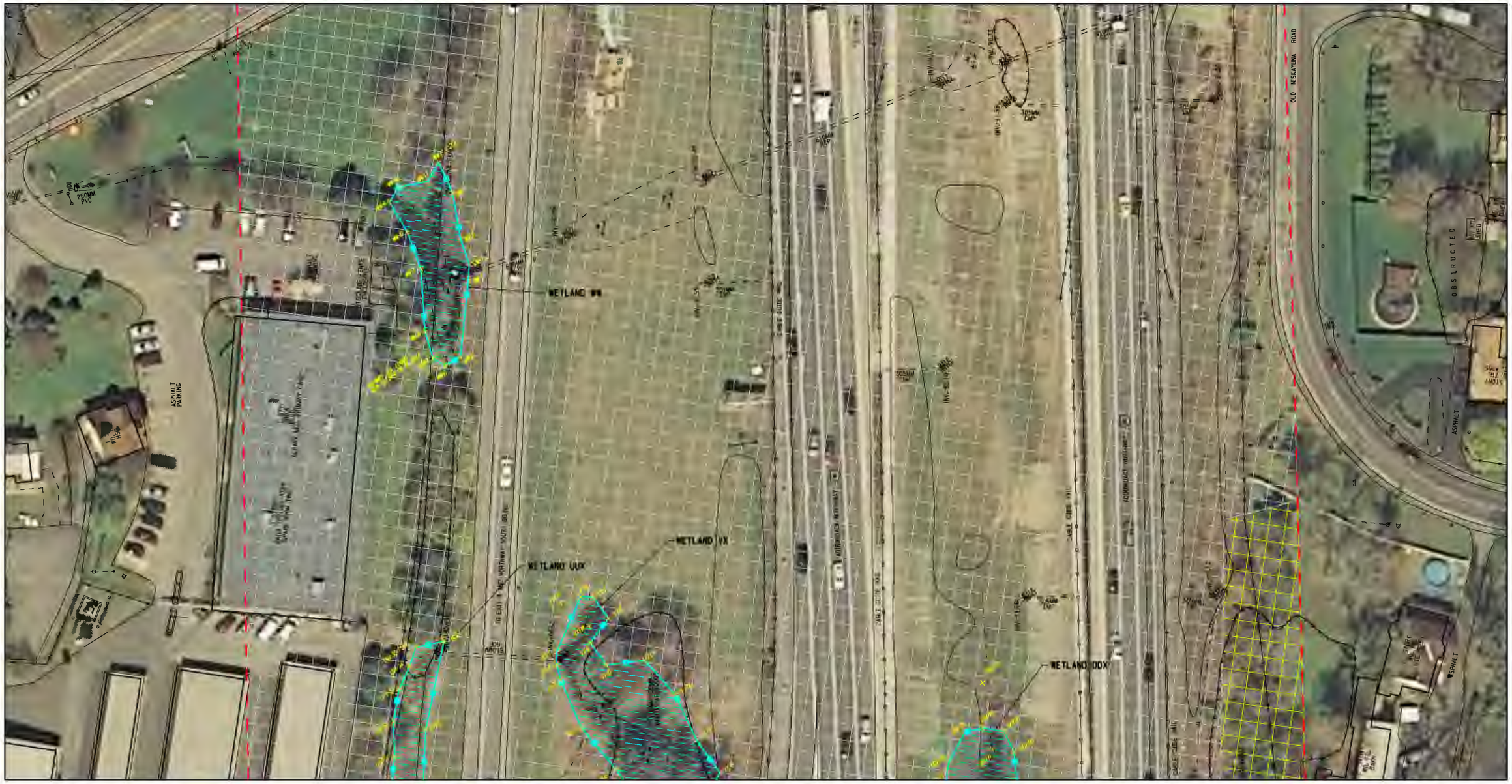
MATCH TO DWG. NO. FIG 3-32



MATCH TO DWG. NO. FIG 3-30

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE DATE	COUNTY: ALBANY				CONTRACT NUMBER / DRAWING NO. FIG 3-31
DOCUMENT NAME: 172151_env_fig_3.dgn					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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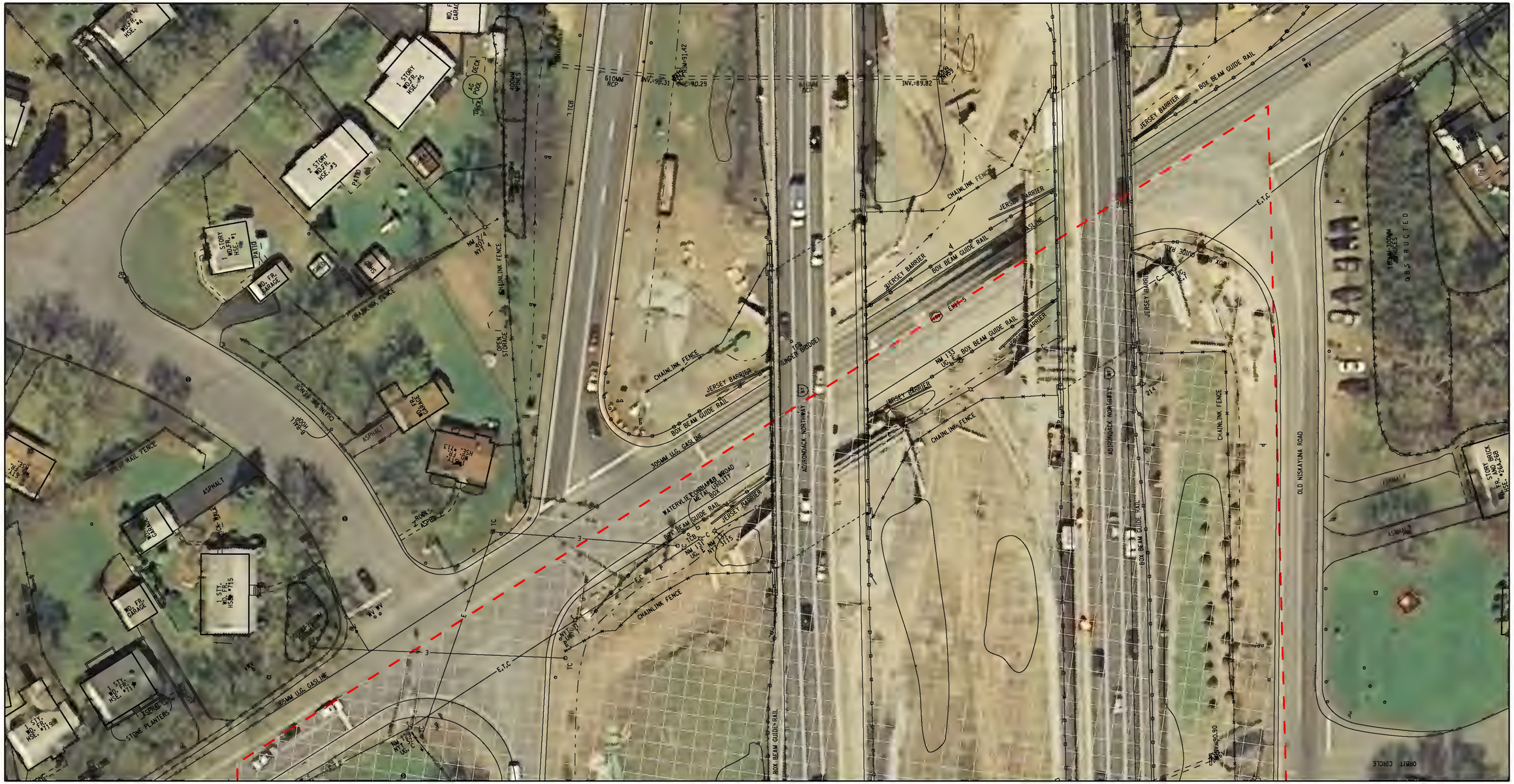

MATCH TO DWG. NO. FIG 3-31

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES
CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY MAP

CONTRACT NUMBER

DRAWING NO.
FIG 3-32

DOCUMENT NAME: 172151_env_fig_3.dgn

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MATCH TO DWG. NO. FIG 3-23

MATCH TO DWG. NO. FIG 3-24

MATCH TO DWG. NO. FIG 3-25

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

DRAWING NO.
FIG 3-33

DOCUMENT NAME: 172151_env_fig_3.dgn

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LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE DATE	COUNTY: ALBANY				CONTRACT NUMBER / DRAWING NO. FIG 3-34

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES
CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER
SHUMAKER

DRAWING NO.
FIG 3-35

DOCUMENT NAME: 172151_env_fig_3.dgn

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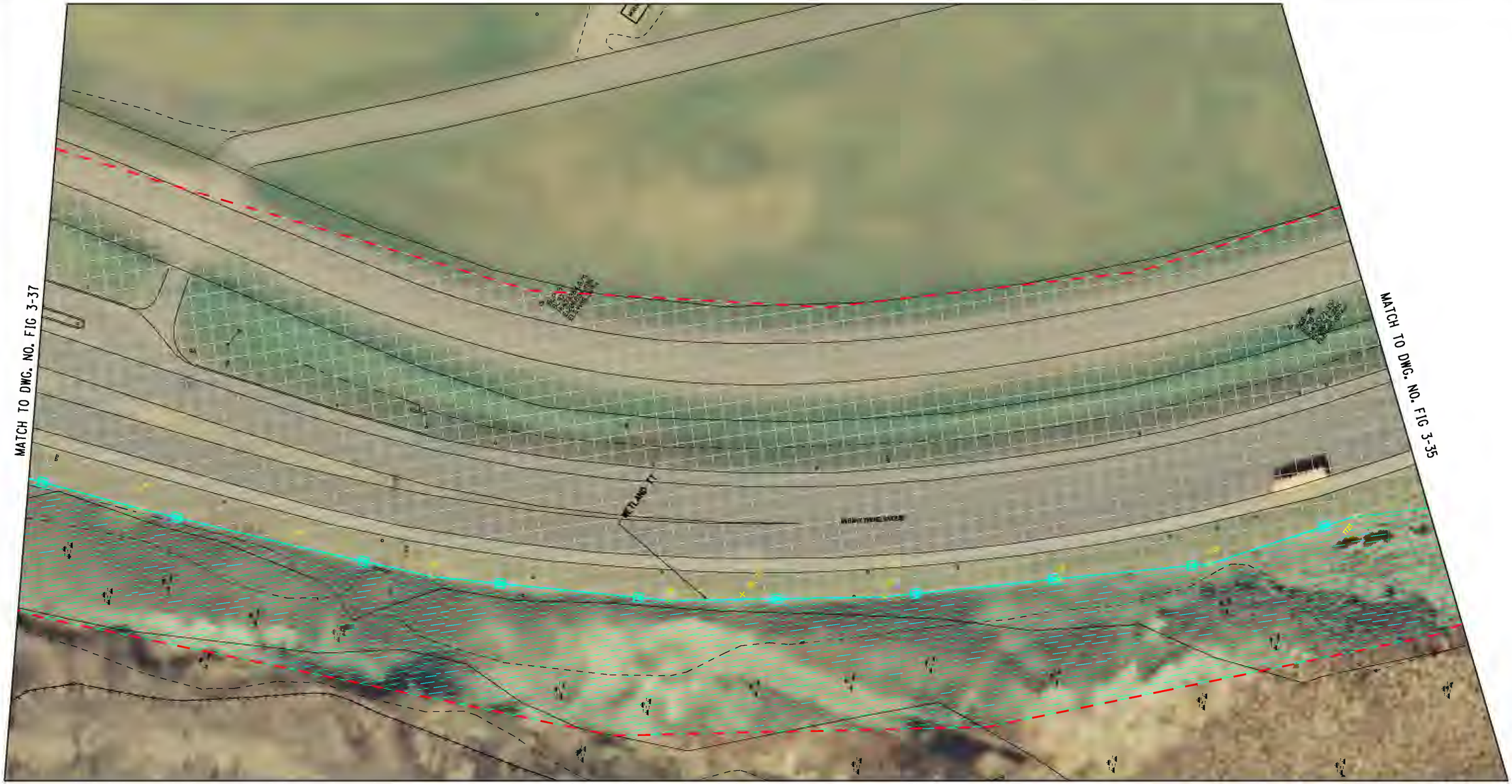

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	DRAWING NO. FIG 3-36
SIGNATURE DATE	COUNTY: ALBANY					

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USER = USER jch

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE DATE	COUNTY: ALBANY				
DOCUMENT NAME: 172151_env_fig_3.dgn					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

CONTRACT NUMBER

SHUMAKER

DRAWING NO. FIG 3-37

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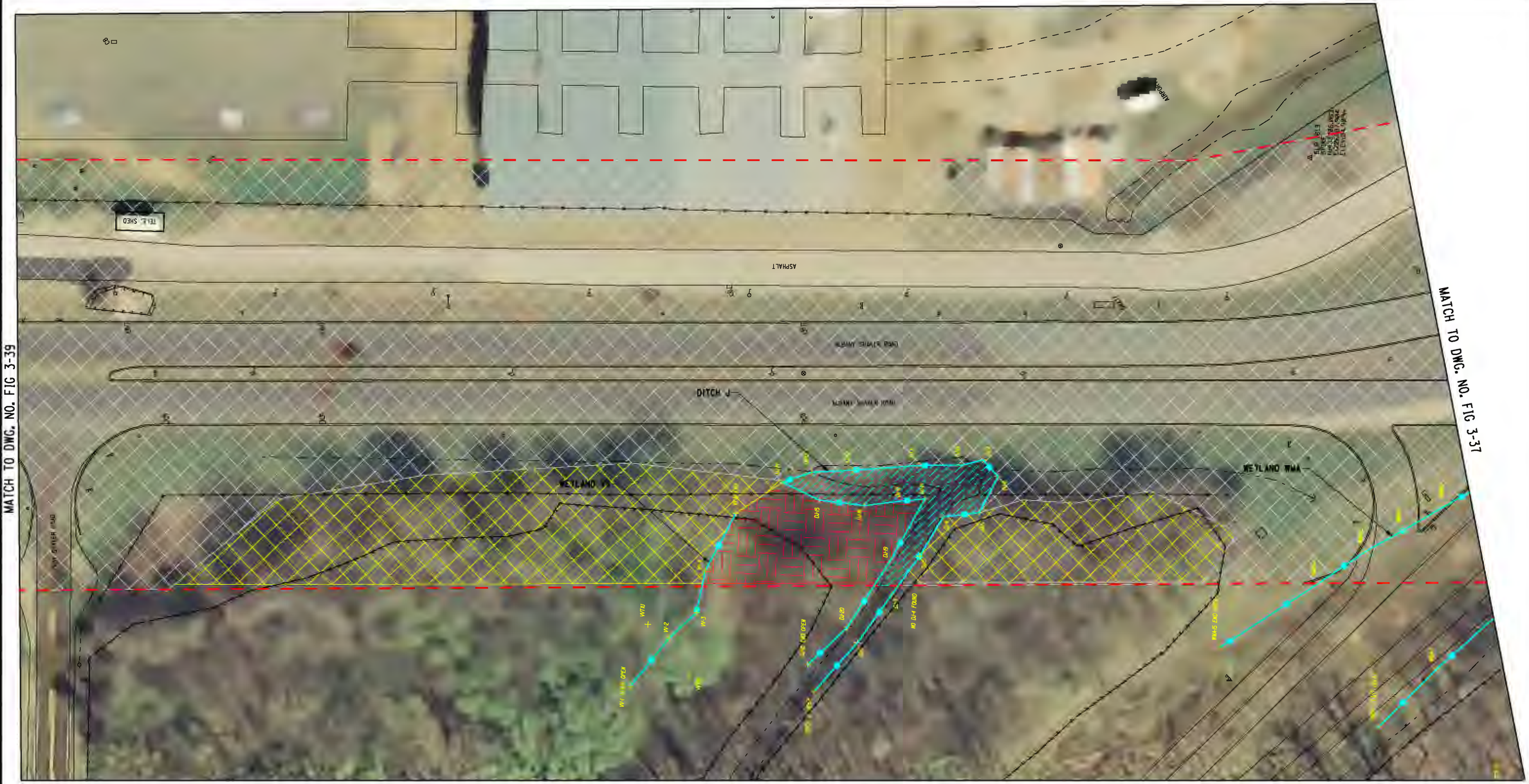

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE DATE	COUNTY: ALBANY				CONTRACT NUMBER
DOCUMENT NAME: 172151_env_fig_3.dgn					DRAWING NO. FIG 3-38
					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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USER = USER jch

MATCH TO DWG. NO. FIG 3-40

MATCH TO DWG. NO. FIG 3-38

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	
SIGNATURE DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-39
DOCUMENT NAME: 172151_env_fig_3.dgn					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1	

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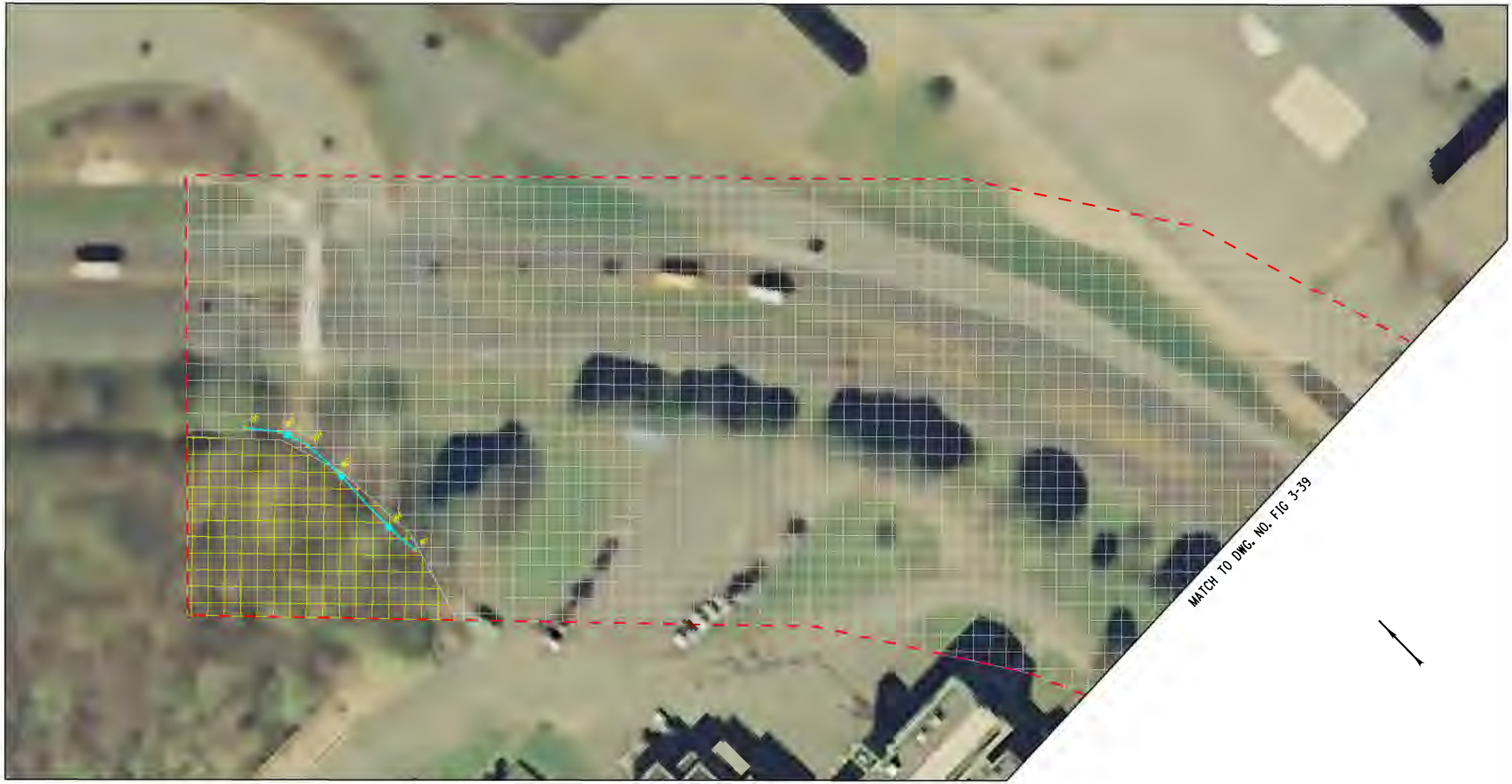

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

DRAWING NO.
FIG 3-40

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

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MATCH TO DWG. NO. FIG 3-3

MATCH TO DWG. NO. FIG 3-10

MATCH TO DWG. NO. FIG 3-10

MATCH TO DWG. NO. FIG 3-42

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE DATE	COUNTY: ALBANY				CONTRACT NUMBER / DRAWING NO. FIG 3-41

DOCUMENT NAME: 172151_env_fig_3.dgn

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MATCH TO DWG. NO. FIG 3-41

MATCH TO DWG. NO. FIG 3-10

MATCH TO DWG. NO. FIG 3-10

MATCH TO DWG. NO. FIG 3-43

MATCH TO DWG. NO. FIG 3-44

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP
SIGNATURE DATE	COUNTY: ALBANY				

CONTRACT NUMBER

DRAWING NO. FIG 3-42

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

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USER = USER jch

MATCH TO DWG. NO. FIG 3-42

MATCH TO DWG. NO. FIG 3-44

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

EXIT 3/4 ACCESS IMPROVEMENT
TOWN OF COLONIE
COUNTY: ALBANY

PIN 1721.51
PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED

FIGURE 3
VEGETATIVE COMMUNITY
MAP

CONTRACT NUMBER

HUMMAYER

DRAWING NO.
FIG 3-43

DOCUMENT NAME: 172151_env_fig_3.dgn

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

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DATE/TIME = 1/21/2014 /2:14:19 PM
USER = USER jch

MATCH TO DWG. NO. FIG 3-42

MATCH TO DWG. NO. FIG 3-43

LEGEND

FORESTED WETLAND	SHALLOW EMERGENT MARSH	OPEN WATER
SHALLOW EMERGENT MARSH/FORESTED WETLAND	WET MEADOW	WOODS
FLOODPLAIN FOREST/WET MEADOW	URBAN/DEVELOPED	FIELD
	CONSTRUCTED WETLAND	

30 0 30 60'

AS BUILT REVISIONS DESCRIPTION OF WORK:	EXIT 3/4 ACCESS IMPROVEMENT	PIN 1721.51	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	TOWN OF COLONIE	PS&E DATE			FIGURE 3 VEGETATIVE COMMUNITY MAP	SHUMAKER
SIGNATURE / DATE	COUNTY: ALBANY					DRAWING NO. FIG 3-44
DOCUMENT NAME: 172151_env_fig_3.dgn						NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

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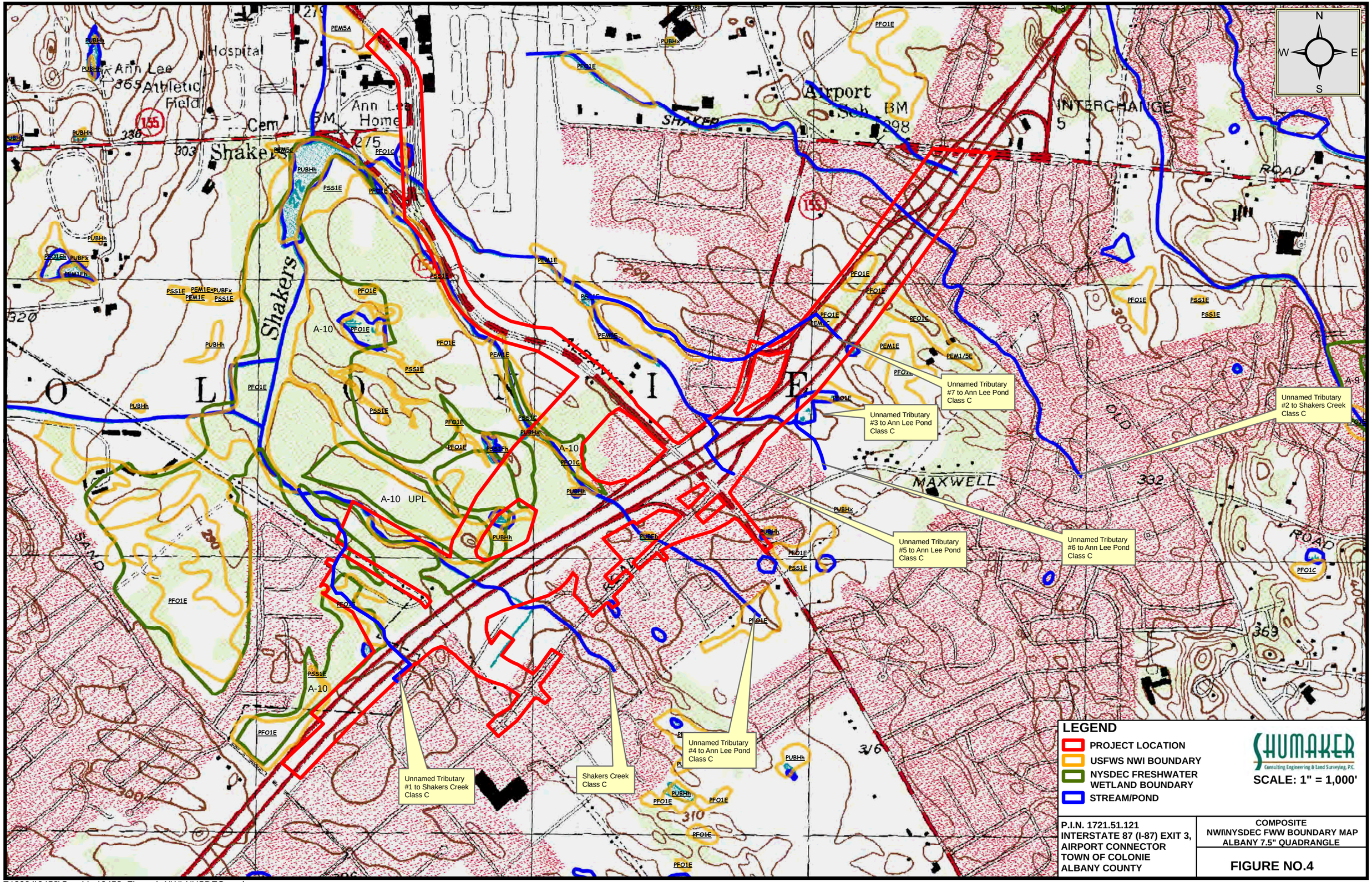

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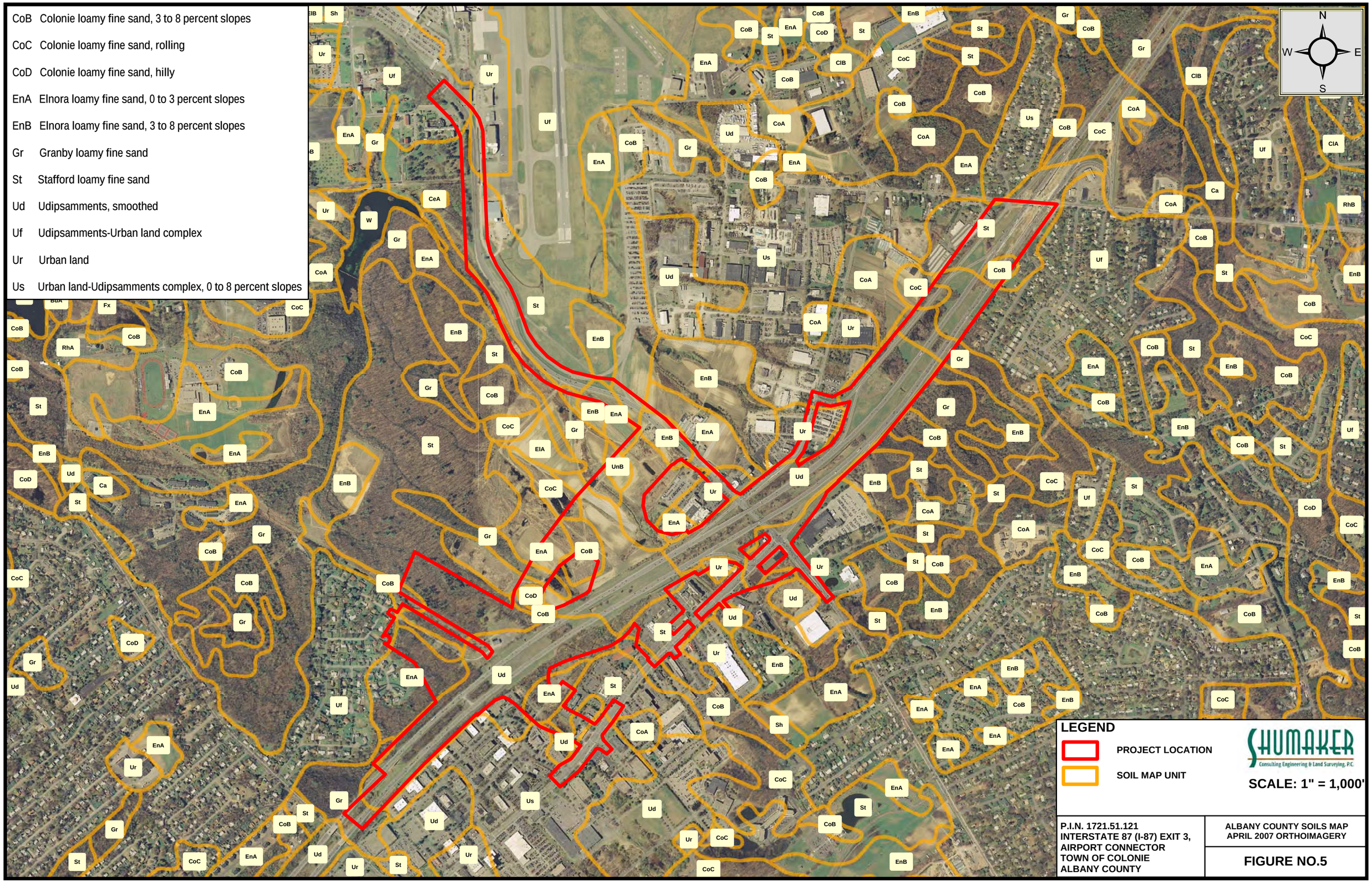

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EXHIBIT A
Wetland Determination Data Sheets

Wetland Assessment and Delineation Report
Interstate 87 (I-87) Exit 4 Access Improvements

January 2014

DATA FORM 1 - WETLAND A
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 28, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of Old Wolf Road
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot A-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not meet.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa sp.*	-
2.		2. *Plantago lanceolata*	UPL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/1 x 100 = 0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: B/N Old Wolf Road and I-87 S bound, just NE of Albany Shaker Rd. Preparer: EBW, SCC Date: September 28, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot A-1 Between wetland flags: 23 and 24

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland A Transect 1 – Upland Plot A-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/2
texture: sandy loam
13 cm B layer
hue value/chroma: 10YR 3/2
texture: sandly loam
31 cm stopped

Conclusion/Comments:

Hydric soil criteria not meet.

Note: Some gravel present in the B layer.

Refusal due to rock.

DATA FORM 1 - WETLAND A
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 28, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot A-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	1	(cm.)
Depth to free water in pit:	0	(cm.)
Depth to saturated soil:	0	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- √ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: B/N Old Wolf Road and I-87 S bound, just NE of Albany Shaker Rd. Preparer: EBW, SCC Date: September 28, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot A-2 Between wetland flags: 23 & 24

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	No
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland A Transect 1 – Wetland Plot A-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm O layer
hue value/chroma: 10YR 2/2
texture: loamy peat
19 cm A layer
hue value/chroma: 5Y 2.5/1
texture: mucky
31 cm stopped

Conclusion/Comments:

Soils are hydric by criteria I.

Note: A layer is darker than Munsell soil chart allows for.

DATA FORM 1 - WETLAND A
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 28, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87 southbound
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot A-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Impatiens capensis*	FACW
3.		3. *Glecoma hederacea*	FACU
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Salix sp.*	-	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/4 x 100 = 75 %

Remarks: Hydrophytic vegetative criteria are met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: B/N Old Wolf Road and I-87 S bound, just NE of Albany Shaker Rd. Preparer: EBW, SCC Date: September 28, 2009	Mapped Soil Series: Udipsamments, smoothed, (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot A-3 Between wetland flags: 23 & 24

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland A Transect 1 – Upland Plot A-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
33 cm stopped

Conclusion/Comments:

Hydric soil criteria not met.

Refusal due to roots.

DATA FORM 1 - WETLAND B
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of Old Wolf Road
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot B-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa pratensis*	FACU
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/1 x 100 = 0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Old Wolf Rd b/n Hotel Indigo and Koto Japanese Steakhouse Preparer: EBW, SCC Date: September 29, 2009	Mapped Soil Series: Elnora loamy fine sand (EnB) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot B-1 Between wetland flags: B2 & B3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland B Transect 1 – Upland Plot B-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Hydric soil criteria not met.

Note: Some gravel present in A layer.

Refusal due to rock.

DATA FORM 1 - WETLAND B
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot B-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets all 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	2	(cm.)
Depth to saturated soil:	0	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Hydrology meets criteria required by the U.S. ACOE to be considered a wetland.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Gleditisa triacanthos*	FAC-	1. *Phalaris arundinacea*	FACW+
2.		2. *Lythrum salicaria*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Frangula alnus*	FAC	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/4 x 100 = 75%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW Old Wolf Road b/n Hotel Indigo and Koto Japanese Steakhouse Preparer: EBW, SCC Date: September 29, 2009	Mapped Soil Series: Elnora loamy fine sand (EnB) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot B-2 Between wetland flags: B2 & B3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	Yes
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	Yes
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	No
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland B Transect 1 – Wetland Plot B-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm O layer
hue value/chroma: 10YR 2/2
texture: mucky peat
16 cm A layer
hue value/chroma: 10YR 2/1
texture: peaty muck
41 cm stopped

Conclusion/Comments:

Soils are hydric by criteria I, III.A & III.C.

Note: Soils are darker than Munsell soil color chart allows for.

DATA FORM 1 - WETLAND C
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87 N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot C-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Impatiens capensis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/2 x 100 =100%

Remarks: Vegetative criteria are met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median between I-87N and I-87S just NE of Albany Shaker Road Preparer: EBW, SCC Date: September 29, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot C-1 Between wetland flags: C1 & C2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland C Transect 1 – Upland Plot C-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: loamy sand
19 cm B layer
hue value/chroma: 10YR 4/3
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal due to rocks.

DATA FORM 1 - WETLAND C
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot C-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	15	(cm.)
Depth to saturated soil:	11	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 20.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria are met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100 %

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median between I-87N and I-87S, just NE of Albany Shaker Road Preparer: EBW, SCC Date: September 29, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot C-2 Between wetland flags: C1 & C2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland C Transect 1 – Wetland Plot C-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/1
texture: peaty loam
11 cm B layer
hue value/chroma: 10YR 4/1
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

DATA FORM 1 - WETLAND C
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot C-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer negundo*	FAC+	1. *Phragmites australis*	FACW
2. *Populus deltoides*	FAC	2. *Impatiens capensis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100 = 100%

Remarks: Hydrophytic vegetative criteria are met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median between I-87S and I-87N, just NE of Albany Shaker Road Preparer: EBW, SCC Date: September 29, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot C-3 Between wetland flags: C1 & C2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland C Transect 1 – Upland Plot C-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/1
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Abundance of roots present.

Refusal due to roots.

DATA FORM 1 - WETLAND D
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 30, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of Moe's parking lot
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot D-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet all 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Populus tremuloides*	FACU	1. *Phragmites australis*	FACW
2.		2. *Poa sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rhus typhina*	-	1. *Parthenocissus quinquefolia*	FACU
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/3 x 100 =33%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of Wolf Road near intersection with Albany Shaker Road Preparer: EBW, SCC Date: September 30, 2009	Mapped Soil Series: Urban land (Ur) Drainage Class: N/A Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot D-1 Between wetland flags: D21 & D22

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland D Transect 1 – Upland Plot D-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	Yes
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: silty loam
20 cm B layer
hue value/chroma: 10YR 4/1
texture: silty loam
31 cm stopped

Conclusion/Comments:

Soils are hydric by criteria III.D and III.H.1.

Note: Redoximorphic features present in the B layer—approximately 10% mottling.

Refusal due to roots.

DATA FORM 1 - WETLAND D
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 30, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot D-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets all 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	18	(cm.)
Depth to saturated soil:	14	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:

- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria are met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Lythrum salicaria*	FACW+
3.		3. *Juncus effusus*	FACW+
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/3 x 100 = 100%

Remarks: Hydrophytic vegetative criteria are met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of Wolf Road near intersection with Albany Shaker Road Preparer: EBW, SCC Date: September 30, 2009	Mapped Soil Series: Urban Land (Ur) Drainage Class: N/A Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot D-2 Between wetland flags: D21 & D22

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland D Transect D-1 – Wetland Plot D-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	Yes
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm 0 layer
hue value/chroma: 10YR 2/2
texture: loamy peat
2 cm A layer
hue value/chroma: 10YR 3/2
texture: silty loam
16 cm B layer
hue value/chroma: 10YR 5/2
texture: silty loam
31 cm stopped

Conclusion/Comments:

Soils are hydric by criteria III.D. and III.H.1.

Note: Approximately 85% mottling present in B layer.

Note: Some gravel present in B layer.

DATA FORM 1 - WETLAND D
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 15, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old Field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot D-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet all 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___
- ___
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa sp.*	-
2.		2. *Solidago sp.*	-
3.		3. *Phragmites australis*	FACW
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of Wolf Road near intersection w/ Albany Shaker Road Preparer: EBW, SCC Date: October 15, 2009	Mapped Soil Series: Urban Land (Ur) Drainage Class: N/A Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot D-3 Between wetland flags: D21 & D22

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland D Transect 1 – Upland Plot D-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
32 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Fair amount of gravel present in A layer.

Refusal due to rocks.

DATA FORM 1 - WETLAND E
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 30, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S on ramp
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot E-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet all 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Poa sp.*	-
3.		3. *Alopecurus sp.*	-
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100 %

Remarks: Hydrophytic vegetative criteria are met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of intersection b/n I-87S on ramp and Albany Shaker Road Preparer: EBW, SCC Date: September 30, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot E-1 Between wetland flags: E2 & E3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland E Transect 1 – Upland Plot E-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/2
texture: sandy loam
16 cm B layer
hue value/chroma: 10YR 4/3
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Some gravel present in A layer.

Refusal by roots.

DATA FORM 1 - WETLAND E
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 30, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot E-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	27	(cm.)
Depth to saturated soil:	13	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of intersection b/n I-87S on ramp and Albany Shaker Road Preparer: EBW, SCC Date: September 30, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot E-2 Between wetland flags: E2 & E3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland E Transect 1 – Wetland Plot E-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm O layer
hue value/chroma: 10YR 2/1
texture: loamy peat
2 cm A layer
hue value/chroma: 10YR 2/2
texture: silty loam
16 cm B layer
hue value/chroma: 10YR 4/1
texture: silty loam
33 cm stopped

Conclusion/Comments:

Soils are hydric by criteria III.D.

Note: O layer is darker than Munsell soil color chart allows for.

Note: Approximately 10% mottling present in B layer.

DATA FORM 1 - WETLAND E
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	September 30, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of Desmond parking lot
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot E-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Solidago sp.*	-
2.		2. *Poa sp.*	-
3.		3. *Galium mollugo*	NL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/1 x 100 = 0 %

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of intersection b/n I-87S on ramp and Albany Shaker Road Preparer: EBW, SCC Date: September 30, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot E-3 Between wetland flags: 2 & 3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland E Transect 1 – Upland Plot E-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: sandy loam
13 cm B layer
hue value/chroma: 10YR 4/4
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal due to roots.

DATA FORM 1 - WETLAND F
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 1, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot F-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet all 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:

- ___ Inundated
- ___ Saturated within Upper 12 inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Poa sp.*	-
2. *Salix nigra*	FACW+	2. *Solidago sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100 = 66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median of I-87N and I-87S, southwest of Albany Shaker Road Preparer: EBW, SCC Date: October 1, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot F-1 Between wetland flags: F16 & F17

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland F Transect 1 – Upland Plot F-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	Yes
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10 YR 3/2
texture: peaty loam
4 cm B layer
hue value/chroma: 10 YR 4/2
texture: loamy sand
32 cm stopped

Conclusion/Comments:

Soils are hydric by criteria III.D and III.G.2.

Note: Approximately 10% mottling present in B layer.

DATA FORM 1 - WETLAND F
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 1, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot F-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 12 inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Salix nigra*	FACW+	1. *Phragmites australis*	FACW
2. *Fraxinus pennsylvanica*	FACW	2. *Lythrum salicaria*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/5 x 100 = 80%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median of I-87N and I-87S, southwest of Albany Shaker Road Preparer: EBW, SCC Date: October 1, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot F-2 Between wetland flags: F16 & F17

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland F Transect F-1 – Wetland Plot F-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	Yes
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm 0 layer
hue value/chroma: 10YR2/1
texture: loamy peat
1 cm A layer
hue value/chroma: 10YR3/1
texture: peaty loam
8 cm B layer
hue value/chroma: 10YR4/1
texture: loamy sand
32 cm stopped

Conclusion/Comments:

Soils are hydric by criteria III.D and III.G.2.

Note: Approximately 40% mottling present in B layer.

DATA FORM 1 - WETLAND F
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 1, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot F-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 12 inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Solidago sp.*	-
3.		3. *Poa sp.*	-
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rhus typhina*	NL	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100= 66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median of I-87N and I-87S, southwest of Albany Shaker Road Preparer: EBW, SCC Date: October 1, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot F-3 Between wetland flags: F16 & F17

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	No
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland F Transect 1 – Upland Plot F-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	Yes
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	Yes
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	No
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/1
texture: sandy loam
9 cm B layer
hue value/chroma: 10YR 3/2
texture: sandy loam
33 cm stopped

Conclusion/Comments:
Soils are hydric by criteria III.I.1.

Note: Abundance of roots in the A layer.

Note: Approximately 10% mottling present in B layer.

DATA FORM 1 - WETLAND G
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 12, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of ditch
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot G-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa sp*.	-
2.		2. *Phragmites australis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Rd across from Ulenski Dr, NE of the Homewood Suites Preparer: EBW, SCC Date: October 12, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot G-1 Between wetland flags: G3 & G4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	No
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland G Transect 1 – Upland Plot G-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: sandy loam
15 cm B layer
hue value/chroma: 10YR 4/3
texture: sandy loam
32 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Approximately 15% mottling present in the B layer.

Refusal due to roots.

DATA FORM 1 - WETLAND G
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 12, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot G-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	2	(cm.)
Depth to saturated soil:	0	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Typha angustifolia*	OBL
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Rd across from Ulenski Dr, NE of Homewood Suites Preparer: EBW, SCC Date: October 12, 2009	Mapped Soil Series: Stafford Loamy Fine Sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot G-2 Between wetland flags: G3 & G4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland G Transect G-1 – Wetland Plot G-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm O layer
hue value/chroma: 10YR 2/1
texture: mucky peat
5 cm A layer
hue value/chroma: 10 YR 4/1
texture: sandy loam
36 cm stopped

Conclusion/Comments:

Soil is hydric by criteria I and III.D.

Note: O layer is darker than Munsell Soil Color Chart allows for.

DATA FORM 1 - WETLAND H
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 12, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of Wolf Road
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot H-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 12 inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Poa spp.*	-
2.		2. *Phragmites australis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1. *Cynanchum nigrum*	NL
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100 = 66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Rd across from Ulenski Dr, SW of Maxie's Bar & Grill Preparers: EBW, SCC Date: October 12, 2009	Mapped Soil Series: Stafford Loamy Fine Sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot H-1 Between wetland flags: H3 & H4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland H Transect 1 – Upland Plot H-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND H
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 12, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot H-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	24	(cm.)
Depth to saturated soil:	22	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Rd. across from Ulenski Dr SW of Maxie's Bar & Grill Preparers: EBW, SCC Date: October 12, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot H-2 Between wetland flags: H3 & H4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland H Transect H-1 – Wetland Plot H-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/1
texture: silty loam
22 cm B layer
hue value/chroma: 2.5Y 4/1
texture: silty loam
36 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: A layer is darker than the Munsell Soil Color Chart allows for.

Refusal by roots.

DATA FORM 1 - WETLAND I
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 13, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87 N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot I-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rhamnus cathartica*	UPL	1.	
2. *Rhus typhina*	NL	2.	
3. *Lonicera tatarica*	FACU	3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/4 x 100 = 25%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of I-87 N & N Maxies Bar, Country Kitchen & Homewood Suites Preparers: EBW, SCC Date: October 13, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot I-1 Between wetland flags: I18 & I19

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland I Transect 1 – Upland Plot I-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
32 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND I
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 13, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot I-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	19	(cm.)
Depth to saturated soil:	16	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Salix nigra*	FACW+	1. *Phragmites australis*	FACW
2. *Acer rubrum*	FAC	2. *Impatiens capensis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 5/5 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of I-87 N & N Maxies Bar, Country Kitchen & Homewood Suites Preparers: EBW, SCC Date: October 13, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot I-2 Between wetland flags: I18 & I19

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland I Transect 1 – Wetland Plot I-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/2
texture: silty loam
16 cm B layer
hue value/chroma: 10 YR 4/1
texture: sandy loam
33 cm stopped

Conclusion/Comments:

Soils are hydric by criteria III.D.

Note: Observed petroleum, suspended in free water of soil pit.

DATA FORM 1 - WETLAND J
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 14, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87 N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot J-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Poa sp.*	-
2.		2. *Euthamia graminifolia*	FAC
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Cornus sericea*	FACW+	1.	
2. *Lonicera tatarica*	FACU	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/4 x 100 = 75%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: South of I-87N and northwest of the rear Red Roof Inn parking lot. Preparers: EBW, SCC Date: October 14, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot J-1 Between wetland flags: J16 & J17

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland J Transect 1 – Upland Plot J-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/1
texture: sandy loam
19 cm B layer
hue value/chroma: 10 YR 4/3
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND J
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 14, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain Forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot J-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	22	(cm.)
Depth to saturated soil:	18	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Matteuccia struthiopteris*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Hamamelis virginiana*	FAC-	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100 = 66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: South of I-87N and northwest of the rear Red Roof Inn parking lot. Preparers: EBW, SCC Date: October 14, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot J-2 Between wetland flags: J16 & J17

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	Yes
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	No
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland J Transect 1– Wetland Plot J-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/1
texture: muck
cm B layer
hue value/chroma:
texture:
42 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.A.

Note: Approximately 35% depletion is Present, below 22 cm in soil profile.

Note: Soil in A layer is darker than the Munsell Soil Color Chart allows for.

DATA FORM 1 - WETLAND J
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 14, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Early successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot J-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Betula papyrifera*	FACU	1. *Matteuccia struthiopteris*	FACW
2. *Salix nigra*	FACW+	2. *Impatiens capensis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/4 x 100 = 75%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: South of I-87N and northwest of the rear Red Roof Inn parking lot. Preparers: EBW, SCC Date: October 14, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot J-3 Between wetland flags: J16 & J17

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland J Transect 1 – Upland Plot J-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/1
texture: peaty loam
14 cm B layer
hue value/chroma: 10 YR 4/1
texture: loamy sand
19 cm C layer
hue value/chroma: 10 YR 4/4
texture: loamy sand
32 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

DATA FORM 1 - WETLAND J
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 14, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87 N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID	Upland Plot J-4

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- Inundated
- Saturated within Upper 30.5 cm
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- Oxidized Root Channels in Upper 30.5 cm
- Water-Stained Leaves
- Local Soil Survey Data
- √ FAC-Neutral Test
- Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa sp.*	-
2.		2. *Solidago sp.*	-
3.		3. *Phragmites australis*	FACW
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100 = 66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: South of I-87N and northwest of the rear Red Roof Inn parking lot. Preparers: EBW, SCC Date: October 14, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Upland Plot J-4 Between wetland flags: J15 & J16

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland J Transect 2 – Upland Plot J-4 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/1
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND J
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 14, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot J-5

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	27	(cm.)
Depth to saturated soil:	18	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Fraxinus pennsylvanica*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/2 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: South of I-87N and northwest of the rear Red Roof Inn parking lot. Preparers: EBW, SCC Date: October 14, 2009	Mapped Soil Series: Udipsamments, Smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Wetland Plot J-5 Between wetland flags: J15 & J16

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland J Transect 2 – Wetland Plot J-5 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/1
texture: silty loam
18 cm B layer
hue value/chroma: 10 YR 4/1
texture: silty loam
26 cm B layer
hue value/chroma: 10 YR 4/4
texture: silty loam
38 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

DATA FORM 1 - WETLAND J
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 14, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Early successional hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID	Upland Plot J-6

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Robina pseudoacacia*	FACU-	1. *Matteuccia struthiopteris*	FACW
2. *Fraxinus pennsylvanica*	FACW	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Prunus serotina*	FACU	1.	
2. Hamamelis virginiana	FAC-	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/5 x 100 = 40%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: South of I-87N and northwest of the rear Red Roof Inn parking lot. Preparers: EBW, SCC Date: October 14, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Upland Plot J-6 Between wetland flags: J15 & J16

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland J Transect 2 – Upland Plot J-6 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND K
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 14, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot K-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Polygonum cuspidatum*	FACU-
2. *Populus tremuloides*	FACU	2. *Impatiens capensis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/4 x 100 = 50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Road between I-87N & the E end of town stockpile area Preparers: EBW, SCC Date: October 14, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot K-1 Between wetland flags: K2 & K3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland K Transect 1 – Upland Plot K-1continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
32 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Fair amount of gravel in A layer.

Refusal by rock.

DATA FORM 1 - WETLAND K
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 14, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Flood Plain Forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot K-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	32	(cm.)
Depth to saturated soil:	26	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Impatiens capensis*	FACW
2.		2. *Lythrum salicaria*	FACW+
3.		3. *Phragmites australis*	FACW
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100 = 100%

Remarks: Hydrophtic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Road between I-87N & the E end of town stockpile area Preparers: EBW, SCC Date: October 14, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot K-2 Between wetland flags: K2 & K3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland K Transect 1 – Wetland Plot K-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/2
texture: sandy loam
23 cm B layer
hue value/chroma: 10YR 4/1
texture: silty loam
39 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 25% mottling present in B layer.

DATA FORM 1 - WETLAND K
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 14, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Succesional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot K-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Betula alleghaniensis*	FAC	1. *Oniclea sensibilus*	FACW
2. *Quercus palustris*	FACW	2.	
3. *Acer rubrum*	FAC	3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 5/5 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Rd between I-87N & the E end of town stockpile area Preparers: EBW, SCC Date: October 14, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot K-3 Between wetland flags: K2 & K3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland K Transect 1– Upland Plot K-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 3/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soils does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND L
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 15, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot L-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1.	
2. *Quercus palustris*	FACW	2.	
3. *Quercus rubra*	FACU-	3.	
4. *Prunus serotina*	FACU	4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Cornus racemosa*	FAC	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/5 x 100 = 60%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Rd. between I-87N & W part of the town stockpile area Preparers: EBW, SCC Date: October 15, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot L-1 Between wetland flags: L9 & L10

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland L Transect 1– Upland Plot L-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/2
texture: sandy loam
14 cm B layer
hue value/chroma: 10YR 4/3
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soils does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND L
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 15, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot L-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- √ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

Note: No outlet, therefore water is retained within the wetland. Using best professional judgment the determination was made that water-stained leaves are most likely present in the spring.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Onoclea sensibilis*	FACW
2. *Quercus rubra*	FACU	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100 = 66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Rd. between I-87N & the W end of town stockpile area Preparers: EBW, SCC Date: October 15, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot L-2 Between wetland flags: L9 & L10

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland L Transect 1– Wetland Plot L-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/1
texture: sandy loam
8 cm B layer
hue value/chroma: 10YR 4/1
texture: sandy loam
32 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 40% mottling present in the B layer.

DATA FORM 1 - WETLAND L
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 15, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot L-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 cm
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 cm
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Fragaria virginiana*	FACU
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rhamnus cathartica*	UPL	1.	
2. *Populus tremuloides*	FACU	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/4 x 100 = 25%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of Wolf Rd. between I-87N & the W end of town stockpile area Preparers: EBW, SCC Date: October 15, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot L-3 Between wetland flags: L9 & L10

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland L Transect 1– Upland Plot L-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR 2/1
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND M
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 26, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot M-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:

- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Onoclea sensibilis*	FACW
2. *Fraxinus pennsylvanica*	FACW	2.	
3. *Populus tremmuloides*	FACU	3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Prunus serotina*	FACU	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/5 x 100 = 60 %

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N & I-87S in the SW most portion of project limits. Preparer: EBW, SCC Date: October 26, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot M-1 Between wetland flags: M4 & M5

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland M Transect 1 – Upland Plot M-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND M
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 26, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot M-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	30	(cm.)
Depth to saturated soil:	29	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrologic criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Onoclea sensibilis*	FACW
2. *Fraxinus pennsylvanica*	FACW	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Prunus serotina*	FACU	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/4 x 100 = 75 %

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: 0458 Location: Median b/n I-87N & I-87S in the SW most portion of project limits. Preparer: EBW, SCC Date: October 26, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot M-2 Between wetland flags: M4 & M5

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland M Transect 1 – Wetland Plot M-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: silty loam
22 cm B layer
hue value/chroma: 10YR5/2
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 15% mottling is present in the B layer.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11

Applicant/Owner: NYSDOT State: NY Sampling Point: ROP MX-1

Investigator (s): Donald Lockwood Section, Township, Range: _____

Landform (hillslope, terrace, etc): plain Local relief (concave, convex, none): none

Slope (%): 0-3 Lat: 42° 43' 13" N Long: 73° 48' 3" W Datum: _____

Soil Map Unit Name: Udipsamments smoothed (Ud) NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)

Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: Wetland MX

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- _____ Water Marks (B1)
- X Sediment Deposits (B3)
- _____ Drift Deposits (B3)
- _____ Algal Mat or Crust (B4)
- _____ Iron Deposits (B5)
- _____ Inundation Visible on Aerial Imagery (B7)
- _____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- _____ Aquatic Fauna (B13)
- _____ Marl Deposits (B15)
- _____ Hydrogen Sulfide Odor (C1)
- _____ Oxidized Rhizospheres on Living Roots (C3)
- _____ Presence of Reduced Iron (C4)
- _____ Recent Iron Reduction in Tilled Soils (C6)
- _____ Thin Muck Surface (C7)
- _____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- _____ Surface Cracks (B6)
- _____ Drainage Patters (B10)
- _____ Moss Trim Lines (B16)
- _____ Dry-Season Water Table (C2)
- _____ Crayfish Burrows (C8)
- _____ Saturation Visible on Aerial Imagery (C9)
- _____ Stunted or Stressed Plants (D1)
- _____ Geomorphic Position (D2)
- _____ Shallow Aquitard (D3)
- _____ Mircotopographic Relief (D4)
- _____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches) >4

Water Table Present? Yes X No _____ Depth (inches) 0

Saturation Present? Yes X No _____ Depth (inches) 0

(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Photos 29 - 31

SAMPLING POINT: ROPMX1

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Acer rubrum*	40	Yes	FAC
2. *Quercus bicolor*	20	Yes	FACW
3. *Populus deltoides*	20	Yes	FAC
4. *Fraxinus pennsylvanica*	5	No	FACW
5.			
6.			
7.			
	85	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Carex sp.*	30	Yes	FAC
2. *Carex stricta*	10	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	= Total Cover	

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Remarks: (Include photo numbers here or on separate sheet)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/1	95	7.5Y 4/6	5	C	M	loamy fine sand	
5-9	10YR 2/1	100					loamy fine sand	
9-18	2.5Y 5/1	100					loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
X Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

DATA FORM 1 - WETLAND N
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 26, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot N-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

_____ Stream, Lake, or Tide Gauge

√ Aerial Photographs

√ Other: NWI, USGS

_____ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:

_____ Inundated

_____ Saturated within Upper 30.5 centimeters

_____ Water Marks

_____ Drift Lines

_____ Sediment Deposits

_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

_____ Oxidized Root Channels in Upper 30.5 centimeters.

_____ Water-Stained Leaves

_____ Local Soil Survey Data

_____ FAC-Neutral Test

_____ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Onoclea sensibilis*	FACW
2. *Betula populifolia*	FAC	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Cornus racemosa*	FAC	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100 = 100 %

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N and I-87S SW side of emergency turnaround. Preparer: EBW, SCC Date: October 26, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot N-1 Between wetland flags: N3 & N4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland N Transect 1 – Upland Plot N-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
16 cm B layer
hue value/chroma: 10YR5/6
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND N
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 26, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot N-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	10	(cm.)
Depth to saturated soil:	6	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- √ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Hydrologic criteria are met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Lythrum salicaria*	FACW+
2. *Betula populifolia*	FAC	2. *Typha agustifolia*	OBL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100 = 100 %

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: 0458 Location: Median b/n I-87N and I-87S SW side of emergency turnaround. Preparer: EBW, SCC Date: October 26, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot N-2 Between wetland flags: N3 & N4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	Yes
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	No
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland N Transect 1 – Wetland Plot N-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm O layer
hue value/chroma: 10YR2/1
texture: loamy peat
4 cm A layer
hue value/chroma: 10YR2/2
texture: mucky peat
26 cm B layer
hue value/chroma: 10YR4/1
texture: silty loam
35 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.B.

Note: Oxidized roots channels present in the B layer.

DATA FORM 1 - WETLAND N
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 26, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot N-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- Inundated
- Saturated within Upper 30.5 centimeters
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- Oxidized Root Channels in Upper 30.5 centimeters.
- Water-Stained Leaves
- Local Soil Survey Data
- √ FAC-Neutral Test
- Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Solidago sp.*	-
2.		2. *Onoclea sensibilis*	FACW
3.		3. *Polygonum sagittatum*	OBL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/3 x 100 = 100 %

Remarks: Hydrophttic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N and I-87S SW side of emergency turnaround. Preparer: EBW, SCC Date: October 26, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot N-3 Between wetland flags: N3 & N4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland N Transect 1 – Upland Plot N-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
20 cm B layer
hue value/chroma: 10YR5/6
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND O
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 27, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot O-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrologic criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Osmunda cinnamomea*	FACW
3.		3. *Cirsium arvense*	FACU
4.		4. *Impatiens capensis*	FACW
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100 = 66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N, S of emergency turnaround near SW end of project limits Preparer: EBW, SCC Date: October 27, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot O-1 Between wetland flags: O7 & O8

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland O Transect 1 – Upland Plot O-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
6 cm B layer
hue value/chroma: 10YR4/4
texture: silty loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

DATA FORM 1 - WETLAND O
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 27, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot O-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	28	(cm.)
Depth to saturated soil:	26	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Onoclea sensibilis*	FACW
2.		2. *Impatiens capensis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/3 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N, S of emergency turnaround near SW end of project limits Preparer: EBW, SCC Date: October 27, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot O-2 Between wetland flags: O7 & O8

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland O Transect 1 – Wetland Plot O-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
14 cm B layer
hue value/chroma: 10YR4/1
texture: silty loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

DATA FORM 1 - WETLAND O
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 27, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot O-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

_____ Stream, Lake, or Tide Gauge

√ Aerial Photographs

√ Other: NWI, USGS

_____ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:

_____ Inundated

_____ Saturated within Upper 30.5 centimeters

_____ Water Marks

_____ Drift Lines

_____ Sediment Deposits

_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

_____ Oxidized Root Channels in Upper 30.5 centimeters

_____ Water-Stained Leaves

_____ Local Soil Survey Data

_____ FAC-Neutral Test

_____ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Onoclea sensisbilis*	FACW
2. *Pinus strobus*	FACU	2. *Aster divaricatus*	UPL
3. *Fraxinus pennslyvanica*	FACW	3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/5 x 100 = 60%

.

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N, S of emergency turnaround near SW end of project limits Preparer: EBW, SCC Date: October 27, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot O-3 Between wetland flags: O7 & O8

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland O Transect 1 – Upland Plot O-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
24 cm B layer
hue value/chroma: 10YR3/3
texture: sandy loam
35 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11

Applicant/Owner: NYSDOT State: NY Sampling Point: ROP OX-1

Investigator (s): Donald Lockwood Section, Township, Range: _____

Landform (hillslope, terrace, etc): plain Local relief (concave, convex, none): none

Slope (%): 3-8 Lat: 42° 43' 6.59N Long: 73° 48' 46.8"W Datum: _____

Soil Map Unit Name: Udipsamments smoothed (Ud) NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)

Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: Wetland OX

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- _____ Water Marks (B1)
- X Sediment Deposits (B3)
- X Drift Deposits (B3)
- _____ Algal Mat or Crust (B4)
- _____ Iron Deposits (B5)
- _____ Inundation Visible on Aerial Imagery (B7)
- _____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- _____ Aquatic Fauna (B13)
- _____ Marl Deposits (B15)
- _____ Hydrogen Sulfide Odor (C1)
- _____ Oxidized Rhizospheres on Living Roots (C3)
- _____ Presence of Reduced Iron (C4)
- _____ Recent Iron Reduction in Tilled Soils (C6)
- _____ Thin Muck Surface (C7)
- _____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- _____ Surface Cracks (B6)
- _____ Drainage Patters (B10)
- _____ Moss Trim Lines (B16)
- _____ Dry-Season Water Table (C2)
- _____ Crayfish Burrows (C8)
- _____ Saturation Visible on Aerial Imagery (C9)
- _____ Stunted or Stressed Plants (D1)
- _____ Geomorphic Position (D2)
- _____ Shallow Aquitard (D3)
- _____ Mircotopographic Relief (D4)
- _____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches) 6

Water Table Present? Yes X No _____ Depth (inches) 0

Saturation Present? Yes X No _____ Depth (inches) 0

(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Abrupt boundaries: bounded by I-87 NB road embankment and Computer Drive road embankment.

Photos 25-28

SAMPLING POINT: ROPOX1

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Quercus bicolor*	55	Yes	FACW
2. *Acer rubrum*	20	Yes	FAC
3. *Fraxinus pennsylvanica*	10	No	FACW
4.			
5.			
6.			
7.			
	85 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Fraxinus pennsylvanica*	30	Yes	FACW
2. *Acer rubrum*	2	No	FAC
3.			
4.			
5.			
6.			
7.			
	32 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2. *Phragmites australis*	5	No	FACW
3. *Lythrum salicaria*	2	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	27 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1								organic matter
1-5	2.5Y 4/1	80	7.5YR 5/6	10	C	M	loamy fine sand	
5-10	10YR 2/1	100					loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
X Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

DATA FORM 1 - WETLAND P
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 27, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot P-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Populus tremuloides*	FACU	1. *Solidago sp.*	-
2.		2. *Onoclea sensibilis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Quercus rubra*	FACU-	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/4 x 100 = 50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median between I-87N and I-87S along Shakers Creek. Preparer: EBW, SCC Date: October 27, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot P-1 Between wetland flags: P7 & P8

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland P Transect 1 – Upland Plot P-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: sandy loam
16 cm B layer
hue value/chroma: 10YR3/4
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

DATA FORM 1 - WETLAND P
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 27, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot P-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	10	(cm.)
Depth to saturated soil:	8	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Lythrum salicaria*	FACW+
2. *Ulmus Americana*	FACW-	2. *Onoclea sensibilis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median between I-87N and I-87S along Shakers Creek. Preparer: EBW, SCC Date: October 27, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot P-2 Between wetland flags: P7 & P8

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	Yes
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland P Transect 1 – Wetland Plot P-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
25 cm B layer
hue value/chroma: 10YR5/1
texture: sandy loam
40 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D and III. E.

DATA FORM 1 - WETLAND P
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 27, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot P-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Onoclea sensibilis*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rhus typhina*	NL	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100 = 66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median between I-87N and I-87S along Shaker's Creek. Preparer: EBW, SCC Date: October 27, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot P-3 Between wetland flags: P7 & P8

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland P Transect 1 – Upland Plot P-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: silty loam
cm B layer
hue value/chroma:
texture:
35 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

DATA FORM 1 - WETLAND Q
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 27, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot Q-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Plantago lanceolota*	UPL
3.		3. *Galium mollugo*	UPL
4.		4. *Phragmites australis*	FACW
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/3 x 100=33%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N & I-87S in SW central portion of project corridor Preparer: EBW, SCC Date: October 27, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot Q-1 Between wetland flags: Q3 & Q4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland Q Transect 1– Upland Plot Q-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
16 cm B layer
hue value/chroma: 10YR4/2
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 5% mottling is present in the B layer.

DATA FORM 1 - WETLAND Q
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 27, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot Q-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	28	(cm.)
Depth to saturated soil:	26	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennslyvanica*	FACW	1. *Phragmites australis*	FACW
2.		2. *Onoclea sensibilis*	FACW
3.		3. *Lythrum salicaria*	FACW+
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N & I-87S in SW central portion of project corridor Preparer: EBW, SCC Date: October 27, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot Q-2 Between wetland flags: Q3 & Q4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland Q Transect 1– Wetland Plot Q-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm O layer
hue value/chroma: 10YR2/1
texture: loamy peat
3 cm A layer
hue value/chroma: 10YR3/1
texture: silty loam
15 cm B layer
hue value/chroma: 10YR5/2
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 45% mottling is present in the B layer.

DATA FORM 1 - WETLAND Q
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 27, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot Q-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
		1. *Poa spp.*	-
2.		2. *Plantago lanceolota*	UPL
3.		3. *Galium mollugo*	UPL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/2 x 100=0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N & I-87S in SW central portion of project corridor Preparer: EBW, SCC Date: October 27, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot Q-3 Between wetland flags: Q3 & Q4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland Q Transect 1– Upland Plot Q-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: peaty loam
6 cm B layer
hue value/chroma: 10YR3/1
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Approximately 40% mottling is present in the B layer.

Refusal by roots.

DATA FORM 1 - WETLAND R
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot R-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
		1. *Poa spp.*	-
2.		2. *Lotus corniculatus*	UPL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/1 x 100=0%
.

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N and I-87S in NE portion of project corridor Preparer: EBW, SCC Date: October 29, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot R-1 Between wetland flags: R1 & R2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland R Transect 1 – Upland Plot R-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
12 cm B layer
hue value/chroma: 10YR3/4
texture: sandy loam
34 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND R
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot R-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	12	(cm.)
Depth to saturated soil:	10	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Onoclea sensibilis*	FACW
2. *Acer rubrum*	FAC	2. *Phragmites australis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/5 x 100=80%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N and I-87S in NE portion of project corridor Preparer: EBW, SCC Date: October 29, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot R-2 Between wetland flags: R1 & R2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland R Transect 1 – Wetland Plot R-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
20 cm B layer
hue value/chroma: 10YR4/1
texture: silty loam
34 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

DATA FORM 1 - WETLAND R
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot R-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	24	(cm.)
Depth to saturated soil:	20	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
		1. *Poa spp.*	-
2.		2. *Plantago lanceolota*	UPL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/1 x 100=0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N and I-87S in NE portion of project corridor Preparer: EBW, SCC Date: October 29, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot R-3 Between wetland flags: R1 & R2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland R Transect 1 – Upland Plot R-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
10 cm B layer
hue value/chroma: 10YR4/2
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Fair amount of gravel in both layers.

Note: Approximately 20% mottling is present in the B layer.

DATA FORM 1 - WETLAND R
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID	Upland Plot R-4

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

_____ Stream, Lake, or Tide Gauge

√ Aerial Photographs

√ Other: NWI, USGS

_____ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:

_____ Inundated

_____ Saturated within Upper 30.5 centimeters

_____ Water Marks

_____ Drift Lines

_____ Sediment Deposits

_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

_____ Oxidized Root Channels in Upper 30.5 centimeters

_____ Water-Stained Leaves

_____ Local Soil Survey Data

_____ FAC-Neutral Test

_____ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
		1. *Poa spp.*	-
2.		2. *Plantago lanceolota*	UPL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/1 x 100=0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N and I-87S in NE portion of project corridor Preparer: EBW, SCC Date: October 29, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Upland Plot R-4 Between wetland flags: R10 & R11

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland R Transect 2 – Upland Plot R-4 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

DATA FORM 1 - WETLAND R
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot R-5

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets all of the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	15	(cm.)
Depth to saturated soil:	11	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Betula populifolia*	FAC	1. *Phragmites australis*	FACW
2.		2. *Lythrum salicaria*	FACW+
3.		3. *Typhus angustifolia*	OBL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N and I-87S in NE portion of project corridor Preparer: EBW, SCC Date: October 29, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Wetland Plot R-5 Between wetland flags: R10 & R11

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland R Transect 2 – Wetland Plot R-5 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
7 cm B layer
hue value/chroma: 10YR4/2
texture: sandy loam
36 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 20% mottling is present in the B layer.

Note: Petroleum observed in free water in soil pit.

DATA FORM 1 - WETLAND R
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	October 29, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID	Upland Plot R-6

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Plantago lanceolota*	UPL
3.		3. *Galium mollugo*	UPL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/2 x 100=0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: 0458 Location: Median b/n I-87N & I-87S in NE portion of the project corridor Preparer: EBW, SCC Date: October 29, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Upland Plot R-6 Between wetland flags: R10 & R11

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland R Transect 2 – Upland Plot R-6 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: sandy loam
22 cm B layer
hue value/chroma: 10YR4/6
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

DATA FORM 1 - WETLAND S
WETLAND DETERMINATION
(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 3, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of SW side of Courtyard Marriot Parking Lot
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot S-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: 30 (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Poa spp.*	-
3.		3. *Solidago sp.*	-
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1. *Vitis riparia*	FACW
2. *Salix sp.*	-	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100=66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW Marriot parking lot, NW of Wolf Rd across from Metro Park Rd Preparer: EBW, SCC Date: November 3, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot S-1 Between wetland flags: S9 & S10

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland S Transect 1 – Upland Plot S-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
10 cm B layer
hue value/chroma: 10YR4/4
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Deposited layer of gravel in B layer.

Refusal by rock.

DATA FORM 1 - WETLAND S
WETLAND DETERMINATION
(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 3, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot S-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	1	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- √ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Populus deltoides*	FAC	1. *Phragmites australis*	FACW
2.		2. *Lythrum salicaria*	FACW+
3.		3. *Onoclea sensibilis*	FACW
4.		4. *Carex sp.*	-
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Salix sp.*	-	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW Marriot parking lot, NW of Wolf Rd across from Metro Park Rd Preparer: EBW, SCC Date: November 3, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot S-2 Between wetland flags: S9 & S10

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	No
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland S Transect 1 – Wetland Plot S-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm O layer
hue value/chroma: 10YR3/2
texture: loamy peat
10 cm A layer
hue value/chroma: 10YR4/6
texture: sandy loam
32 cm stopped

Conclusion/Comments:

Soil is hydric by criteria I.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 12/01/11

Applicant/Owner: NYSDOT State: NY Sampling Point: ROP SX-1

Investigator (s): Donald Lockwood Section, Township, Range: _____

Landform (hillslope, terrace, etc): deltas & glacial lake plains Local relief (concave, convex, none): none

Slope (%): 0-3 Lat: 42° 43' 13" N Long: 73° 48' 3" W Datum: _____

Soil Map Unit Name: Elnora loamy fine sand (EnA) NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)

Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: Wetland SX

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- X Sediment Deposits (B3)
- X Drift Deposits (B3)
- _____ Algal Mat or Crust (B4)
- _____ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- _____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- _____ Aquatic Fauna (B13)
- _____ Marl Deposits (B15)
- _____ Hydrogen Sulfide Odor (C1)
- _____ Oxidized Rhizospheres on Living Roots (C3)
- _____ Presence of Reduced Iron (C4)
- _____ Recent Iron Reduction in Tilled Soils (C6)
- _____ Thin Muck Surface (C7)
- X Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- _____ Surface Cracks (B6)
- _____ Drainage Patters (B10)
- _____ Moss Trim Lines (B16)
- _____ Dry-Season Water Table (C2)
- _____ Crayfish Burrows (C8)
- _____ Saturation Visible on Aerial Imagery (C9)
- _____ Stunted or Stressed Plants (D1)
- _____ Geomorphic Position (D2)
- _____ Shallow Aquitard (D3)
- _____ Mircotopographic Relief (D4)
- _____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches) 1-36+

Water Table Present? Yes X No _____ Depth (inches) 0

Saturation Present? Yes X No _____ Depth (inches) 0

(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

signs of recent beaver activity: lodge; dam; and cuttings

SAMPLING POINT: ROPSX1

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Betula populifolia*	80	Yes	FAC
2. *Acer rubrum*	60	Yes	FAC
3. *Betula alleghaniensis*	10	No	FAC
4. *Populus deltoides*	15	No	FACW
5.			
6.			
7.			
	165	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Onoclea sensibilis*	30		FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30	= Total Cover	

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X Rapid Test for Hydrophytic Vegetation

____ Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					silt loam	
4-18	10YR 4/2	98	7.5YR 4/6	2	C	M	loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
X Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

DATA FORM 1 - WETLAND T
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 3, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot T-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Solidago sp.*	-
2.		2. *Lythrum salicaria*	FACW+
3.		3. *Juncus effusus*	FACW+
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/2 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: b/n Cerone Commercial Dr & Shakers Creek, N of Wetland S Preparer: EBW, SCC Date: 11/03/09	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot T-1 Between wetland flags: T5 & T6

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland T Transect 1 – Upland Plot T-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND T
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 3, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot T-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- √ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Lythrum salicaria*	FACW+
2.		2. *Juncus effusus*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/2 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: b/n Cerone Commercial Dr & Shakers Creek, N of Wetland S Preparer: EBW, SCC Date: 11/03/09	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot T-2 Between wetland flags: T5 & T6

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland T Transect 1 – Wetland Plot T-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
12 cm B layer
hue value/chroma: 10YR4/1
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 30% mottling is present in the B layer.

DATA FORM 1 - WETLAND T
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 3, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot T-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer negundo*	FAC+	1. *Glechoma hederacea*	FACU
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/4 x 100=50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: b/n Cerone Commercial Dr & Shakers Creek, N of Wetland S Preparer: EBW, SCC Date: 11/03/09	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot T-3 Between wetland flags: T5 & T6

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland T Transect 1 – Upland Plot T-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

DATA FORM 1 - WETLAND U
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot U-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Plantago lanceolota*	UPL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/1 x 100 = 0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N & I-87S in NE portion of project study area Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot U-1 Between wetland flags: U1 & U9

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland U Transect 1 – Upland Plot U-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
14 cm B layer
hue value/chroma: 10YR4/3
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Fair amount of gravel present in A layer.

Refusal by roots.

DATA FORM 1 - WETLAND U
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot U-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	15	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- √ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Hydrologic criteria are met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Typhus agustifolia*	OBL
2.		2. *Potomogeton sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: 0458 Location: Median b/n I-87N & I-87S in NE portion of project study area Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot U-2 Between wetland flags: U1 & U9

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland U Transect 1 – Wetland Plot U-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	

Soil Profile:

cm A layer
hue value/chroma:
texture:
cm B layer
hue value/chroma:
texture:
cm stopped

Conclusion/Comments:

No soil pit dug due to ponding.

Soil is hydric by criteria I.

Note: Petroleum film observed on water surface.

DATA FORM 1 - WETLAND U
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot U-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Plantago lanceolota*	UPL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/1 x 100 = 0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N & I-87S in NE portion of project study area Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot U-3 Between wetland flags: U1 & U9

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland U Transect 1 – Upland Plot U-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
15 cm B layer
hue value/chroma: 10YR4/3
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND V
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot V-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Poa spp.*	-
2. *Carya ovalis*	NI	2. *Plantago lanceolota*	UPL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/3 x 100=33%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N & I-87S in NE portion of PSA, NE of Wetland U. Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot V-1 Between wetland flags: V1 & V18

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland V Transect 1 – Upland Plot V-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
18 cm B layer
hue value/chroma: 10YR4/3
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND V
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot V-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	10	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- √ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Ulmus Americana*	FACW-	1. *Carex stricta*	OBL
2. *Acer rubrum*	FAC	2. *Acorus calamus*	OBL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Vibirnum recognitum*	FACW-	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 5/5 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N & I-87S in NE portion of PSA, NE of Wetland U. Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot V-2 Between wetland flags: V1 & V18

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland V Transect 1 – Wetland Plot V-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma:
texture:
cm B layer
hue value/chroma:
texture:
cm stopped

Conclusion/Comments:

No soil pit dug due to ponding.

Soil is hydric by criteria I.

Note: Petroleum film observed on water surface.

DATA FORM 1 - WETLAND V
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot V-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Plantago lanceolota*	UPL
3.		3. *Galium mollugo*	NL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/2 x 100=0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87N & I-87S in NE portion of PSA, NE of Wetland U. Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot V-3 Between wetland flags: V1 & V18

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland V Transect 1 – Upland Plot V-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
20 cm B layer
hue value/chroma: 10YR4/3
texture: sandy loam
32 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Some gravel present in both layers.

Refusal by rock.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11
Applicant/Owner: NYSDOT State: NY Sampling Point: VXT1U
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): plain Local relief (concave, convex, none): none
Slope (%): 0-3 Lat: 42° 44' 13.55"N Long: 73° 47' 7.79"W Datum: _____
Soil Map Unit Name: Stafford fine loamy sand NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators present.

SAMPLING POINT: VVXT1U

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Galium mollugo*	60	Yes	UPL
2. *Festuca sp.*	30	Yes	FAC
3. *Bromus inermis*	10	No	UPL
4. *Dactylis glomerata*	10	No	FACU
5. *Cirisium sp.*	5	No	FAC
6. *Equisetum arvense*	5	No	FAC
7.			
8.			
9.			
10.			
11.			
12.			
	120 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply by:
OBL species		x 1=	
FACW species		x 2=	
FAC species		x 3=	
FACU species		x 4=	
UPL species		x 5=	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

_____ Rapid Test for Hydrophytic Vegetation

_____ Dominance Test is >50%

_____ Prevalence Index is ≤3.0[1]

_____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** _____ **No** X

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					silt loam	top soil fill on road embankment

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Road embankment; no hydric soil indicators present.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11
Applicant/Owner: NYSDOT State: NY Sampling Point: VXT1W
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): lake plain Local relief (concave, convex, none): none
Slope (%): 0-3 Lat: 42° 44' 13.55"N Long: 73° 47' 7.79"W Datum: _____
Soil Map Unit Name: Stafford loamy fine sand (St) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: VX

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
X High Water Table (A2)
X Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes X No _____ Depth (inches) 10
Saturation Present? Yes X No _____ Depth (inches) 5
(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Photos 38-43

SAMPLING POINT: VXT1W

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Acer rubrum*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Alnus rugosa*	5	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	5 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Phragmites australis*	30	Yes	FACW
2. *Lythrum salicaria*	25	Yes	FACW
3. *Impatiens capensis*	15	No	FACW
4. *Equisetum arvense*	10	No	FAC
5. *Cirisium sp.*	5	No	FAC
6. *Onoclea sensibilis*	5	No	FACW
7.			
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/2	100					loamy fine sand	
2-5	2.5Y 3/2	95	7.5YR 3/4	5	C	M	loamy fine sand	
5-18	2.5Y 4/2	90	7.5YR 3/4	10	C	M	loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
X Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

DATA FORM 1 - WETLAND W
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot W-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology requirements not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp*	-
2.		2. *Plantago lanceolota*	UPL
3.		3. *Galium mollugo*	NL
4.		4. *Solidago sp.*	-
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Juglans nigra*	FACU	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): ¼ x 100=25%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87S/Old Wolf Rd on-ramp, near NE portion of PSA. Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot W-1 Between wetland flags:W19 & W20

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland W Transect 1 – Upland Plot W-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: sandy loam
23 cm B layer
hue value/chroma: 10YR4/4
texture: sandy loam
32 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

DATA FORM 1 - WETLAND W
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot W-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	5	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:

- √ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Phalaris arundinaceae*	FACW+
2. *Ulmus americana*	FACW+	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Vibirnum recognitum*	FACW-	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87S/Old Wolf Rd on-ramp, near NE portion of PSA. Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot W-2 Between wetland flags:W19 & W20

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland W Transect 1 – Wetland Plot W-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	

Soil Profile:

0 cm A layer
hue value/chroma:
texture:
cm B layer
hue value/chroma:
texture:
cm stopped

Conclusion/Comments:

Soil is hydric by criteria I.

No soil pit dug due to ponding.

Note: Petroleum film observed on water surface.

DATA FORM 1 - WETLAND W
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope I-87S/Old Wolf Rd on-ramp
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot W-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp*	-
2.		2. *Phalaris arundinaceae*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87S/Old Wolf Rd on-ramp, near NE portion of PSA. Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot W-3 Between wetland flags:W19 & W20

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland W Transect 1 – Upland Plot W-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: sandy loam
18 cm B layer
hue value/chroma: 10YR4/3
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

DATA FORM 1 - WETLAND X
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot X-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Solidago sp.*	-
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Populus tremuloides*	FACU	1. *Vitis riparia*	FACW
2. *Lonicera tatarica*	FACU	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/4 x 100=50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87S/Old Wolf Rd on-ramp, near NE portion of PSA. Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot X-1 Between wetland flags: X19 & X20

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland X Transect 1 – Upland Plot X-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND X
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot X-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	1	(cm.)
Depth to saturated soil:	1	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:

- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Onoclea sensibilis*	FACW
2.		2. *Phalaris arundinaceae*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1. *Solanum dulcamara*	FAC-
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/4 x 100=75%

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Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87S/Old Wolf Rd on-ramp, near NE portion of PSA. Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot X-2 Between wetland flags: X19 & X20

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland X Transect 1 – Wetland Plot X-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm O layer
hue value/chroma: 10YR2/1
texture: loamy peat
2 cm A layer
hue value/chroma: 10YR2/2
texture: silty loam
7 cm B layer
hue value/chroma: 10YR4/1
texture: sandy loam
32 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 10% mottling is present in the B layer.

DATA FORM 1 - WETLAND X
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 4, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope I-87S/Old Wolf Rd on-ramp
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot X-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Poa spp.*	-
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Populus tremuloides*	FACU	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/2 x 100=50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Median b/n I-87S/Old Wolf Rd on-ramp, near NE portion of PSA. Preparer: EBW, SCC Date: November 4, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot X-3 Between wetland flags: X19 & X20

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland X Transect 1 – Upland Plot X-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: sandy loam
22 cm B layer
hue value/chroma: 10YR4/4
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by rock.

DATA FORM 1 - WETLAND Y
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 5, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot Y-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Solidago sp.*	-
3.		3. *Poa sp.*	-
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N on-ramp and I-87N merge in NE portion of PSA. Preparer: EBW, SCC Date: November 5, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot Y-1 Between wetland flags: Y13 & Y14

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland Y Transect 1– Upland Plot Y-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: silty loam
7 cm B layer
hue value/chroma: 10YR4/3
texture: sandy loam
32 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND Y
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 5, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot Y-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	26	(cm.)
Depth to saturated soil:	13	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Onoclea sensibilis*	FACW
3.		3. *Solidago sp.*	-
4.		4. *Carex stricta*	OBL
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/3 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N on-ramp and I-87N merge in NE portion of PSA. Preparer: EBW, SCC Date: November 5, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot Y-2 Between wetland flags: Y13 & Y14

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland Y Transect 1– Wetland Plot Y-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm O layer
hue value/chroma: 10YR2/1
texture: loamy peat
2 cm A layer
hue value/chroma: 10YR4/1
texture: loamy sand
26 cm B layer
hue value/chroma: 10YR4/2
texture: loamy sand
33 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

DATA FORM 1 - WETLAND Y
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 5, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot Y-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	12	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:

- √ Inundated
- ___ Saturated within Upper 30.5 centimeters
- √ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrologic criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Carex stricta*	OBL
2. *Quercus bicolor*	FACW+	2. *Potomogeton sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/3 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N on-ramp and I-87N merge in NE portion of PSA. Preparer: EBW, SCC Date: November 5, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot Y-3 Between wetland flags: Y13 & Y14

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland Y Transect 1– Wetland Plot Y-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	

Soil Profile:

cm O layer
hue value/chroma:
texture:
cm A layer
hue value/chroma:
texture:
cm B layer
hue value/chroma:
texture:
cm stopped

Conclusion/Comments:

Soil is hydric by criteria I.

No soil pit dug due to ponding.

Note: Petroleum observed on water surface.

DATA FORM 1 - WETLAND Z
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 5, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N on-ramp
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot Z-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rhus typhina*	NL	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): ½ x 100 = 50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N on-ramp in the NE central portion of the PSA. Preparer: EBW, SCC Date: November 5, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot Z-1 Between wetland flags: Z3 & Z4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland Z Transect 1 – Upland Plot Z-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Some gravel present in the A layer.

Refusal by rock.

DATA FORM 1 - WETLAND Z
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 5, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot Z-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	5	(cm.)
Depth to saturated soil:	1	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Phragmites australis*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/2 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N on-ramp in the NE central portion of the PSA Preparer: EBW, SCC Date: November 5, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot Z-2 Between wetland flags: Z3 & Z4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	Yes
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland Z Transect 1 – Wetland Plot Z-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm 0 layer
hue value/chroma: 10YR2/1
texture: peaty muck
11 cm A layer
hue value/chroma: 10YR4/1
texture: silty loam
24 cm B layer
hue value/chroma: 10YR5/1
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.C and III.D.

Note: Petroleum film observed on water surface.

DATA FORM 1 - WETLAND AA
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 5, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot AA-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Spiraea alba*	FACW+
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1.*Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): ¾ x 100 = 75%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87 N in the NE portion of the projects study area. Preparer: EBW, SCC Date: November 5, 2009	Mapped Soil Series: Colonie loamy fine sand (CoB). Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot AA-1 Between wetland flags:AA2 & AA3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland AA Transect 1– Upland Plot AA-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND AA
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 5, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot AA-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:

- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Onoclea sensibilis*	FACW
2. *Fraxinus pennsylvanica*	FACW	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/5 x 100=80%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87 N in the NE portion of the projects study area. Preparer: EBW, SCC Date: November 5, 2009	Mapped Soil Series: Colonie loamy fine sand (CoB) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot AA-2 Between wetland flags: AA2&AA3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland AA Transect 1 – Wetland Plot AA-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: sandy loam
15 cm B layer
hue value/chroma: 10YR4/1
texture: sandy loam
32 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 25% mottling present in the B layer.

DATA FORM 1 - WETLAND BB
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 6, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot BB-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology requirements not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Plantago lanceolota*	UPL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Populus tremuloides*	FACU	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/2 x 100 = 0%

Remarks: Hydrophytic vegetative requirements not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N in the NE portion of the PSA, NE of Wetland AA. Preparer: EBW, SCC Date: 11/6/09	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot BB-1 Between wetland flags: BB4&BB5

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland BB Transect 1 – Upland Plot BB-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
20 cm B layer
hue value/chroma: 10YR4/2
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 30% mottling present in the B layer.

DATA FORM 1 - WETLAND BB
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 6, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot BB-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	15	(cm.)
Depth to saturated soil:	15	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Onoclea sensibilis*	FACW
2. *Ulmus americana*	FACW-	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SE of I-87N in the NE portion of the PSA, NE of Wetland AA. Preparer: EBW, SCC Date: November 6, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot BB-2 Between wetland flags: BB4&BB5

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland BB Transect 1 – Wetland Plot BB-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: peaty loam
2 cm B layer
hue value/chroma: 10YR4/1
texture: silty loam
32 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 25% mottling present in the B layer.

DATA FORM 1 - WETLAND CC
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 9, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot CC-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- Inundated
- Saturated within Upper 30.5 centimeters
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- Oxidized Root Channels in Upper 30.5 centimeters
- Water-Stained Leaves
- Local Soil Survey Data
- √ FAC-Neutral Test
- Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Solidago sp.*	-
3.		3. *Carex flava*	OBL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Albany Shaker Road and Engel's Farmstead Preparer: EBW, SCC Date: November 9, 2009	Mapped Soil Series: Stafford loamy fine san (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot CC-1 Between wetland flags: CC2&CC3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland CC Transect 1 – Upland Plot CC-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND CC
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 9, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot CC-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	26	(cm.)
Depth to saturated soil:	19	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Solidago sp.*	-
3.		3. *Phragmites australis*	FACW
4.		4. *Lythrum salicaria*	FACW+
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/2 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Albany Shaker Road and Engel's Farmstead Preparer: EBW, SCC Date: November 9, 2009	Mapped Soil Series: Stafford loamy fine san (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot CC-2 Between wetland flags: CC2&CC3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland CC Transect 1 – Wetland Plot CC-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
3 cm B layer
hue value/chroma: 10YR4/1
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 15% mottling is present in the B layer.

DATA FORM 1 - WETLAND CC
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 9, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Agricultural field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot CC-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2. *Phalaris arundinacea*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Albany Shaker Road and Engel's Farmstead Preparer: EBW, SCC Date: November 9, 2009	Mapped Soil Series: Stafford loamy fine san (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot CC-3 Between wetland flags: CC2&CC3

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland CC Transect 1 – Upland Plot CC-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/4
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 5/03/11
Applicant/Owner: NYSDOT State: NY Sampling Point: ROP CCU-1
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): Plain Local relief (concave, convex, none): _____
Slope (%): 0-3 Lat: 42° 43' 48.36"N Long: 73° 47' 59.99"W Datum: _____
Soil Map Unit Name: Strafford loamy fine sand (St) NWI classification: None
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators present.

SAMPLING POINT: ROPCCH

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Acer negundo*	30	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	30 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Galium sp.*	45	Yes	FAC
2. *Cirisium sp.*	45	Yes	FAC
3. *Alliaria Petiolata*	30	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	120 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	100					loamy sand	
10-18	10YR 4/2	80	5Y 4/6	20	C	M	loamy sand	Doesn't start within 10"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

DATA FORM 1 - WETLAND DD
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 10, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87N
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot DD-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Solidago sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Populus tremuloides*	FACU	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): ½ x 100 =50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Between I-87N and Rodgers Drive near NE limits of the PSA. Preparer: EBW, SCC Date: November 10, 2009	Mapped Soil Series: Udipsamments-Urban land complex (Uf) Drainage Class: somewhat excessively drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot DD-1 Between wetland flags: DD8&DD9

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland D Transect 1 – Upland Plot DD-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
18 cm B layer
hue value/chroma: 10YR4/4
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

No Upland Plot DD-3 dug due to yard waste/private property which lies outside the project limits.

Refusal by roots.

DATA FORM 1 - WETLAND DD
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 10, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot DD-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Populus tremuloides*	FACU	1. *Juncus effuses*	FACW+
2.		2. *Phragmites australis*	FACW
3.		3. *Galium palustre*	OBL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/4 x 100 =75%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Between I-87N and Rodgers Drive near NE limits of the PSA. Preparer: EBW, SCC Date: November 10, 2009	Mapped Soil Series: Udipsamments-Urban land Complex (Uf) Drainage Class: somewhat excessively drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot DD-2 Between wetland flags: DD8&DD9

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland D Transect 1 – Wetland Plot DD-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
17 cm B layer
hue value/chroma: 10YR4/1
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 5% mottling is present in B layer.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11
Applicant/Owner: NYSDOT State: NY Sampling Point: DDXT1U
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): delta plain Local relief (concave, convex, none): none
Slope (%): 3-8 Lat: 42° 44' 10.31"N Long: 73° 47' 7.43"W Datum: _____
Soil Map Unit Name: Colonie loamy fine sand (CoB) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: DDXT1U

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Phragmites australis*	90	Yes	FACW
2. *Lythrum salicaria*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Remarks: (Include photo numbers here or on separate sheet)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1=	
FACW species		x 2=	
FAC species		x 3=	
FACU species		x 4=	
UPL species		x 5=	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100					loamy fine sand	
7-18	10YR 3/2	70	10YR 5/6	30	CS	M	loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators present.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11
Applicant/Owner: NYSDOT State: NY Sampling Point: DDXT1W
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): delta plain Local relief (concave, convex, none): none
Slope (%): 3-8 Lat: 42° 44' 10.31"N Long: 73° 47' 7.43"W Datum: _____
Soil Map Unit Name: Colonie loamy fine sand (CoB) NWI classification: _____
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: Wetland DDX

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
X Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
X Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes X No _____ Depth (inches) 6
(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Photos 32-37. Permanent erosion matting present; area is a stormwater management feature.

SAMPLING POINT: DDXT1W

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			FACW
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Phragmites australis*	90	Yes	FACW
2. *Typha latifolia*	10	No	OBL
3. *Lythrum salicaria*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	110	= Total Cover	

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Remarks: (Include photo numbers here or on separate sheet)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1=
FACW species		x 2=
FAC species		x 3=
FACU species		x 4=
UPL species		x 5=
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					loamy fine sand	
6-18	10YR 4/2	90	7.5YR 4/6	10	C	M	loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
X Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

DATA FORM 1 - WETLAND EE
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 10, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Northern successional hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot EE-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Quercus rubra*	FACU-	1. *Solidago sp.*	-
2.		2. *Poa sp.*	-
3.		3. *Onoclea sensibilis*	FACW
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Juglans nigra*	FACU	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/4 x 100=50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Northwest of I-87S near southwestern limits of project study area Preparer: EBW, SCC Date: November 10, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot EE-1 Between wetland flags:EE13&EE14

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland EE Transect 1 – Upland Plot EE-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Fair amount of gravel present in A layer.

Refusal by rock.

DATA FORM 1 - WETLAND EE
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 10, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot EE-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	27	(cm.)
Depth to saturated soil:	20	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1. *Osmunda regalis*	OBL
2. *Acer rubrum*	FAC	2. *Dryopteris sp.*	-
3. *Quercus alba*	FACU-	3.	
4. *Ulmus Americana*	FACW-	4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/5 x 100=80%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Northwest of I-87S near southwestern limits of project study area Preparer: EBW, SCC Date: November 10, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot EE-2 Between wetland flags:EE13&EE14

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland EE Transect 1 – Wetland Plot EE-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
19 cm B layer
hue value/chroma: 10YR4/1
texture: silty loam
34 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: A layer is darker than the Munsell soil color chart allows for.

DATA FORM 1 - WETLAND EE
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 10, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old successional field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID	Upland Plot EE-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Quercus rubra*	FACU-	1. *Solidago spp.*	-
2.		2. *Poa sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Cornus sericea*	FACW+	1.	
2. *Rhus typhina*	NL	2.	
3. *Juglans nigra*	FACU	3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/4 x 100=25%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Northwest of I-87S near southwestern limits of project study area Preparer: EBW, SCC Date: November 10, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Upland Plot EE-3 Between wetland flags:EE19&EE20

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland EE Transect 2 – Upland Plot EE-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: sandy loam
12 cm B layer
hue value/chroma: 10YR2/2
texture: sandy loam
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Fair amount of roots present in A layer.

Refusal by roots.

DATA FORM 1 - WETLAND FF
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 11, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Northern successional hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot FF-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Betula populifolia*	FAC	1. *Solidago sp.*	-
2. *Ulmus americana*	FACW-	2. *Onoclea sensibilis*	FACW
3. *Acer negundo*	FAC+	3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1. *Vitis riparia*	FACW
2. *Rhamnus cathartica*	UPL	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 5/7 x 100=71%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Northwest of I-87S, just southwest of the Desmond Hotel Preparer: EBW, SCC Date: November 11, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot FF-1 Between wetland flags:FF12&FF13

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland FF Transect 1 – Upland Plot FF-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: loamy sand
8 cm B layer
hue value/chroma: 10YR4/4
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND FF
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 11, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot FF-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	29	(cm.)
Depth to saturated soil:	20	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Phalaris arundinacea*	FACW+
3.		3. *Onoclea sensibilis*	FACW
4.		4. *Lythrum salicaria*	FACW+
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1.	
2. *Acer rubrum*	FAC	2.	
3. *Alnus incana*	NI	3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 5/7 x 100=71%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Northwest of I-87S, just southwest of the Desmond Hotel Preparer: EBW, SCC Date: November 11, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot FF-2 Between wetland flags:FF12&FF13

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland FF Transect 1 – Wetland Plot FF-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
20 cm B layer
hue value/chroma: 10YR4/1
texture: silty loam
41 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

DATA FORM 1 - WETLAND FF
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 11, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Early successional field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot FF-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Solidago sp.*	-
2.		2. *Poa pratensis*	FACU
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/1 x 100=0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Northwest of I-87S, just southwest of the Desmond Hotel Preparer: EBW, SCC Date: November 11, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot FF-3 Between wetland flags:FF12&FF13

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland FF Transect 1 – Upland Plot FF-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: sandy loam
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND GG
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 11, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot GG-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Solidago sp.*	-
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rhus typhina*	NL	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): ½ x 100=50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of I-87S bound, NE of the cemetery in the central portion of PSA Preparer: EBW, SCC Date: November 11, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot GG-1 Between wetland flags:GG1&GG2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland GG Transect 1 – Upland Plot GG-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND GG
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 11, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot GG-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	9	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- √ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Typha angustifolia*	OBL
2.		2. *Lemna sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of I-87S bound, NE of the cemetery in the central portion of PSA Preparer: EBW, SCC Date: November 11, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot GG-2 Between wetland flags: GG1&GG2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland GG Transect 1 – Wetland Plot GG-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	

Soil Profile:

0 cm A layer
hue value/chroma:
texture:
cm B layer
hue value/chroma:
texture:
cm stopped

Conclusion/Comments:

Soil is hydric by criteria I.

No soil pit dug due to ponding.

DATA FORM 1 - WETLAND GG
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 11, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot GG-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Salix nigra*	FACW+	1. *Solidago spp.*	-
2.		2. *Onoclea sensibilis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1. *Vitis riparia*	FACW
2. *Cornus amomum*	FACW	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/5 x 100=80%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of I-87S bound, NE of the cemetery in the central portion of PSA Preparer: EBW, SCC Date: November 11, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot GG-3 Between wetland flags: GG1&GG2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland GG Transect 1 – Upland Plot GG-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND HH
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 11, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot HH-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Fraxinus pennsylvanica*	FACW
2.		2. *Onoclea sensibilis*	FACW
3.		3. *Galium mollugo*	NL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/5 x 100=60%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of I-87S and Wetland Q in the SW central portion of the PSA Preparer: EBW, SCC Date: November 11, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot HH-1 Between wetland flags: HH6&HH7

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland HH Transect 1 – Upland Plot HH-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND HH
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 11, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot HH-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	5	(cm.)
Depth to saturated soil:	0	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennsylvanica*	FACW	1.	
2. *Acer rubrum*	FAC	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Lonicera tatarica*	FACU	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100=66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of I-87S and Wetland Q in the SW central portion of the PSA Preparer: EBW, SCC Date: November 11, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot HH-2 Between wetland flags: HH6&HH7

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland HH Transect 1 – Wetland Plot HH-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: peaty loam
6 cm B layer
hue value/chroma: 10YR4/1
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 5% mottling present in the B layer.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 5/03/11
Applicant/Owner: NYSDOT State: NY Sampling Point: ROP HHX-1
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): Glacial lake plain Local relief (concave, convex, none): none
Slope (%): 0-3 Lat: 42° 43' 34.68"N Long: 73° 48' 16.91"W Datum: _____
Soil Map Unit Name: Elnora loamy fine sand (EnA) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators present.

SAMPLING POINT: ROPHHY

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Robinia pseudoacacia*	10	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Robinia pseudoacacia*	70	Yes	FACU
2. *Prunus serotina*	30	Yes	FACU
3. *Spirea sp.*	5	No	FAC
4.			
5.			
6.			
7.			
	105 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Geum sp.*	60	Yes	FAC
2. *Urtica sp.*	10	No	FAC
3. *Pteridium aquilinum*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	75 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Remarks: (Include photo numbers here or on separate sheet)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

_____ Rapid Test for Hydrophytic Vegetation

_____ Dominance Test is >50%

_____ Prevalence Index is ≤3.0[1]

_____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** X

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					loamy sand	
6-18	10YR 4/4	100					loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators present.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 5/03/11
Applicant/Owner: NYSDOT State: NY Sampling Point: ROP HHX-2
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): plain Local relief (concave, convex, none): none
Slope (%): 3-8 Lat: 42° 43' 34.68"N Long: 73° 48' 16.91"W Datum: _____
Soil Map Unit Name: Colonie loamy fine sand (CoB) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators present.

SAMPLING POINT: ROPHHY

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Setaria sp.*	90	Yes	FAC
2. *Solidago sp.*	15	No	FAC
3. *Centaurea maculosa*	10	No	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/2	100					loamy sand	
10-18	10YR 4/3	100					loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators present.

DATA FORM 1 - WETLAND II
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 12, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot II-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa spp.*	-
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Cornus amomum*	FACW	1.	
2. *Lonicera tatarica*	FACU	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): ½ x 100=50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Northwest of I-87S, along Shakers Creek Preparer: EBW, SCC Date: November 12, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot II-1 Between wetland flags: II24&II25

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland II Transect 1 – Upland Plot II-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: loamy sand
13 cm B layer
hue value/chroma: 10YR4/4
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND II
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 12, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Floodplain forest
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot II-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets all of the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	24	(cm.)
Depth to saturated soil:	18	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Phalaris arundinacea*	FACW+
2. *Ulmus americana*	FACW	2. *Lythrum salicaria*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1. *Vitis riparia*	FACW
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 5/5 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Northwest of I-87S, along Shakers Creek Preparer: EBW, SCC Date: November 12, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot II-2 Between wetland flags: II24&II25

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland II Transect 1 – Wetland Plot II-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: Silty loam
13 cm B layer
hue value/chroma: 10YR4/1
texture: Silty loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Roots prevalent in A layer.

Note: Approximately 5% mottling is present in the B layer.

DATA FORM 1 - WETLAND JJ
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 12, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of I-87S
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot JJ-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Solidago sp.*	-
3.		3. *Poa sp.*	-
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of I-87S & Wetland P in the SW central portion of the PSA Preparer: EBW, SCC Date: November 12, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot JJ-1 Between wetland flags: JJ5&JJ6

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland JJ Transect 1 – Upland Plot JJ-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND JJ
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 12, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot JJ-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	12	(cm.)
Depth to saturated soil:	6	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Lythrum salicaria*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/2 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: NW of I-87S & Wetland P in the SW central portion of the PSA Preparer: EBW, SCC Date: November 12, 2009	Mapped Soil Series: Udipsamments, smoothed (Ud) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot JJ-2 Between wetland flags: JJ5&JJ6

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland JJ Transect 1 – Wetland Plot JJ-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: sandy loam
5 cm B layer
hue value/chroma: 10YR4/2
texture: loamy sand
19 cm C layer
hue value/chroma: 10YR2/1
texture: peaty muck
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Fair amount of roots present in A & B layers.

Note: Approximately 5% mottling present in the B layer.

DATA FORM 1 - WETLAND KK
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 16, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot KK-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrologic criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Solidago sp.*	-
2.		2. *Phalaris arundinacea*	FACW+
3.		3. *Poa sp.*	-
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: B/n farm access roads in the Eastern most portion of the PSA Preparer: EBW, SCC Date: November 16, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot KK-1 Between wetland flags:KK3&KK4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland KK Transect 1 – Upland Plot KK-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND KK
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 16, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Wet Meadow
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot KK-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	32	(cm.)
Depth to saturated soil:	30	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- √ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phalaris arundinacea*	FACW+
2.		2. *Carex flava*	OBL
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rubus idaeus*	FAC-	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100=66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: B/n farm access roads in the Eastern most portion of the PSA Preparer: EBW, SCC Date: November 16, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot KK-2 Between wetland flags:KK3&KK4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland KK Transect 1 – Wetland Plot KK-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: loamy sand
23 cm B layer
hue value/chroma: 10YR5/1
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Oxidized roots channels were observed in the B layer.

DATA FORM 1 - WETLAND KK
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 16, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot KK-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Populus tremuloides*	FACU	1. *Poa sp.*	-
2. *Robinia pseudoacacia*	FACU-	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/2 x 100=0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: B/n farm access roads in the Eastern most portion of the PSA Preparer: EBW, SCC Date: November 16, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot KK-3 Between wetland flags:KK3&KK4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland KK Transect 1 – Upland Plot KK-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: loamy sand
1 cm B layer
hue value/chroma: 10YR2/2
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 5/03/11
Applicant/Owner: NYSDOT State: NY Sampling Point: KKXT1U
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): plain Local relief (concave, convex, none): none
Slope (%): 3-8 Lat: 42° 43' 44.04"N Long: 73° 48' 17.28"W Datum: _____
Soil Map Unit Name: Colonie loamy fine sand (CoB) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area**
Hydric Soil Present?	Yes _____ No X	**within a Wetland?** Yes _____ No X
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
X High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes X No _____ Depth (inches) 17'
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: KKXT1U

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			FACW
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Robinia pseudoacacia*	15	Yes	FACU
2. *Populus tremula*	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	25 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Remarks: (Include photo numbers here or on separate sheet)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

_____ Rapid Test for Hydrophytic Vegetation

_____ Dominance Test is >50%

_____ Prevalence Index is ≤3.0[1]

_____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** X

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators present.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 5/03/11
Applicant/Owner: NYSDOT State: NY Sampling Point: KKXT1W
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): plain Local relief (concave, convex, none): none
Slope (%): 3-8 Lat: 42° 43' 44.04"N Long: 73° 48' 17.28"W Datum: _____
Soil Map Unit Name: Colonie loamy fine sand (CoB) NWI classification: PSS1Fh
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: Wetland KK

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
X High Water Table (A2)
X Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes X No _____ Depth (inches) 11"
Saturation Present? Yes X No _____ Depth (inches) 8"
(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: KKXT1W

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			FACW
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Poa sp.*	30	Yes	FAC
2. *Carex sp.*	20	Yes	FAC
3. *Juncus effusus*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Remarks: (Include photo numbers here or on separate sheet)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-5	5Y 3/1	100					loamy sand	
5-18	10YR 4/2 6/CS	80	5YR 4/6	10	C	PL	loamy sand	
5-18			7.5YR 4/6	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
X Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

DATA FORM 1 - WETLAND LL
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 16, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Upland Plot LL-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Betula populifolia*	FAC	1. *Carex sp.*	-
2. *Populus tremuloides*	FACU	2. *Solidago sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rosa multiflora*	FACU	1.	
2. *Quercus rubra*	FACU-	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): ¼ x 100=25%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S Wetland KK along central portion of E most portion of PSA Preparer: EBW, SCC Date: November 16, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot LL-1 Between wetland flags:LL3&LL4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland LL Transect 1 – Upland Plot LL-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
14 cm B layer
hue value/chroma: 10YR4/1
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Fair amount of roots is present in the upper portion of the A layer.

DATA FORM 1 - WETLAND LL
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 16, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Wet meadow
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID	Wetland Plot LL-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	30	(cm.)
Depth to saturated soil:	26	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Juncus effusus*	FACW+
2.		2. *Carex sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Alnus rugosa*	FACW+	1.	
2. *Rubus idaeus*	FAC-	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100=66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit3 Location: S Wetland KK along central portion of E most portion of PSA Preparer: EBW, SCC Date: November 16, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot LL-2 Between wetland flags:LL3&LL4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland LL Transect 1 – Wetland Plot LL-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
11 cm B layer
hue value/chroma: 10YR4/1
texture: loamy sand
23 cm B layer
hue value/chroma: 10YR5/2
texture: loamy sand
34 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 20% mottling present in the B layer.

Note: Approximately 15% mottling present in the C layer.

DATA FORM 1 - WETLAND MM
WETLAND DETERMINATION
(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 16, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot MM-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Betula nigra*	FACW	1. *Poa sp.*	-
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rosa multiflora*	FACU	1.	
2. *Acer rubrum*	FAC	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100=66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Just S of Wetland LL along central portion of E most portion of PSA Preparer: EBW, SCC Date: November 16, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot MM-1 Between wetland flags:MM1/MM2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland MM Transect 1 – Upland Plot MM-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
8 cm B layer
hue value/chroma: 7.5YR4/4
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND MM
WETLAND DETERMINATION
(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 16, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot MM-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	24	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- √ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Carex sp.*	-
2.		2. *Juncus effusus*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Just S of Wetland LL along central portion of E most portion of PSA Preparer: EBW, SCC Date: November 16, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot MM-2 Between wetland flags:MM1/MM2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland MM Transect 1 – Wetland Plot MM-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
8 cm B layer
hue value/chroma: 7.5YR4/4
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria I.

No soil pit dug due to ponding.

DATA FORM 1 - WETLAND MM
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 16, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot MM-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

_____ Stream, Lake, or Tide Gauge

√ Aerial Photographs

√ Other: NWI, USGS

_____ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:

_____ Inundated

_____ Saturated within Upper 30.5 centimeters

_____ Water Marks

_____ Drift Lines

_____ Sediment Deposits

_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

_____ Oxidized Root Channels in Upper 30.5 centimeters

_____ Water-Stained Leaves

_____ Local Soil Survey Data

_____ FAC-Neutral Test

_____ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Quercus rubra*	FACU-	1. *Carex sp.*	-
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rosa multiflora*	FACU	1.	
2. *Acer rubrum*	FAC	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/3 x 100=33%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: Just S of Wetland LL along central portion of E most portion of PSA Preparer: EBW, SCC Date: November 16, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot MM-3 Between wetland flags:MM1/MM2

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland MM Transect 1 – Upland Plot MM-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: loamy sand
1 cm B layer
hue value/chroma: 7.5YR4/4
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND NN
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 16, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Wet Meadow
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot NN-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	29	(cm.)
Depth to saturated soil:	20	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Juncus effusus*	FACW+
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Betula nigra*	FACW	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/2 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Wetland MM along central portion of E most portion of PSA Preparer: EBW, SCC Date: November 16, 2009	Mapped Soil Series: Stafford loamy fine sand (St) Drainage Class: somewhat poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot NN-2 Between wetland flags: NN3&NN4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland NN Transect 1 – Wetland Plot NN-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
10 cm B layer
hue value/chroma: 10YR4/1
texture: sandy loam
34 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 5% mottling present in the B layer.

DATA FORM 1 - WETLAND OO
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot OO-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Populus tremuloides*	FACU	1. *Dryopterus sp.*	-
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Alnus incana*	NI	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/2 x 100=0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of Wetland NN along the SW portion of E most portion of PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot OO-1 Between wetland flags: OO8&OO9

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland OO Transect 1 – Upland Plot OO -1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND OO
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot OO-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	12	(cm.)
Depth to saturated soil:	0	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- Inundated
- √ Saturated within Upper 30.5 centimeters
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- Oxidized Root Channels in Upper 30.5 centimeters
- Water-Stained Leaves
- Local Soil Survey Data
- FAC-Neutral Test
- Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Populus deltoides*	FAC	1. *Carex sp.*	-
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of Wetland NN along the SW portion of E most portion of PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot OO-2 Between wetland flags: OO8&OO9

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland OO Transect 1 – Wetland Plot OO-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: peaty loam
6 cm B layer
hue value/chroma: 10YR4/1
texture: loamy sand
33 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: A layer is darker than the Munsell soil color chart allows.

DATA FORM 1 - WETLAND OO
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot OO-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Onoclea sensibilis*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Populus deltoides*	FAC	1.	
2. *Alnus incana*	NI	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100=66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of Wetland NN along the SW portion of E most portion of PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Elnora loamy fine sand (EnA) Drainage Class: moderately well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot OO-3 Between wetland flags: OO8&OO9

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland OO Transect 1 – Upland Plot OO-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
5 cm B layer
hue value/chroma: 10YR4/3
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

Note: Fair amount of roots present in the A layer.

DATA FORM 1 - WETLAND PP
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot PP-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennslyvanica*	FACW	1.	
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Populus tremuloides*	FACU	1.	
2. *Alnus incana*	NI	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/3 x 100 = 33%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of Wetland OO along S portion of E most portion of PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot PP-1 Between wetland flags: PP9&PP10

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland PP Transect 1 – Upland Plot PP-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND PP
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot PP-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	24	(cm.)
Depth to saturated soil:	19	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Carex sp.*	-
2.		2. *Juncus effusus*	FACW+
3.		3. *Polygonum sagittatum*	OBL
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/3 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of Wetland OO along S portion of E most portion of PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot PP-2 Between wetland flags: PP9&PP10

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland PP Transect 1 – Wetland Plot PP-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: silty loam
6 cm B layer
hue value/chroma: 10YR4/1
texture: sandy loam
18 cm B layer
hue value/chroma: 10YR5/2
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 15% mottling present in the B layer.

Note: Approximately 10% mottling present in the C layer.

DATA FORM 1 - WETLAND PP
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot PP-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

_____ Stream, Lake, or Tide Gauge

√ Aerial Photographs

√ Other: NWI, USGS

_____ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:

_____ Inundated

_____ Saturated within Upper 30.5 centimeters

_____ Water Marks

_____ Drift Lines

_____ Sediment Deposits

_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

_____ Oxidized Root Channels in Upper 30.5 centimeters

_____ Water-Stained Leaves

√ Local Soil Survey Data

_____

√ FAC-Neutral Test

_____ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Fraxinus pennslyvanica*	FACW	1. *Poa sp.*	-
2.		2. *Solidago sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of Wetland OO along S portion of E most portion of PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: PP Between wetland flags: PP9&PP10

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland PP Transect 1 – Upland Plot PP-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND PP
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot PP-4

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Acer rubrum*	FAC	1. *Poa sp.*	-
2. *Quercus alba*	FACU-	2.	
3. *Betula populifolia*	FAC	3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Hamamelis virginiana*	FAC-	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/4 x 100 = 50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of Wetland OO along S portion of E most portion of PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Upland Plot PP-4 Between wetland flags:PP14&PP15

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland PP Transect 2– Upland Plot PP-4 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: loamy sand
8 cm B layer
hue value/chroma: 10YR5/4
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND PP
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot PP-5

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	8	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- √ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Hydrologic criteria are met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Lemna sp.*	-
2.		2. *Juncus effusus*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100 = 100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of Wetland OO along S portion of E most portion of PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Wetland Plot PP-5 Between wetland flags:PP14&PP15

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland PP Transect 2– Wetland Plot PP-5 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	

Soil Profile:

0 cm A layer
hue value/chroma:
texture:
cm B layer
hue value/chroma:
texture:
cm stopped

Conclusion/Comments:

Soil is hydric by criteria I.

No soil pit dug due to ponding.

Note: Petroleum observed on water surface.

DATA FORM 1 - WETLAND PP
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional northern hardwoods
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 2
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot PP-6

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1. *Robinia pseudoacacia*	FACU-	1. *Poa sp.*	-
2. *Quercus rubrum*	FACU-	2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/2 x 100 = 0%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: S of Wetland OO along S portion of E most portion of PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 2 Wetland: Upland Plot PP-6 Between wetland flags:PP14&PP15

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland PP Transect 2– Upland Plot PP-6 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma: 10YR5/4
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 5/03/11
Applicant/Owner: NYSDOT State: NY Sampling Point: ROP PPX-1
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): Glacial lake plain Local relief (concave, convex, none): none
Slope (%): 0-3 Lat: 42° 43' 34.31"N Long: 73° 48' 20.15"W Datum: _____
Soil Map Unit Name: Elnora loamy fine sand (EnA) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators present.

SAMPLING POINT: ROPPPY

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Robinia pseudoacacia*	10	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Robinia pseudoacacia*	75	Yes	FACU
2. *Lonicera tatarica*	5	No	FACU
3.			
4.			
5.			
6.			
7.			
	80 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Galium sp.*	85	Yes	FAC
2. *Geum sp.*	45	Yes	FAC
3. *Urtica sp.*	10	No	FAC
4. *Alliaria Petiolata*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	145 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1. *Vitis sp.*	10	Yes	FAC
2.			
3.			
4.			
	10 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/3	100					loamy sand	
6-18	10YR 4/4	100					loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 5/03/11
Applicant/Owner: NYSDOT State: NY Sampling Point: ROP PPX-2
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): Glacial lake plain Local relief (concave, convex, none): none
Slope (%): 0-3 Lat: 42° 43' 34.31" Long: 73° 48' 20.15"W Datum: _____
Soil Map Unit Name: Elnora loamy fine sand (EnA) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: ROPPPY

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Rhus typhina*	30	Yes	FACU
2. *Ulmus americana*	25	Yes	FACW
3. *Robinia pseudoacacia*	20	Yes	FACU
4.			
5.			
6.			
7.			
	75	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Robinia pseudoacacia*	15	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Alliaria Petiolata*	60	Yes	FACU
2. *Solidaga sp.*	30	Yes	FAC
3. *Poa sp.*	30	No	FAC
4. *Carex sp.*	20	No	FAC
5. *Onoclea sensibilis*	10	No	FACW
6. *Geum sp.*	5	No	FAC
7. *Impatiens capensis*	5	No	FACW
8.			
9.			
10.			
11.			
12.			
	160	= Total Cover	

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
		= Total Cover	

Remarks: (Include photo numbers here or on separate sheet)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

_____ Rapid Test for Hydrophytic Vegetation

_____ Dominance Test is >50%

_____ Prevalence Index is ≤3.0[1]

_____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** X

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					loamy sand	
10-18	10YR 4/4	100					loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators present.

DATA FORM 1 - WETLAND QQ
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot QQ-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrolog criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Panicum dichotomiflorum*	FACW-
2.		2. *Solidago sp.*	-
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Wetland TT, in the N portion of the E most portion of the PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Colonie loamy fine sand (CoB) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot QQ-1 Between wetland flags:QQ4&QQ5

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland QQ Transect 1 – Upland Plot QQ-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: loamy sand
11 cm B layer
hue value/chroma: 10YR4/1
texture: loamy sand
26 cm C layer
hue value/chroma: 10YR5/3
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

DATA FORM 1 - WETLAND QQ
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 17, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Wet meadow
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot QQ-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)

- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	31	(cm.)
Depth to saturated soil:	16	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:

- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)

- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrologic criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Carex sp.*	-
2.		2. *Onoclea sensibilis*	FACW
3.		3. *Lythrum salicaria*	FACW+
4.		4. *Phragmites australis*	FACW
5.		5. *Juncus effusus*	FACW+
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/4 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Wetland TT, in the N portion of the E most portion of the PSA Preparer: EBW, SCC Date: November 17, 2009	Mapped Soil Series: Colonie loamy fine sand (CoB) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot QQ-2 Between wetland flags:QQ4&QQ5

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland QQ Transect 1 – Wetland Plot QQ-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/1
texture: loamy peaty
3 cm B layer
hue value/chroma: 10YR4/1
texture: loamy sand
18 cm C layer
hue value/chroma: 10YR5/2
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: A layer is darker than the Munsell soils color chart allows.

Note: Approximately 15% mottling present in the C layer.

DATA FORM 1 - WETLAND RR
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 18, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot RR-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrologic criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa sp.*	-
2.		2. *Phragmites australis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Albany Shaker Rd & Wetland CC in N central portion of PSA Preparer: EBW, SCC Date: November 18, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot RR-1 Between wetland flags: RR4&RR5

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland RR Transect 1– Upland Plot RR-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND RR
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 18, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot RR-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	14	(cm.)
Depth to saturated soil:	11	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2. *Poa sp.*	-
3.		3. *Lythrum salicaria*	FACW+
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Alnus incana*	NI	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/3 x 100=66%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Albany Shaker Rd & Wetland CC in N central portion of PSA Preparer: EBW, SCC Date: November 18, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot RR-2 Between wetland flags: RR4&RR5

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland RR Transect 1– Wetland Plot RR-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	No
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	Yes
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	No
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	No
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: silty loam
11 cm B layer
hue value/chroma: 10YR4/1
texture: silty loam
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

DATA FORM 1 - WETLAND RR
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 18, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Old field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot RR-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa sp.*	-
2.		2. *Phragmites australis*	FACW
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rhus typhina*	UPL	1.	
2. *Rosa multiflora*	FACU	2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/3 x 100=33%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Albany Shaker Rd & Wetland CC in N central portion of PSA Preparer: EBW, SCC Date: November 18, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot RR-3 Between wetland flags: RR4&RR5

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland RR Transect 1– Upland Plot RR-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 5/02/11
Applicant/Owner: NYSDOT State: NY Sampling Point: RRXT1U
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): Glacial lake plain Local relief (concave, convex, none): none
Slope (%): 0-2 Lat: 42° 43' 45.48"N Long: 73° 48' 9.35"W Datum: _____
Soil Map Unit Name: Granby loamy fine sand (Gr) NWI classification: PFO1C
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: RRXT1U

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			FACW
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Phragmites australis*	45	Yes	FACW
2. *Cirsium sp.*	40	Yes	FAC
3. *Impatiens capensis*	25	No	FACW
4. *Solidago sp.*	15	No	FAC
5. *poa sp.*	40	Yes	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	165 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Remarks: (Include photo numbers here or on separate sheet)

5' - 8' x 10'
15' - 10' x 70'
30' - 20' x 140'

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1=
FACW species		x 2=
FAC species		x 3=
FACU species		x 4=
UPL species		x 5=
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation
X Dominance Test is >50%
____ Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/2	100					loamy sand	
3-6	10YR 4/3	60	7.5YR 4/6	40	C	M	loamy sand	
6-16	7.5YR 2.5/1	90	7.5YR 3/4	10	C	M	loamy sand	
16-18	10YR 5/3	90	7.5YR 4/6	10	C	M	loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 5/02/11
Applicant/Owner: NYSDOT State: NY Sampling Point: RRXT1W
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): Glacial lake plain Local relief (concave, convex, none): none
Slope (%): 0-2 Lat: 42° 43' 45.48"N Long: 73° 48' 9.35"W Datum: _____
Soil Map Unit Name: Granby loamy fine sand (Gr) NWI classification: _____
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: RR

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
X High Water Table (A2)
X Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes X No _____ Depth (inches) _____
Saturation Present? Yes X No _____ Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: RRXT1W

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			FACW
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Phragmites australis*	100	Yes	FACW
2. *Symplocarpus foetidus*	10	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	110	= Total Cover	

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Remarks: (Include photo numbers here or on separate sheet)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1=
FACW species		x 2=
FAC species		x 3=
FACU species		x 4=
UPL species		x 5=
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					loamy sand	
18	Gley2 6/SPB	100					loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
X____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
_____ Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X____ No _____

Remarks:

DATA FORM 1 - WETLAND SS
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 18, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot SS-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa sp.*	-
2.		2. *Juncus effusus*	FACW+
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: B/n Wetlands QQ & TT, in N portion of the E most portion of PSA Preparer: EBW, SCC Date: November 18, 2009	Mapped Soil Series: Colonie loamy fine sand (CoB) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot SS-1 Between wetland flags: SS1&SS6

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	No
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland SS Transect 1 – Upland Plot SS-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: loamy sand
9 cm B layer
hue value/chroma: 10YR5/3
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Approximately 5% mottling present in the B layer.

Refusal by roots.

DATA FORM 1 - WETLAND SS
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 18, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot SS-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	7	(cm.)
Depth to free water in pit:	-	(cm.)
Depth to saturated soil:	-	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- √ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Scripus cyperinus*	FACW+
2.		2. *Typhus angustifolia*	OBL
3.		3. *Juncus effusus*	FACW+
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/3 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: B/n Wetlands QQ & TT, in N portion of the E most portion of PSA Preparer: EBW, SCC Date: November 18, 2009	Mapped Soil Series: Colonie loamy fine sand (CoB) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot SS-2 Between wetland flags: SS1&SS6

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	Yes
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland SS Transect 1 – Wetland Plot SS-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	

Soil Profile:

0 cm A layer
hue value/chroma:
texture:
cm B layer
hue value/chroma:
texture:
cm stopped

Conclusion/Comments:

Soil is hydric by criteria I.

No soil pit dug due to ponding.

DATA FORM 1 - WETLAND SS
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 18, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot SS-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Juncus effusus*	FACW+
2.		2. *Poa sp.*	-
3.		3. *Solidago sp.*	-
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: B/n Wetlands QQ & TT, in N portion of the E most portion of PSA Preparer: EBW, SCC Date: November 18, 2009	Mapped Soil Series: Colonie loamy fine sand (CoB) Drainage Class: well drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot SS-3 Between wetland flags: SS1&SS6

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	No
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland SS Transect 1 – Upland Plot SS-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: loamy sand
10 cm B layer
hue value/chroma: 10YR5/3
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Note: Approximately 5% mottling present in the B layer.

Refusal by roots.

DATA FORM 1 - WETLAND TT
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 18, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Successional field
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot TT-1

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?		√
Wetland Hydrology Present?		√
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria not met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa sp.*	-
2.		2. *Solidago sp.*	-
3.		3. *Phragmites australis*	FACW
4.		4. *Lycopodium sp.*	-
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1. *Rosa multiflora*	FACU-	1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): ½ x 100=50%

Remarks: Hydrophytic vegetative criteria not met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Albany Shaker Rd in N most portion of E most portion of PSA Preparer: EBW, SCC Date: November 18, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot TT-1 Between wetland flags: TT3&TT4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland TT Transect 1 – Upland Plot TT-1 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
10 cm B layer
hue value/chroma: 10YR5/4
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

DATA FORM 1 - WETLAND TT
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 18, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York

Do Normal Circumstances exist on the site?	Yes	Community ID:	Shallow emergent marsh
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Wetland Plot TT-2

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?	√	

	Yes	No
Is this Sampling Point Within a Wetland?	√	

Remarks: Area meets the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water:	-	(cm.)
Depth to free water in pit:	14	(cm.)
Depth to saturated soil:	0	(cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- √ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- ___
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Phragmites australis*	FACW
2.		2.	
3.		3.	
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Albany Shaker Rd in N most portion of E most portion of PSA Preparer: EBW, SCC Date: November 18, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Wetland Plot TT-2 Between wetland flags: TT3&TT4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	Yes
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	No
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	No
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	No
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	Yes
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	No
III.F.	Have a spodic horizon **and** one of the following morphologies:	No
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland TT Transect 1 – Wetland Plot TT-2 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR2/2
texture: peaty loam
6 cm B layer
hue value/chroma: 10YR4/1
texture: loamy sand
14 cm B layer
hue value/chroma: 10YR6/2
texture: loamy sand
31 cm stopped

Conclusion/Comments:

Soil is hydric by criteria III.D.

Note: Approximately 5% mottling present in the C layer.

DATA FORM 1 - WETLAND TT
WETLAND DETERMINATION

(modified in format from 1987 ACOE Wetlands Delineation Manual)

Project/Site:	I-87 Exit 3	Date:	November 18, 2009
Applicant/Owner:	NYSDOT	County:	Albany
Investigators:	Eric B. Watkins, Stephanie C. Craig	State:	New York
Do Normal Circumstances exist on the site?	Yes	Community ID:	Backslope of Albany Shaker Road
Is the site significantly disturbed (Atypical Situation)?	No	Transect ID:	Transect 1
Is the area a potential Problem Area?	No	Plot ID:	Upland Plot TT-3

Remarks:

WETLAND DETERMINATION

	Yes	No
Hydrophytic Vegetation Present?	√	
Wetland Hydrology Present?	√	
Hydric Soils Present?		√

	Yes	No
Is this Sampling Point Within a Wetland?		√

Remarks: Area does not meet the 3 criteria required by the USACE to be considered a wetland.

HYDROLOGY

√ Recorded Data (Describe in Remarks)
- ___ Stream, Lake, or Tide Gauge
- √ Aerial Photographs
- √ Other: NWI, USGS

___ No recorded Data

Field Observations:

Depth of surface water: - (cm.)

Depth to free water in pit: - (cm.)

Depth to saturated soil: - (cm.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated within Upper 30.5 centimeters
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ___ Oxidized Root Channels in Upper 30.5 centimeters
- ___ Water-Stained Leaves
- √ Local Soil Survey Data
- √ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology criteria met.

VEGETATION (Dominant Plant Species)

Trees	Indic.	Herbs	Indic.
1.		1. *Poa sp.*	-
2.		2. *Solidago sp.*	-
3.		3. *Phragmites australis*	FACW
4.		4.	
5.		5.	
Sapling/Shrubs	**Indic.**	**Woody Vines**	**Indic.**
1.		1.	
2.		2.	
3.		3.	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/1 x 100=100%

Remarks: Hydrophytic vegetative criteria met.

Quick Field Reference to
Field Indicators for Identifying Hydric Soils
Version 2, July 1998

Project: I-87 Exit 3 Location: SW of Albany Shaker Rd in N most portion of E most portion of PSA Preparer: EBW, SCC Date: November 18, 2009	Mapped Soil Series: Granby loamy fine sand (Gr) Drainage Class: very poorly drained Field Observation: Confirm Mapped Type?	Transect 1 Wetland: Upland Plot TT-3 Between wetland flags: TT3&TT4

Criteria	*Field Indicator*	*Comments*
I.	Soils frequently ponded or flooded for a long or very long duration during the growing season	No
II.	Soils flooded daily by tides and/or have sulfidic materials w/in 12" (30.5 cm) of the soil surface	No
III.	Soils have aquic conditions w/in the upper part of the soil for some period of time in most years, **and**	No
III.A.	have organic soils at or near the soil surface that are greater than 16" (40.6 cm) thick; **or**	
III.B.	have organic soils at or near the soil surface that are 8-16" (20.3-40.6 cm) thick, **and** directly underlying the O or A horizon, have a depleted or gleyed matrix and/or other redoximorphic features;	
III.C.	have a layer 4-8" (10.2-20.3 cm) thick of partially to well decomposed organic soil material **and/or** a mucky A or Ap horizon, **and** are directly underlain by a horizon with a depleted **or** gleyed matrix; **or**	
III.D.	w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying an A or Ap or O horizon, is a horizon with a depleted or gleyed matrix; **or**	
III.E.	beginning w/in 20" (50.8 cm) of the top of the mineral soil **and** directly underlying a thick or very thick, dark A or Ap horizon is a horizon with a depleted **or** gleyed matrix that is $\geq$ 4" (10.2 cm) thick; **or**	
III.F.	Have a spodic horizon **and** one of the following morphologies:	
F.1.	W/in 6" (15.2 cm) of the top of the mineral soil have an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a spodic horizon with **either**:	
F.1.a.	a Bs horizon with redoximorphic features in the upper part; **or**	
F.1.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.2.	Beginning w/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A horizon and/or a shallow E horizon or an O horizon, there is a dark Bh and/or Bhs horizon that is > 2" thick that is directly underlain by a horizon with $\geq$ 5% redoximorphic features in the upper part: **or**	
F.3	W/in 10" (25.4 cm) of the top of the mineral soil **and** directly underlying a dark Ap horizon, is **either**:	
F.3.a	an E horizon with $\geq$ 5% redoximorphic features **and/or** organic streaking directly underlain by a horizon with redoximorphic features in the upper part; **or**	
F.3.b	a dark Bh and/or Bhs horizon directly underlain by a horizon with $\geq$5% redoximorphic features in the upper part	
F.3.c	a Bs horizon with $\geq$ 5% redoximorphic features in the upper part	

Wetland TT Transect 1 – Upland Plot TT-3 continued

Criteria	*Field Indicator*	*Comments*
III.G.	No spodic horizon and dominant textures in the upper 20” (50.8 cm) of the soil are loamy fine sand or coarser **and:**	Yes
G.1	have a layer 4-8” (10.2-20.3 cm) thick of partially to well-decomposed organic soil and/or a mucky A or Ap horizon; **and** are directly underlain by a horizon with ≥ 5% redoximorphic features; **or**	No
G.2	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features; **or**	No
G.3	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon is a horizon with a matrix color due to wetness of chroma 3 or less, value 4 or more, with ≥ 5% redoximorphic features	No
III.H.	No spodic horizon present a**nd** the dominant texture in the upper 20” (50.8 cm) of soil are finer than loamy fine sand, **and**	No
H.1	w/in 10” (25.4 cm) of the top of the mineral soil **and** directly underlying a dark A or Ap or O horizon is a horizon with ≥ 10% redox depletions, **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **or**	
H.2	w/in 15” (38.1 cm) of the top of the mineral soil **and** directly underlying a thick, very dark Ap horizon, is a horizon with **either:**	
H.2.a	≥ 20% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed ; **or**	
H.2.b	≥ 10% redox depletions **and** w/in 20” (50.8 cm) of the mineral soil surface there is a horizon with a depleted or gleyed matrix; **and** there are ≥ 5% redoximorphic features w/in 6” (15.2 cm) of the top of the top of the mineral soil	
III.I.	Any soil that has a very dark A or Ap or O horizon < 10” inches (25.4 cm) thick directly underlain by a horizon with a matrix color due to wetness of chroma 3 or less, with ≥ 10% redoximorphic features; **and** w/in 6” (15.2 cm) of the mineral soil surface **has:**	No
I.1	≥ 5% redox concentrations and/or depletions, **and/or**	
I.2	≥ 2% Fe/Mn nodules **and/or** concretions	
IV.	Problem soil: disturbed and/or altered.	No

Soil Profile:

0 cm A layer
hue value/chroma: 10YR3/2
texture: loamy sand
cm B layer
hue value/chroma:
texture:
31 cm stopped

Conclusion/Comments:

Soil does not meet hydric criteria.

Refusal by roots.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/07/11
Applicant/Owner: NYSDOT State: NY Sampling Point: TTXT1U
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): lake plain depression Local relief (concave, convex, none): none
Slope (%): 0-2 Lat: 42° 44' 10.31"N Long: 73° 48' 31.32"W Datum: _____
Soil Map Unit Name: Granby loamy fine sand (Gr) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators present.

SAMPLING POINT: TTXT1U

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Quercus rubra*	90	Yes	FACU
2. *Acer rubrum*	30	Yes	FAC
3.			
4.			
5.			
6.			
7.			
	120 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Acer rubrum*	30	Yes	FAC
2. *Hamamelis virginiana*	25	Yes	FAC
3. *Fraxinus pennsylvanica*	2	No	FACW
4.			
5.			
6.			
7.			
	57 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Acer rubrum*	20	Yes	FAC
2. *Fraxinus pennsylvanica*	20	Yes	FACW
3. *Vaccinium angustifolium*	5	Yes	FACU
4. *Thelypteris noveboracensis*	5	Yes	FAC
5. *Osmunda cinnamomea*	5	Yes	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 78% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/1	100					loamy fine sand	
2-8	10YR 4/3	100					loamy fine sand	
8-18	7.5YR 4/6	100					loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/07/11

Applicant/Owner: NYSDOT State: NY Sampling Point: TTXT1W

Investigator (s): Donald Lockwood Section, Township, Range: _____

Landform (hillslope, terrace, etc): lake plain depression Local relief (concave, convex, none): none

Slope (%): 0-2 Lat: 42° 44' 10.31"N Long: 73° 48' 31.32"W Datum: _____

Soil Map Unit Name: Granby loamy fine sand (Gr) NWI classification: PSS1E/PFO1E

Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)

Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: TTX

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
X Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
X Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____

Water Table Present? Yes _____ No X Depth (inches) _____

Saturation Present? Yes X No _____ Depth (inches) 0
(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: TTXT1W

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Acer rubrum*	70	Yes	FAC
2. *Ulmus americana*	30	Yes	FACW
3. *Quercus alba*	20	No	FACU
4.			
5.			
6.			
7.			
	120 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Acer rubrum*	20	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	20 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Symplocarpus foetidus*	40	Yes	OBL
2. *Impatiens capensis*	35	Yes	FACW
3. *Onoclea sensibilis*	20	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 2/1	100					loamy fine sand	
9-18	10YR 4/1	95	10YR 5/8	5	C	M	loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

X Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: Interstate 87 Exit 3 City/County: Albany County Sampling Date: 7/21/10

Applicant/Owner: NYS Department of Transportation State: NY Sampling Point: Wetland Plot UU-2

Investigator (s): Eric B. Watkins Section, Township, Range: Town of Colonie

Landform (hillslope, terrace, etc): naturalized ditch Local relief (concave, convex, none): concave

Slope (%): 1 - 2 Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Granby fine sandy loam (Gr) NWI classification: PEM1E

Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)

Are vegetation No Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are vegetation No, Soil No, or Hydrology No naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: Shallow emergent marsh

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
X Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
X Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____

Water Table Present? Yes _____ No X Depth (inches) _____

Saturation Present? Yes _____ No X Depth (inches) _____

(includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: UU-2

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 10' x 180')	Absolute % Cover	Dominant Species	Indicator Status
1. *Fraxinus pennsylvanica*	3	No	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	3 = Total Cover		

Sapling/Shrub Stratum (Plot size: 10' x 70')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 8' x 10')			
1. *Phragmites australis*	115	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115 = Total Cover		

Woody Vine Stratum (Plot size: 10' x 180')			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1=	
FACW species		x 2=	
FAC species		x 3=	
FACU species		x 4=	
UPL species		x 5=	
Column Totals:	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Rapid Test for Hydrophytic Vegetation

_____ Dominance Test is >50%

_____ Prevalence Index is ≤3.0[1]

_____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Rectangular plots were utilized in order to assess the maximum amount of the linear wetland community.

Hydrophytic Vegetation Present? **Yes** X **No** _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10 YR 2/1	100					silt loam	many fine roots
4-13	10 YR 5/1	55	10 YR 4/6	45	C	M	silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
_____ Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_X_ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _X_ No _____

Remarks:

A horizon is darker than the Munsell Soil Color Chart allows for.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: Interstate 87 Exit 3 City/County: Albany County Sampling Date: 7/21/10

Applicant/Owner: NYS Department of Transportation State: NY Sampling Point: Upland Plot UU-1

Investigator (s): Eric B. Watkins Section, Township, Range: Town of Colonie

Landform (hillslope, terrace, etc): backslope of roadway Local relief (concave, convex, none): convex

Slope (%): 30 Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Granby fine sandy loam (Gr) NWI classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)

Are vegetation No Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are vegetation No, Soil No, or Hydrology No naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____

Water Table Present? Yes _____ No X Depth (inches) _____

Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: UPL UU

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 10' x 180')	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 10' x 70')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 8' x 10')			
1. *Poa pratensis*	90	Yes	FACU
2. *Phragmites australis*	12	No	FACW
3. *Taraxacum officinale*	4	No	FACU-
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	106 = Total Cover		

Woody Vine Stratum (Plot size: 10' x 180')			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply by:
OBL species	0	x 1=	0
FACW species	1	x 2=	2
FAC species	0	x 3=	0
FACU species	2	x 4=	8
UPL species	0	x 5=	0
Column Totals:	3 (A)		10 (B)

Prevalence Index = B/A = 3.3

Hydrophytic Vegetation Indicators:

_____ Rapid Test for Hydrophytic Vegetation

_____ Dominance Test is >50%

_____ Prevalence Index is ≤3.0[1]

_____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Rectangular plots were utilized in order to assess the maximum amount of the sloped upland community (containing the same hydrologic, vegetative and soil conditions) adjacent to the linear wetland community.

Hydrophytic Vegetation Present? **Yes** _____ **No** X

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10 YR 2/1	100					loamy fine sand	some fine roots

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11
Applicant/Owner: NYSDOT State: NY Sampling Point: ROP UUX-1
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): lake plain Local relief (concave, convex, none): none
Slope (%): 0-3 Lat: 42° 44' 13.55"N Long: 73° 47' 10.31"W Datum: _____
Soil Map Unit Name: Stafford loamy fine sand (St) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: UU

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

X Surface Water (A1)
X High Water Table (A2)
X Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches) <1
Water Table Present? Yes X No _____ Depth (inches) 0
Saturation Present? Yes X No _____ Depth (inches) 0
(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: ROP UPX

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Phragmites australis*	95	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1=
FACW species		x 2=
FAC species		x 3=
FACU species		x 4=
UPL species		x 5=
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					loamy fine sand	
4-18	10YR 4/2	90	7.5YR 4/6	10	C	M	loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
X Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/07/11
Applicant/Owner: NYSDOT State: NY Sampling Point: VVT1U
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): lake plain Local relief (concave, convex, none): none
Slope (%): 0-3 Lat: 42° 44' 16.79"N Long: 73° 48' 31.32"W Datum: _____
Soil Map Unit Name: Stafford loamy fine sand (St) NWI classification: PFO1C
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators present.
Photos 1&2.

SAMPLING POINT: VVT1U

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Salix nigra*	90	Yes	FACW
2. *Acer rubrum*	15	No	FAC
3. *Fraxinus pennsylvanica*	15	No	FACW
4. *Ulmus americana*	5	No	FACW
5.			
6.			
7.			
	125	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Cornus foemina*	30	Yes	FAC
2. *Lonicera tatrica*	20	No	FACU
3. *Rhamnus cathartica*	5	No	UPL
4.			
5.			
6.			
7.			
	55	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Cornus amomum*	30	Yes	FACW
2. *Carex sp.*	20	Yes	FAC
3. *Impatiens capensis*	15	No	FACW
4. *Ulmus americana*	5	No	FACW
5. *Acer rubrum*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	75	= Total Cover	

Woody Vine Stratum (Plot size: 15' radius)			
1. *Parthenocissus quinquefolia*	10	Yes	FACU
2.			
3.			
4.			
	10	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					loamy fine sand	
4-18	10YR 5/4	80	7.5YR 4/6	20	C	M	loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators present.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/07/11

Applicant/Owner: NYSDOT State: NY Sampling Point: VVT1W

Investigator (s): Donald Lockwood Section, Township, Range: _____

Landform (hillslope, terrace, etc): lake plain Local relief (concave, convex, none): none

Slope (%): 0-3 Lat: 42° 44' 16.79"N Long: 73° 48' 31.32"W Datum: _____

Soil Map Unit Name: Stafford loamy fine sand (St) NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)

Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: Wetland VV

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- _____ Surface Water (A1)
- _____ High Water Table (A2)
- X Saturation (A3)
- _____ Water Marks (B1)
- _____ Sediment Deposits (B3)
- _____ Drift Deposits (B3)
- _____ Algal Mat or Crust (B4)
- X Iron Deposits (B5)
- _____ Inundation Visible on Aerial Imagery (B7)
- _____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- _____ Aquatic Fauna (B13)
- _____ Marl Deposits (B15)
- _____ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- _____ Presence of Reduced Iron (C4)
- _____ Recent Iron Reduction in Tilled Soils (C6)
- _____ Thin Muck Surface (C7)
- _____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- _____ Surface Cracks (B6)
- X Drainage Patters (B10)
- _____ Moss Trim Lines (B16)
- X Dry-Season Water Table (C2)
- _____ Crayfish Burrows (C8)
- _____ Saturation Visible on Aerial Imagery (C9)
- _____ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- _____ Shallow Aquitard (D3)
- _____ Mircotopographic Relief (D4)
- _____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____

Water Table Present? Yes _____ No X Depth (inches) _____

Saturation Present? Yes X No _____ Depth (inches) 8

(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: VVT1W

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Salix nigra*	20	Yes	FACW
2. *Fraxinus pennsylvanica*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	35 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Cornus amomum*	30	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	30 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Carex sp.*	20	Yes	FAC
2. *Carex vulpinoidea*	10	Yes	OBL
3. *Lythrum salicaria*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	35 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11

Applicant/Owner: NYSDOT State: NY Sampling Point: ROP WW-1

Investigator (s): Donald Lockwood Section, Township, Range: _____

Landform (hillslope, terrace, etc): lake plain Local relief (concave, convex, none): none

Slope (%): 0-3 Lat: 42° 44' 16.44"N Long: 73° 47' 6.72"W Datum: _____

Soil Map Unit Name: Stafford loamy fine sand (St) NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)

Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: Wetland WW

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
X High Water Table (A2)
X Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
X Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____

Water Table Present? Yes X No _____ Depth (inches) 8

Saturation Present? Yes X No _____ Depth (inches) 3

(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: ROPWW1

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Typha latifolia*	70	Yes	OBL
2. *Lythrum salicaria*	5	No	FACW
3. *Onoclea sensibilis*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR3/1	100					loamy fine sand	
4-18	10YR 4/2	95	7.5YR 4/6	5	C	M	loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
X Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	100					loamy fine sand	
12-18	10YR 4/2	70	7.5YR 5/6	30	C	M	loamy fine sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
X_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
_____ Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X____ No _____

Remarks:

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11
Applicant/Owner: NYSDOT State: NY Sampling Point: XXT1U
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): plain Local relief (concave, convex, none): none
Slope (%): 0-2 Lat: 42° 44' 10.31"N Long: 73° 47' 14.28"E Datum: _____
Soil Map Unit Name: Udipsamments - Urban land complex NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area**
Hydric Soil Present?	Yes _____ No X	**within a Wetland?** Yes _____ No X
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1)
_____ Sediment Deposits (B3)
_____ Drift Deposits (B3)
_____ Algal Mat or Crust (B4)
_____ Iron Deposits (B5)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Water-Stained Leaves (B9)
_____ Aquatic Fauna (B13)
_____ Marl Deposits (B15)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres on Living Roots (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Tilled Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

_____ Surface Cracks (B6)
_____ Drainage Patters (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ Mircotopographic Relief (D4)
_____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
Water Table Present? Yes _____ No X Depth (inches) _____
Saturation Present? Yes _____ No X Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators present.

SAMPLING POINT: XXT1U

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Populus tremula*	40	Yes	FACU
2. *Betula populifolia*	10	No	FAC
3. *Fraxinus pennsylvanica*	10	No	FACW
4. *Acer rubrum*	10	No	FAC
5.			
6.			
7.			
	70	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Populus tremula*	10	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	10	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Onoclea sensibilis*	80	Yes	FACW
2. *Impatiens capensis*	20	No	FACW
3. *Unknown cotyledon*	20	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	120	= Total Cover	

Woody Vine Stratum (Plot size: 15' radius)			
1. *Celastrus orbiculatus*	30	Yes	UPL
2.			
3.			
4.			
	30	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

_____ Rapid Test for Hydrophytic Vegetation

_____ Dominance Test is >50%

_____ Prevalence Index is ≤3.0[1]

_____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** _____ **No** X

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/3	100					loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)

_____Histic Epipedon (A2)

_____ Black Histic (A3)

_____ Hydrogen Sulfide (A4)

_____ Stratified Layers (A5)

_____ Depleted Below Dark Surface (A11)

_____ Thick Dark Surface (A12)

_____ Sandy Mucky Mineral (S1)

_____ Sandy Gleyed Matrix (S4)

_____ Sandy Redox (S5)

_____ Stripped Matrix (S6)

_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**

_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

_____ Loamy Mucky Mineral (F1) (**LRR K, L**)

_____ Loamy Gleyed Matrix (F2)

_____ Deplete Matrix (F3)

_____ Redox Dark Surface (F6)

_____ Depleted Dark Surface (F7)

_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

_____ Coast Prairie Redox (A16) (**LRR K, L, R**)

_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

_____ Dark Surface (S7) (**LRR K, L**)

_____ Polyvalue Below Surface (S8) (**LRR K, L**)

_____ Thin Dark Surface (S9) (**LRR K, L**)

_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)

_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)

_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)

_____ Red Parent Material (TF2)

_____ Very Shallow Dark Surface (TF 12)

_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators present.

Print Form

WETLAND DETERMINATION DATA FROM - Northcentral and Northeast Region

Project/Site: I-87 Exit 3 City/County: Albany County Sampling Date: 6/08/11
Applicant/Owner: NYSDOT State: NY Sampling Point: XXT1W
Investigator (s): Donald Lockwood Section, Township, Range: _____
Landform (hillslope, terrace, etc): plain Local relief (concave, convex, none): none
Slope (%): 0-2 Lat: 42° 44' 10.31"N Long: 73° 47' 14.28"W Datum: _____
Soil Map Unit Name: Udipsamments - Urban land complex (Uf) NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of yr? Yes X No _____ (if no explain in Remarks)
Are vegetation no Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation no, Soil no, or Hydrology no naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	If yes, optional Wetland Site ID: XX

Remarks: (Explain alternative procedure here or in a separate report)

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- _____ Water Marks (B1)
- _____ Sediment Deposits (B3)
- _____ Drift Deposits (B3)
- _____ Algal Mat or Crust (B4)
- _____ Iron Deposits (B5)
- _____ Inundation Visible on Aerial Imagery (B7)
- _____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- _____ Aquatic Fauna (B13)
- _____ Marl Deposits (B15)
- _____ Hydrogen Sulfide Odor (C1)
- _____ Oxidized Rhizospheres on Living Roots (C3)
- _____ Presence of Reduced Iron (C4)
- _____ Recent Iron Reduction in Tilled Soils (C6)
- _____ Thin Muck Surface (C7)
- _____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- _____ Surface Cracks (B6)
- _____ Drainage Patters (B10)
- _____ Moss Trim Lines (B16)
- _____ Dry-Season Water Table (C2)
- _____ Crayfish Burrows (C8)
- _____ Saturation Visible on Aerial Imagery (C9)
- _____ Stunted or Stressed Plants (D1)
- _____ Geomorphic Position (D2)
- _____ Shallow Aquitard (D3)
- _____ Mircotopographic Relief (D4)
- _____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No_____ Depth (inches) _____
Water Table Present? Yes X No _____ Depth (inches) _____
Saturation Present? Yes X No _____ Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SAMPLING POINT: XXT1W

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Status
1. *Acer rubrum*	95	Yes	FAC
2. *Fraxinus pennsylvanica*	25	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	120 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Acer rubrum*	5	Yes	FAC
2. *Fraxinus pennsylvanica*	5	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Onoclea sensibilis*	30	Yes	FACW
2. *Cornus foemina*	10	Yes	FAC
3. *Populus tremula*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	45 = Total Cover		

Woody Vine Stratum (Plot size: 15' radius)			
1. *Celastrus orbiculatus*	10	Yes	UPL
2.			
3.			
4.			
	10 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 86% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1=	
FACW species	x 2=	
FAC species	x 3=	
FACU species	x 4=	
UPL species	x 5=	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide Supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines >than 3.28 ft in height.

Remarks: (Include photo numbers here or on separate sheet)

Hydrophytic Vegetation Present? **Yes** X **No** ____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	100					loamy sand	
4-15	10YR 4/2	90	7.5YR 3/4	10	C	M	loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coasted Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

_____ Histosol (A1)
_____Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (A5)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Dark Surface (S7) (**LRR R, MLRA 149B**)

_____ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B)**
_____ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
_____ Loamy Mucky Mineral (F1) (**LRR K, L**)
_____ Loamy Gleyed Matrix (F2)
X Deplete Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

_____ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
_____ Coast Prairie Redox (A16) (**LRR K, L, R**)
_____ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
_____ Dark Surface (S7) (**LRR K, L**)
_____ Polyvalue Below Surface (S8) (**LRR K, L**)
_____ Thin Dark Surface (S9) (**LRR K, L**)
_____ Iron-Manganese Masses (F12) **(LRR K, L, R**)
_____ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
_____ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
_____ Red Parent Material (TF2)
_____ Very Shallow Dark Surface (TF 12)
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

EXHIBIT B
Hydric Soils Lists of New York State & Albany County

Wetland Assessment and Delineation Report
Interstate 87 (I-87) Exit 4 Access Improvements

January 2014

NYS Hydric Soils List
Albany County

area symbol	area name	mapunit sequence	mapunit symbol	mapunit name	component name	component percent	landforms	hydric rating	hydric criteria
NY001	Albany County, New York	0	Ad	Adrian muck	Adrian	75	Marshes, Swamps	Yes	1, 3
NY001	Albany County, New York	1	Ae	Allis silt loam	Allis	85	Depressions	Yes	2B3
NY001	Albany County, New York	8	Br	Birdsall mucky silt loam	Birdsall	85	Depressions	Yes	2B3, 3
NY001	Albany County, New York	15	Ca	Carlisle muck	Carlisle	75	Marshes, Swamps	Yes	1, 3
NY001	Albany County, New York	44	Fx	Fluvaquents-Udifluvents complex, frequently flooded	Fluvaquents, frequently flooded	45	Flood plains	Yes	2B3, 3, 4
NY001	Albany County, New York	45	Gr	Granby loamy fine sand	Granby	80	Depressions	Yes	2B2, 3
NY001	Albany County, New York	57	In	Ilion silt loam	Ilion	90	Depressions	Yes	2B3, 3
NY001	Albany County, New York	67	Ma	Madalin silt loam	Madalin	80	Depressions	Yes	2B3, 3
NY001	Albany County, New York	72	Mh	Medihemists and Hydraquents, ponded	Medihemists, ponded	45	Marshes, Swamps	Yes	1, 3
NY001	Albany County, New York	72	Mh	Medihemists and Hydraquents, ponded	Hydraquents	35	Marshes, Swamps	Yes	2B3, 3
NY001	Albany County, New York	90	Pa	Palms muck	Palms	80	Marshes, Swamps	Yes	1, 3
NY001	Albany County, New York	93	Ra	Raynham very fine sandy loam	Raynham, poorly drained	80	Depressions	Yes	2B3
NY001	Albany County, New York	101	Sh	Shaker fine sandy loam	Shaker	80	Depressions	Yes	2B3
NY001	Albany County, New York	130	Wo	Wayland silt loam	Wayland	85	Flood plains	Yes	2B3, 3, 4

Kelly Salada 06068
607-798-8186

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST
MAPUNITS WITH HYDRIC INCLUSIONS

Mapunits are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). The "FSA Criteria" columns contain information needed for the Food Security Act determinations required by Section 512.11(h)(4) of the National Food Security Manual (August, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
Ad:										
ADRIAN MUCK										
	ADRIAN (C)	Yes	---	1,3	NO	NO	YES	Wooded	---	270
	CARLISLE (I)	Yes	Bog	1,3	NO	NO	YES	Wooded		
	GRANBY (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MEDIHEMIST S (I)	Yes	Marsh	1,3	NO	NO	YES	Wooded		
	STAFFORD (I)	No								
Ae:										
ALLIS SILT LOAM										
	ALLIS (C)	Yes	---	2B3	YES	NO	NO	Wooded	---	510
	GREENE (I)	No								
	HORNELL (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	TULLER (I)	No								
AnA:										
ANGOLA SILT LOAM, 0 TO 3 PERCENT SLOPES										
	ANGOLA (C)	No								1280
	ALLIS (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	BURDETT (I)	No								
	GREENE (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	TULLER (I)	No								

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
An8: ANGOLA SILT LOAM, 3 TO 8 PERCENT SLOPES										
	ANGOLA (C)	No								4250
	ALLIS (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	BURDETT (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	TULLER (I)	No								
AnC: ANGOLA SILT LOAM, 8 TO 15 PERCENT SLOPES										
	ANGOLA (C)	No								600
	ALLIS (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	BURDETT (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	NUNDA (I)	No								
Br: BIRDSALL MUCKY SILT LOAM										
	BIRDSALL (C)	Yes	—	2B3,3	YES	NO	YES	Wooded	—	510
	ELMRIDGE (I)	No								
	RAYNHAM (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	SCIO (I)	No								
	SHAKER (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
BuA: BURDETT SILT LOAM, 0 TO 3 PERCENT SLOPES										
	BURDETT (C)	No								4870
	BUSTI (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	NUNDA (I)	No								

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
BuB: BURDETT SILT LOAM, 3 TO 8 PERCENT SLOPES										
	BURDETT (C)	No								19430
	BUSTI (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	NUNDA (I)	No								
BuC: BURDETT SILT LOAM, 8 TO 15 PERCENT SLOPES										
	BURDETT (C)	No								3380
	BUSTI (I)	No								
	CHAUTAUQUA (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	NUNDA (I)	No								
BvB: BURDETT SILT LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY										
	BURDETT (C)	No								190
	BUSTI (I)	No								
	CHAUTAUQUA (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	NUNDA (I)	No								
BxA: BUSTI SILT LOAM, 0 TO 3 PERCENT SLOPES										
	BUSTI (C)	No								580
	BURDETT (I)	No								
	CHAUTAUQUA (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	NUNDA (I)	No								

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
BxB:										
BUSTI SILT LOAM, 3 TO 8 PERCENT SLOPES										
	BUSTI (C)	No								1730
	BURDETT (I)	No								
	CHAUTAUQUA (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MUNDA (I)	No								
Ca:										
CARLISLE MUCK										
	CARLISLE (C)	Yes	—	1,3	NO	NO	YES	Wooded	—	590
	BIRDSALL (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	GRANBY (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	PALMS (I)	Yes	Bog	1,3	NO	NO	YES	Wooded		
Cs:										
COSAD LOAMY FINE SAND										
	COSAD (C)	No								340
	CLAVERACK (I)	No								
	ELMRIDGE (I)	No								
	GRANBY (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	SHAKER,									
	SWP									
	DRAINED (I)	No								

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
Fx:										
FLUVAQUENTS-UDIFLUVENTS COMPLEX, FREQUENTLY FLOODED										
	FLUVAQUENT									
	S (C)	Yes	---	2B3,3,4	YES	YES	YES	---	---	2055
	UDIFLUVENT									
	S (C)	No								1615
	HYDRAQUENT									
	S (I)	Yes	Marsh	2B3,3	YES	NO	YES	Wooded		
	MEDIHEMIST									
	S (I)	Yes	Marsh	2B3,3	YES	NO	YES	Wooded		
	MIDDLEBURY (I)	No								
	TEEL (I)	No								
	WAYLAND (I)	Yes	Flood Plain	2B3,3,4	YES	YES	YES	Wooded		
Gr:										
GRANBY LOAMY FINE SAND										
	GRANBY (C)	Yes	---	2B2,3	YES	NO	YES	Wooded	---	2270
	ADRIAN (I)	Yes	Bog	1,3	NO	NO	YES	Wooded		
	ELNORA (I)	No								
	FLUVAQUENT									
	S (I)	Yes	Flood Plain	2B3,3,4	YES	YES	YES	Wooded		
	MEDIHEMIST									
	S (I)	Yes	Marsh	1,3	NO	NO	YES	Wooded		
	STAFFORD (I)	No								
HnA:										
HORNELL SILT LOAM, 0 TO 3 PERCENT SLOPES										
	HORNELL (C)	No								200
	ALLIS (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	ANGOLA (I)	No								
	BURDETT (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	TULLER (I)	No								

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
HnB:										
HORNELL SILT LOAM, 3 TO 8 PERCENT SLOPES---										
	HORNELL (C)	No								1140
	ALLIS (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	ANGOLA (I)	No								
	BURDETT (I)	No								
	GREENE (I)	No								
	TULLER (I)	No								
HrC:										
HORNELL SILT LOAM, 8 TO 15 PERCENT SLOPES--										
	HORNELL (C)	No								280
	ALLIS (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	ANGOLA (I)	No								
	BURDETT (I)	No								
	NASSAU (I)	No								
	TULLER (I)	No								
In:										
ILION SILT LOAM-------										
	ILION (C)	Yes	---	2B3,3	YES	NO	YES	Wooded	---	3820
	ANGOLA (I)	No								
	BIRDSALL (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	BURDETT (I)	No								
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
Ma:										
MADALIN SILT LOAM-----										
	MADALIN (C)	Yes	---	2B3,3	YES	NO	YES	Wooded	---	1340
	COSAD (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	PALMS (I)	Yes	Bog	1,3	NO	NO	YES	Wooded		
	RHINEBECK (I)	No								

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
Mh:										
MEDIHEMISTS AND HYDRAQUENTS, PONDED										
	MEDIHEMIST									
	S (C)	Yes	---	1,3	NO	NO	YES	---	---	962
	HYDRAQUENT									
	S (C)	Yes	---	2B3,3	YES	NO	YES	---	---	787
	ADRIAN (I)	Yes	Bog	1,3	NO	NO	YES	Wooded		
	FLUVAQUENT									
	S (I)	Yes	Flood Plain	2B3,3,4	YES	YES	YES	Wooded		
	GRANBY (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	STAFFORD (I)	No								
	UDIFLUVENT									
	S (I)	No								
Mk:										
MIDDLEBURY SILT LOAM										
	MIDDLEBURY (C)	No								246
	RAYNHAM (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	RHINEBECK (I)	No								
	TEEL (I)	No								
	TIOGA (I)	No								
	WAYLAND (I)	Yes	Flood Plain	2B3,3,4	YES	YES	YES	Wooded		
MoB:										
MORRIS CHANNERY SILT LOAM, 3 TO 8 PERCENT SLOPES										
	MORRIS (C)	No								2260
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	QUANGOLA (I)	No								
	TULLER (I)	No								
	WELLSBORO (I)	No								

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
MoC: MORRIS CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES										
	MORRIS (C)	No								400
	ANGOLA (I)	No								
	GREENE (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	LACKAWANNA (I)	No								
	WELLSBORO (I)	No								
B: MORRIS CHANNERY SILT LOAM, 3 TO 8 PERCENT SLOPES, VERY STONY										
	MORRIS (C)	No								360
	ALLIS (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	ANGOLA (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	TULLER (I)	No								
	WELLSBORO (I)	No								
Pa: PALMS MUCK										
	PALMS (C)	Yes	---	1,3	NO	NO	YES	Wooded	---	590
	ADRIAN (I)	Yes	Bog	1,3	NO	NO	YES	Wooded		
	CARLISLE (I)	Yes	Bog	1,3	NO	NO	YES	Wooded		
	FLUVAQUENTS (I)	Yes	Flood Plain	2B3,3,4	YES	YES	YES	Wooded		
	MEDIHEMIST									
	S (I)	Yes	Marsh	1,3	NO	NO	YES	Wooded		

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
Ra: RAYNHAM VERY FINE SANDY LOAM										
	RAYNHAM (C)	Yes	---	2B3	YES	NO	NO	Wooded	---	2720
	BIRDSALL (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	COSAD (I)	No								
	SCIO (I)	No								
	SHAKER (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	UNADILLA (I)	No								
Rh: RHINEBECK SILTY CLAY LOAM, 0 TO 3 PERCENT SLOPES										
	RHINEBECK (C)	No								8020
	CLAVERACK (I)	No								
	HUDSON (I)	No								
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	RAYNHAM (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
RhB: RHINEBECK SILTY CLAY LOAM, 3 TO 8 PERCENT SLOPES										
	RHINEBECK (C)	No								2630
	CLAVERACK (I)	No								
	HUDSON (I)	No								
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	RAYNHAM (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
Sh: SHAKER FINE SANDY LOAM										
	SHAKER (C)	Yes	---	2B3	YES	NO	NO	Wooded	---	1370
	ADRIAN (I)	Yes	Bog	1,3	NO	NO	YES	Wooded		
	COSAD (I)	No								
	ELMRIDGE (I)	No								
	RAYNHAM (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
St:										
STAFFORD LOAMY FINE SAND										
	STAFFORD (C)	No								4000
	COLONIE (I)	No								
	COSAD (I)	No								
	ELNORA (I)	No								
	GRANBY (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	RAYNHAM (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
:										
EEL SILT LOAM										
	TEEL (C)	No								2670
	HAMLIN (I)	No								
	RAYNHAM (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	RHINEBECK (I)	No								
	WAKELAND (I)	Yes	Flood Plain	4	NO	YES	NO	Wooded		
TuB:										
TULLER-GREENE COMPLEX, 0 TO 8 PERCENT SLOPES										
	TULLER (C)	No								4254
	GREENE (C)	No								2836
	ALLIS (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	ANGOLA (I)	No								
	ARNOT (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	KEARSARGE (I)	No								
Ud:										
UDIPSAMMENTS, SMOOTHED										
	UDIPSAMMENTS (C)	No								2070
	COLONIE (I)	No								
	ELNORA (I)	No								
	GRANBY (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MIDDLEBURY (I)	No								
	SHAKER (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
Ua:										
UDIPSAMMENTS, DREDGED-										
	UDIPSAMMEN									
	TS, DREDGE (C)	No								230
	BIRDSALL (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	COSAD (I)	No								
	GRANBY (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	TEEL (I)	No								
	TIOGA (I)	No								
:										
DIPSAMMENTS-URBAN LAND COMPLEX										
	UDIPSAMMEN									
	TS (C)	No								4718
	URBAN LAND (C)	Unranked								2892
	COLONIE (I)	No								
	PSAMMAQUEN									
	TS (I)	Yes	Depression	2B2,3	YES	NO	YES	Wooded		
	SCIO (I)	No								
	SHAKER (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	UDORTHENTS (I)	No								
Ug:										
UDORTHENTS, LOAMY										
	UDORTHENTS (C)	No								3930
	HORNELL (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	NELLIS (I)	No								-
	TULLER (I)	No								
	WELLSBORO (I)	No								

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
Uh:										
UDORTHENTS CLAYEY-URBAN LAND COMPLEX										
	UDORTHENTS(C)	No								2331
	URBAN LAND(C)	Unranked								1759
	BURDETT (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	RHINEBECK (I)	No								
	WASSAIC (I)	No								
Uk:										
UDORTHENTS, LOAMY-URBAN LAND COMPLEX										
	UDORTHENTS(C)	No								1567
	URBAN LAND(C)	Unranked								1182
	ANGOLA (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	TULLER (I)	No								
	VALOIS (I)	No								
	WASSAIC (I)	No								
Ur:										
URBAN LAND										
	URBAN LAND(C)	Unranked								5730
	BURDETT (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MIDDLEBURY(I)	No								
	UDORTHENTS(I)	No								
	UNADILLA (I)	No								

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
Us:										
URBAN LAND-UDIPSAMMENTS COMPLEX, 0 TO 8 PERCENT SLOPES---------										
	URBAN LAND (C)	Unranked								719
	UDIPSAMMENTS (C)	No								441
	BIRDSALL (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	ELMRIDGE (I)	No								
	RIVERHEAD (I)	No								
	SCIO (I)	No								
	SHAKER (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	UDORTHENTS (I)	No								
Ut:										
URBAN LAND-UDORTHENTS COMPLEX, 0 TO 8 PERCENT SLOPES---------										
	URBAN LAND (C)	Unranked								732
	UDORTHENTS (C)	No								448
	AMGOLA (I)	No								
	ILION (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MADALIN (I)	Yes	Depression	2B3,3	YES	NO	YES	Wooded		
	MUNDA (I)	No								
	TULLER (I)	No								
Wa:										
WAKELAND SILT LOAM----										
	WAKELAND (C)	Yes	---	4	NO	YES	NO	Wooded	---	570
	MIDDLEBURY (I)	No								
	RAYNHAM (I)	Yes	Depression	2B3	YES	NO	NO	Wooded		
	TEEL (I)	No								
	WAYLAND (I)	Yes	Flood Plain	2B3,3,4	YES	YES	YES	Wooded		

ALBANY COUNTY, NEW YORK
HYDRIC SOILS LIST (Continued)
MAPUNITS WITH HYDRIC INCLUSIONS

Map Symbol Mapunit Name	Component(C)/ Inclusion(I)	Hydric	Local Landform	Hydric Soils Criteria: Hydric Criteria Code	Meets Saturation Criteria	Meets Flooding Criteria	Meets Ponding Criteria	FSA Criteria and Information: Natural Condition of Soil	Needs On-Site	Acres
No:										
WAYLAND SILT LOAM-----										
	WAYLAND (C)	Yes	---	2B3,3,4	YES	YES	YES	Wooded	---	2190
	FLUVAQUENT									
	S (I)	Yes	Flood Plain	2B3,3	YES	NO	YES	Wooded		
	MEDIHEMIST									
	S (I)	Yes	Marsh	1,3	NO	NO	YES	Wooded		
	MIDDLEBURY (I)	No								
	TEEL (I)	No								
	WAKELAND (I)	No								

FOOTNOTE: There may be small areas of included soils or miscellaneous areas that are significant to use and management of the soil; yet are too small to delineate on the soil map at the map's original scale. These may be designated as spot symbols and are defined in the published Soil Survey Report or the USDA-SCS Technical Guide, Part II.

HYDRIC SOILS CRITERIA CODES AND DEFINITIONS

1. All Histosols, except Folists, or

2. Soils in Aquic suborder, Aquic subgroup, Albolls suborder, Salorthids great group, Pell great group of Vertisols, Pachic subgroup, or Cumulic subgroups that are:

   a. somewhat poorly drained and have a frequently occurring water table less than 0.5 feet from the surface for a significant period (usually 14 consecutive days or more) during the growing season, or

   b. poorly drained or very poorly drained and have either:

      (1) a frequently occurring water table less than 0.5 feet from the surface for a significant period (usually 14 consecutive days or more) during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches, or for other soils,

      (2) a frequently occurring water table less than 1.0 feet from the surface for a significant period (usually 14 consecutive days or more) during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within 20 inches, or

      (3) a frequently occurring water table less than 1.5 feet from the surface for a significant period (usually 14 consecutive days or more) during the growing season if permeability is less than 6.0 in/hr in any layers within 20 inches, or

   Soils that are frequently ponded for long or very long duration during the growing season, or

4. Soils that are frequently flooded for long or very long duration during the growing season.

EXHIBIT C
Function-Value Evaluation Sheets

Wetland Assessment and Delineation Report
Interstate 87 (I-87) Exit 4 Access Improvements

January 2014

Supporting Document for Wetland Functions/ Values Evaluation

Below is a numbered list of considerations and qualifiers taken from the 1995 ACOE Highway Methodology Workbook Supplement that were used in the functional evaluation of the wetlands delineated in support of the I-87 Exit 3 project in Albany County, New York. Application of considerations/qualifiers was based on best professional judgment.

GROUNDWATER RECHARGE/ DISCHARGE – This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. It refers to the fundamental interaction between wetlands and aquifers, regardless of size or importance of either.

CONSIDERATIONS/QUALIFIERS

1. Public or private wells occur downstream of the wetlands.
2. Potential exists for public or private wells downstream of wetlands.
3. Wetland is underlain by stratified drift.
4. Gravel or sandy soils present in or adjacent to the wetlands.
5. Fragipan does not occur in the wetlands.
6. Fragipan, impervious soils, or bedrock, does occur in the wetlands.
7. Wetland is associated with a perennial or intermittent watercourse.
8. Signs of groundwater recharge are present or piezometer data demonstrates recharge.
9. Wetland is associated with a watercourse, but lacks a defined outlet or contains a constricted outlet.
10. Wetland contains only an outlet.
11. Groundwater quality of stratified drift aquifer within or downstream of wetland meets drinking water standards.
12. Quality of water associated with wetland is high.
13. Signs of groundwater discharge are present (e.g. springs).
14. Water temperature suggests it is a discharge site.
15. Wetland shows signs of variable water levels.
16. Gravel or sandy soils present in or adjacent to wetlands.
17. Piezometer – data demonstrates discharge.
18. Other.

FLOODFLOW ALTERATION (Storage & Desynchronization)- This function considers the effectiveness of the wetland in reducing flood damage by water retention for prolonged periods following precipitation events and the gradual release of floodwaters. It adds to the stability of the wetland ecological system or its buffering characteristics and provides social or economic value relative to erosion and/or flood prone areas.

CONSIDERATIONS/QUALIFIERS

1. Area of this wetland is large relative to its watershed.
2. Wetland occurs in the upper portions of its watershed.
3. Effective flood storage is small or non-existent upslope of or above the wetland.
4. Wetland watershed contains a high degree of impervious surfaces.
5. Wetland contains hydric soils which are able to absorb and detain water.
6. Wetland exists in a relatively flat area that has flood storage potential.
7. Wetland has an intermittent outlet, ponded water, or signs are present of variable water level.

8. During flood events this wetland can retain higher volumes of water than under normal or average rainfall conditions.
9. Wetland receives and retains overland or sheet flow runoff from surrounding uplands.
10. In the even of a large storm, this wetland may receive and detain excessive floodwater from a nearby watercourse.
11. Valuable properties, structures or resources are located in or near the floodplain downstream from the wetland.
12. The watershed has a history of economic loss due to flooding.
13. This wetland is associated with one or more watercourses.
14. This wetland watercourse is sinuos or diffuse.
15. This wetland outlet is constricted.
16. Channel flow velocity is affected by this wetland.
17. Land uses downstream are protected by this wetland.
18. This wetland contains a high density of vegetation.
19. Other.

FISH AND SHELLFISH HABITAT – This function considers the effectiveness of seasonal or permanent watercourse associated with the wetland in question for fish and shellfish habitat.

CONSIDERATIONS/QUALIFIERS

1. Forest land dominant in the watershed above this wetland.
2. Abundance of cover objects present.

STOP HERE IF THIS WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE

3. Size of this wetland is able to support large fish/shellfish populations.
4. Wetland is part of a larger, contiguous watercourse.
5. Wetland has sufficient size and depth in open water areas so as not to freeze solid and retains some open water during winter.
6. Stream width (bank to bank) is more than 50 feet.
7. Quality of the watercourse associated with this wetland is able to support healthy fish/shellfish populations.
8. Streamside vegetation provides shade for the watercourse.
9. Spawning areas are present (submerged vegetation or gravel beds).
10. Food is available to fish/shellfish populations within this wetland.
11. Barrier(s) to anadromous fish (such as dams, including beaver dams, waterfalls, road crossings, etc.) are absent from the stream reach associated with this wetland.
12. Evidence of fish is present.
13. Wetland is stocked with fish.
14. The watercourse is persistent.
15. Man-made streams are absent.
16. Water velocities are not too excessive for fish usage.
17. Defined stream channel is present.
18. Other.

SEDIMENT/TOXICANT/PATHOGEN RETENTION - This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands, or upstream eroding wetland areas.

CONSIDERATIONS/QUALIFIERS

1. Potential sources of excess sediment are in the watershed above the wetland.
2. Potential or known sources of toxicants are in the watershed above the wetland.
3. Opportunity for sediment trapping by slow moving water or deepwater habitat are present in this wetland.
4. Mineral, fine grained, or organic soils are present.
5. Long duration water retention time is present in this wetland.
6. Public or private water sources occur downstream.
7. The wetland edge is broad and intermittently aerobic.
8. The wetland is known to have existed for more than 50 years.
9. Drainage ditches have not been constructed in the wetland.

STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE

10. Wetland is associated with an intermittent or perennial stream, or lake.
11. Channelized flows have visible velocity decreases in the wetland.
12. Effective floodwater storage in wetland is occurring. Areas of impounded open water are present.
13. No indicators of erosive forces are present. No high water velocities are present.
14. Diffuse water flows are present in the wetland.
15. Wetland has a high degree of water and vegetation interspersion.
16. Dense vegetation provides opportunity for sediment trapping and/or signs of sediment accumulation by dense vegetation are present.
17. Other.

NUTRIENT REMOVAL/RETENTION/TRANSFORMATION – This function considers the effectiveness of the wetland as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands, and, the ability of the wetland to process these nutrients into other forms or trophic levels. One aspect of this function is to prevent ill effects of nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers or estuaries.

CONSIDERATION/QUALIFIERS

1. Wetland is large relative to the size of its watershed.
2. Deep water or open water habitat exists.
3. Overall potential for sediment trapping exists in the wetland.
4. Potential sources of excess nutrients present in the watershed above the wetland.
5. Wetland saturated for most of the season. Ponded water is present in the wetland.
6. Deep organic/sediment deposits are present.
7. Slowly drained mineral, fine grained, or organic soils, are present.
8. Dense vegetation is present.
9. Emergent vegetation and/or dense woody stems are dominant.
10. Aquatic diversity/abundance sufficient to utilize nutrients.
11. Opportunity for nutrient attenuation exists.
12. Vegetation diversity/abundance sufficient to utilize nutrients.

STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE

13. Water flow through this wetland is diffuse.

14. Water retention/detention time in this wetland is increase by constricted outlet or thick vegetation.
15. Water moves slowly through this wetland.
16. Other.

PRODUCTION EXPORT (Nutrient) – This function evaluates the effectiveness of the wetland to produce food or usable products for man or other living organisms.

CONSIDERATIONS/QUALIFIERS

1. Wildlife food sources grow within this wetland.
2. Detritus development is present within this wetland.
3. Economically or commercially used products found in this wetland.
4. Evidence of wildlife use found within this wetland.
5. Higher trophic level consumers are using this wetland.
6. Fish or shellfish develop or occur in this wetland.
7. High vegetation density is present.
8. Wetland exhibits high degree of plan community structure/species diversity.
9. High aquatic diversity/abundance is present.
10. Nutrients exported in wetland watercourse (permanent outlet present).
11. “Flushing” of relatively large amounts of organic plan material occurs from this wetland.
12. Wetland contains flowering plants which are used by nectar-gathering insects.
13. Indications of export are present.
14. High production levels occurring, however, no visible signs of export (assumes export is attenuated).
15. Other.

SEDIMENT/SHORELINE STABILIZATION – This function considers the effectiveness of a wetland to stabilize stream banks and shoreline against erosion.

CONSIDERATIONS/QUALIFIERS

1. Indications of erosion, siltation present.
2. Topographical gradient is present in wetlands.
3. Potential sediment sources are present upslope.
4. No distinct shoreline or bank is evident between the waterbody and the wetland or upland.
5. A distinct step between the open waterbody or stream and the adjacent land exists (i.e. sharp bank) with dense roots throughout.
6. Wide wetland (>10’) bordering watercourse, lake or pond.
7. High flow velocities in the wetland
8. Potential sediment sources present upstream.
9. The watershed is of sufficient size to produce channelized flow.
10. Open water fetch is present.
11. Boating activity is present.
12. Dense vegetation is bordering watercourse, lake, or pond.
13. High percentage of energy absorbing emergents and/or shrubs bordering watercourse, lake or pond.
14. Vegetation comprised or large trees and shrubs, which withstand major flood events or erosive incidents and stabilize the shoreline on a large scale (feet)

15. Vegetation comprised of dense resilient herbaceous layer, which stabilizes sediments and the shoreline on a small scale (inches) during minor flood events or potentially erosive events.
16. Other.

WILDLIFE HABITAT – This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and/or migrating species must be considered.
CONSIDERATIONS/QUALIFIERS

1. Wetland is not degraded by human activity.
2. Water quality of the watercourse, pond or lake associated with this wetland meets or exceeds Class A or B standards.
3. Wetland is not fragmented by development.
4. Upland surrounding this wetland is undeveloped.
5. More than 40% of this wetland edge is bordered by upland wildlife habitat (e.g. brushland, woodland, active farmland, or idle lands) at least 500 feet in width.
6. Wetland contiguous with other wetland systems connected by watercourse or lake.
7. Wildlife overland access to other wetlands is present.
8. Wildlife food sources are within this wetland or nearby.
9. Wetland exhibits a high degree of interspersion of vegetation classes and/or open water.
10. Two or more islands or inclusions of upland within the wetland are present.
11. Dominant wetland class includes deep or shallow marsh or wooded swamp.
12. More than three acres of shallow permanent open water (less than 6.6 ft deep), including streams in or adjacent to wetland are present.
13. Density of the wetland vegetation is high.
14. Wetland exhibits a high degree of plant species diversity.
15. Wetland exhibits a high degree or diversity in plant community structure (e.g. tree/shrub/vine/grass/moss, etc.)
16. Plant/animal indicator species present.
17. Animal signs observed (tracks, scats, nesting areas, etc.).
18. Seasonal uses vary for wildlife, and wetland appears to support varied population diversity/abundance during different seasons.
19. Wetland contains or has potential to contain a high population of insects.
20. Wetland contains or has potential to contain large amphibian populations.
21. Wetland has a high avian utilization or its potential.
22. Indications of less disturbance-tolerant species present.
23. Signs of wildlife enhancement present (birdhouses, nesting boxes, food sources, etc).
24. Other.

RECREATION (Consumptive and Non-Consumptive) – This value considers the suitability of the wetland and associated watercourse to provide recreational opportunities such as hiking canoeing, boating, fishing, hunting, and other active or passive recreational activities. Consumptive opportunities consume or diminish the plants, animals, and other resources that are intrinsic to the wetland. Non-Consumptive opportunities do not consume or diminish these resources of the wetland.

CONSIDERATIONS/QUALIFIERS

1. Wetland is part of a recreation area, park, forest, or refuge.
2. Fishing is available within or from the wetland.
3. Hunting is permitted in the wetland.
4. Hiking occurs or had potential to occur within the wetland.
5. Wetland is a valuable wildlife habitat.
6. The watercourse, pond or lake associated with the wetland is unpolluted.
7. High visual/aesthetic quality of this potential recreation site.
8. Access to water is available at this potential recreation site for boating, canoeing, or fishing.
9. The watercourse associated with this wetland is wide and deep enough to accommodate canoeing and/or non-powered boating.
10. Off-road public parking available at this potential recreation site.
11. Accessibility and travel ease is present at this site.
12. The wetland is within a short drive or safe walk from highly populated public and private areas.
13. Other.

EDUCATIONAL/SCIENTIFIC VALUE – This value considers the suitability of the wetland as a site for an "outdoor classroom" or as a location for scientific study or research.

CONSIDERATIONS/QUALIFICATIONS

1. Wetland contains or is known to contain threatened, rare or endangered species.
2. Little or no disturbance is occurring in this wetland.
3. Potential educational site contains diversity of wetland classes, which are accessible or potentially accessible.
4. Potential education site is undisturbed and natural.
5. Wetland is considered to be a valuable wildlife habitat.
6. Wetland is located within a nature preserve or wildlife management area.
7. Signs of wildlife habitat enhancement present (bird houses, nesting boxes, food sources, etc).
8. Off-road parking at potential educational site suitable for school bus access in or near wetlands.
9. Potential educational site is within safe walking distance or short drive to schools.
10. Potential educational site within safe distance to other plant communities.
11. Direct access to perennial stream at potential educational site available.
12. Direct access to pond or lake at potential educational site available.
13. No known safety hazards within the potential educational site.
14. Public access to the potential educational site is controlled.
15. Handicap accessibility is available.
16. Site is currently used for educational or scientific purposes.
17. Other.

UNIQUENESS/HERITAGE – This value considers the effectiveness of the wetland or its associated waterbodies to provide certain special values. These may include archaeological sites, critical habitat for endangered species, its overall health and appearance, its role in the ecological system of the area, its relative importance as a typical wetland class for this geographic location. These functions are clearly valuable wetland attributes relative to aspects of public health, recreation, and habitat diversity.

CONSIDERATIONS/QUALIFIERS

1. Upland surrounding wetland primarily urban.
2. Upland surrounding wetland developing rapidly.
3. More than 3 acres of shallow permanent open water occur in wetlands (less than 6.6 ft deep) including streams.
4. Three of more wetland classes present.
5. Deep and/or shallow marsh, or wooded swamp dominate.
6. High degree of interspersion of vegetation and/or open water occurring in this wetland.
7. Well-vegetated stream corridor (15 ft on each side of the stream) occurs in this wetland.
8. Potential education site is within a short drive or safe walk from schools.
9. Of-road parking at potential educational site.
10. No known safety hazards exist within this potential educational site.
11. Direct access to perennial stream or lake at potential educational site.
12. Two or more wetland classes visible from primary viewing locations.
13. Low-growing wetlands (marshes, scrub0-shrub, bogs, open water) visible from primary viewing locations.
14. Half an acre of open water or 200 feet of stream is visible from the primary viewing locations.
15. Large area of wetland is dominated by flowering plants, or plants, which turn vibrant colors in different seasons.
16. General appearance of the wetland visible from primary viewing locations is unpolluted and/or undisturbed.
17. Overall view of the wetland is available from the surrounding upland.
18. Quality of the water associated with the wetland is high.
19. Opportunities for wildlife observations are available.
20. Historical buildings occur near the wetlands.
21. Presence of a pond or pond site and remains of a dam occur within the wetlands.
22. Wetland within 50 yards of the nearest perennial watercourse.
23. Visible stone or earthen foundations, berms, dams, standing structures or associated features occur within the wetlands.
24. Wetland contains critical habitat for a state or federally listed threatened or endangered species.
25. Wetland is known to be a study site for scientific research.
26. Wetland is a natural landmark or recognized by the state natural heritage inventory authority as an exemplary natural community.
27. Wetland has local significance because it serves several functional values.
28. Wetland has local significance because it has biological, geological or other features, which are locally rare or unique.
29. Wetland is known to contain an important archaeological site.
30. Wetland is hydrologically connected to a state of federally designated scenic river.
31. Wetland is located in an area experiencing a high wetland loss rate.
32. Other.

VISUAL QUALITY/AESTHETICS – This value considers the visual and aesthetic quality or usefulness of the wetland.

CONSIDERATIONS/QUALIFIERS

1. Multiple wetland classes visible from primary viewing locations.
2. Emergent marsh and/or open water visible from primary viewing locations.

3. Diversity of vegetation species visible from primary viewing locations.
4. Wetland dominated by flowering plants, or plants which turn vibrant colors in different seasons.
5. Land use surrounding the wetland is undeveloped as seen from primary viewing locations.
6. Visible surrounding land use from contrasts with wetland.
7. Wetland views absent of trash, debris, and signs of disturbance.
8. Wetland is considered to be a valuable wildlife habitat.
9. Wetland is easily accessed.
10. Low noise level at primary viewing locations.
11. Unpleasant odors absent at primary viewing locations.
12. Relatively unobstructed sight line exists through wetland.
13. Other.

ENDANGERED SPECIES HABITAT – This value considers the suitability of the wetland to support threatened or endangered species.

CONSIDERATIONS/QUALIFIERS

1. Wetland contains or is known to contain threatened or endangered species.
2. Wetland contains critical habitat for a state or federally listed threatened or endangered species.
3. Other.

FISH AND SHELLFISH HABITAT – This function considers the effectiveness of wetlands, embayments, tidal flats, vegetated shallows, and other environments in supporting marine resources, such as fish, shellfish, marine mammals and sea turtles.

CONSIDERATIONS/QUALIFIERS (Marine)

1. Special aquatic site are present.
2. Suitable spawning habitat is present at this site or in the area.
3. Commercially or recreationally important species are present, or suitable habitat exists.
4. The wetland/ waterway supports prey for higher trophic level marine organisms.
5. The waterway provides migratory habitat for anadromous fish.
6. Other.

Function-Value Evaluation Form - Wetland Unit A

Total area of wetland? 37,259 square feet (0.86 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** Yes

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 13.1 ft (4 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** September 28, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 6, 7, 9, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 11, 13, 15, 16, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 10, 11, 12, 13, 14, 15, 16	X	
Nutrient Removal	X		3, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15	X	
Production Export	X		7, 10 , 11, 13		
Sediment/Shoreline Stabilization	X		2, 3, 5, 6, 8, 9, 12, 13, 15	X	
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit B

Total area of wetland? 57 square feet (0.001 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** September 29, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 5, 7, 9		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 11, 13, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 10, 11, 12, 13, 15, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15	X	
Production Export	X		7, 10, 11, 13		
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit C

Total area of wetland? 869 square feet (0.02 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 23 ft (7 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** September 29, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 5, 15		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 11, 13, 15, 16, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6	X	
Nutrient Removal	X		3, 5, 7, 8, 9, 11, 12	X	
Production Export	X		7, 10, 11, 13		
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit D

Total area of wetland? 39,746 square feet (0.91 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** Yes

Adjacent land use? Urban development and field **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** October 1, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 5, 7, 9, 11, 15, 18		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit E

Total area of wetland? 5,092 square feet (0.12 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** Yes

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 16.4 ft (5 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: EBW, SCC **Date:** October 1, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge		X			
Floodflow Alteration	X		2, 4, 5, 9, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 5, 6	X	
Nutrient Removal	X		4, 7, 8, 9, 11, 12		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		x			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit F

Total area of wetland? 15,717 square feet (0.36 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** Yes

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 32.8 ft (10 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: EBW, SCC **Date:** October 1, 2009
Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 6, 8, 9, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 10, 12, 14, 16	X	
Nutrient Removal	X		3, 7, 8, 9, 11, 12, 13, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit G

Total area of wetland? Outside of PSA **Human made?** Yes **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 6.6 ft (2 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: EBW, SCC **Date:** October 13, 2009

Wetland Impact: N/A
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 11, 13, 15, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 3, 4, 5, 6, 9, 10, 12, 13, 15, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12, 14,1 5	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit H

Total area of wetland? Outside PSA **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 16.4 ft (5 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: EBW, SCC **Date:** October 13, 2009

Wetland Impact: N/A
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 3, 4, 5, 9, 11, 12, 14, 16	X	
Nutrient Removal	X		2, 4, 5, 7, 8, 9, 10, 12, 13, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		2, 3, 6, 8, 9, 10, 12, 13, 15	X	
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit I

Total area of wetland? 33,346 square feet (0.77 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 16.4 ft (5 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: EBW, SCC **Date:** October 13, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 6, 7, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 11, 13, 15, 16, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 3, 4, 5, 6, 10, 11, 12, 13, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12, 13, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit J

Total area of wetland? 12,123 square feet (0.28 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 19.7 ft (6 m)

Dominant wetland systems present? Floodplain forest and shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: EBW, SCC **Date:** October 14, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 14, 16, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 9, 10, 13, 14, 16	X	
Nutrient Removal	X		3, 4, 7, 8, 9, 11, 12, 13, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		2, 3, 6, 8, 9, 12, 13		
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit K

Total area of wetland? 1035 square feet (0.02 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Woods and urban development **Distance to nearest roadway or other development?** 108.3 ft (33 m)

Dominant wetland systems present? Forested wetland

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: EBW, SCC **Date:** October 15, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 5, 6, 16		
Floodflow Alteration	X		2, 4, 5, 6, 8, 9, 11, 15		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		7, 9, 11, 12		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit L

Total area of wetland? 9,727 square feet (0.22 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 49.2 ft (15 m)

Dominant wetland systems present? Palustrine forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? Yes **If not, where does the wetland lie in the drainage basin?**

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** October 28, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 6, 8, 9, 11		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 6, 7, 9	X	
Nutrient Removal	X		7, 9, 11, 12		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit M

Total area of wetland? 566 square feet (0.01 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 26.2 ft (8 m)

Dominant wetland systems present? Palustrine forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** October 28, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 8, 9, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 6, 7, 9	X	
Nutrient Removal	X		3, 7, 9, 11, 12		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit MX

Total area of wetland? 28,883 square feet (0.66 acres) **Human made?** Yes **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Transportation **Distance to nearest roadway or other development?** <9.8 ft (3 m)

Dominant wetland systems present? Palustrine Emergent and Palustrine Forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: DJL **Date:** 6/10/2011

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 4, 9, 16		
Floodflow Alteration	X		4, 6, 7, 8, 9, 13	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 3, 4, 5, 10, 12, 16	X	
Nutrient Removal	X		3, 7, 9, 11, 12		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		7, 11, 13		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit N

Total area of wetland? 2,857 square feet (0.07 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 16.4 ft (5 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** October 28, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 15, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 16, 18	X	
Fish and Shellfish Habitat	X		4, 8, 14, 16, 17		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 15, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		2, 3, 8, 9, 12, 13, 15		
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit O

Total area of wetland? 4,134 square feet (0.09 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 13.1 ft (4 m)

Dominant wetland systems present? Forested wetland.

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** October 28, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 6, 9, 10, 11, 12, 13, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		6, 8, 12, 13, 14, 15		
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit OX

Total area of wetland? 21,583 square feet (0.50 acres) **Human made?** Yes **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Transportation **Distance to nearest roadway or other development?** <6.6 ft (2 m)

Dominant wetland systems present? Palustrine Forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: DJL **Date:** 6/10/2011

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 4		
Floodflow Alteration	X		2, 4, 6, 7, 8, 9, 15	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 3, 5, 12	X	
Nutrient Removal	X		3, 5, 7, 8, 9		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		7, 11, 13		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit P

Total area of wetland? 18,910 square feet (0.43 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 16.4 ft (5 m)

Dominant wetland systems present? Palustrine forest and shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** October 28, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 15, 16, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 16	X	
Nutrient Removal	X		3, 4, 5, 7, 8, 9, 11, 12, 14, 15	X	
Production Export	X		7, 8, 10, 13		
Sediment/Shoreline Stabilization	X		1, 2, 3, 6, 8, 9, 12, 13, 14, 15	X	
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit Q

Total area of wetland? 6,837 square feet (0.16 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 32.8 ft (10 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** October 28, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 6, 9, 11, 15, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 6, 9	X	
Nutrient Removal	X		3, 4, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit R

Total area of wetland? 39,293 square feet (0.90 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 8.2 ft (2.5 m)

Dominant wetland systems present? Shallow emergent marsh and palustrine forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? Two (2)

Prepared by: SCC, EBW **Date:** October 29, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 18	X	
Fish and Shellfish Habitat	X		4, 8, 14, 16, 17		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 9, 10, 12, 13, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12, 14, 15	X	
Production Export	X		4, 7, 8, 10		
Sediment/Shoreline Stabilization	X		2, 3, 4, 5, 6, 8, 9, 12, 13, 14, 15	X	
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit S/SX

Total area of wetland? 48,900 square feet (1.12 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 13.1 ft (4 m)

Dominant wetland systems present? Shallow emergent marsh and palustrine forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** November 3, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 11, 13, 15, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 16	X	
Nutrient Removal	X		3, 4, 5, 7, 8, 9, 11, 12, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		2, 6, 8, 9, 12, 13, 15		
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit T

Total area of wetland? 1,642 square feet (0.04 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 32.8 ft (10 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? Yes **If not, where does the wetland lie in the drainage basin?**

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 5, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 7, 9, 11		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 5, 6, 9	X	
Nutrient Removal	X		2, 3, 5, 7, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit U

Total area of wetland? 2,949 square feet (0.07 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 5, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 5, 6, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		2, 8, 9, 12, 13, 15		
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit V

Total area of wetland? 13,693 square feet (0.46 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Palustrine forest and emergent

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** November 5, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4,5 , 15, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 5, 6, 10, 11, 12, 15, 16	X	
Nutrient Removal	X		3, 4, 5, 7, 8, 9, 11, 12, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit VX

Total area of wetland? 6,331 square meters (0.14 acres) **Human made?** Yes **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** Yes

Adjacent land use? Transportation **Distance to nearest roadway or other development?** <16.4 ft (5 m)

Dominant wetland systems present? Palustrine emergent

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: DJL **Date:** 6/10/2011

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 4, 7, 9, 16		
Floodflow Alteration	X		4, 7, 9, 15		Minimal function based on size of wetland.
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 3, 4, 5	X	Minimal function based on size of wetland.
Nutrient Removal	X		3, 5, 6, 7		Minimal function based on size of wetland.
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		7, 11		Minimal function based on size of wetland.
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit W/WX

Total area of wetland? 68,270 square feet (1.57 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Palustrine forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** November 5, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 15, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		1, 2, 6, 13, 14		
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit X

Total area of wetland? 61,150 square feet (1.40 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Palustrine forest and wet meadow

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? Two (2)

Prepared by: SCC, EBW **Date:** November 5, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 16, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		2, 6, 8, 14		
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit Y

Total area of wetland? 8,659 square feet (0.20 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Shallow emergent marsh and palustrine forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** November 5, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 6, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 11, 15, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		2, 6, 9, 13, 14, 15		
Wildlife Habitat	X		3, 5, 6, 7, 8, 9, 11, 13, 14, 15, 16		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit Z

Total area of wetland? Outside PSA **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 16.4 ft (5 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** November 6, 2009

Wetland Impact: N/A
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9,16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 14, 15, 16, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 9, 10, 11, 12, 13, 16	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15	X	
Wildlife Habitat	X		4, 5, 6, 7, 8, 9, 13, 19		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit AA

Total area of wetland? 257 square feet (0.01 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 16.4 ft (5 m)

Dominant wetland systems present? Palustrine forest and wet meadow

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 6, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 7, 11		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 6, 7, 9	X	
Nutrient Removal	X		4, 7, 11, 12		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		1, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 23		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit BB

Total area of wetland? 4,201 square feet (0.10 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 16.4 ft (5 m)

Dominant wetland systems present? Palustrine forest and shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 6, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 6, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		5, 6, 8, 9, 11, 13, 14, 15, 17, 18, 20		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit CC

Total area of wetland (CC/CCX)? 58,878 (1.35 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Agriculture and urban development **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 10, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export	X		4, 5, 7, 10, 12, 13		
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		3, 5, 7, 9, 11, 13, 17		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit CCX

Total area of wetland (CC/CCX)? 58,878 (1.35 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Agriculture and urban development **Distance to nearest roadway or other development?** 394 ft (120 m)

Dominant wetland systems present? Palustrine Emergent Persistent

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: DJL **Date:** 6/1/2011

Wetland Impact:
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16	X	
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 15, 18		
Fish and Shellfish Habitat	X		4, 14, 16		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		3, 5, 6, 7, 13		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit DD

Total area of wetland? 8,901 square feet (0.19 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and residential development **Distance to nearest roadway or other development?** 11.5 ft (3.5 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One

Prepared by: SCC, EBW **Date:** November 10, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 3, 4, 5, 6 ,7, 9, 10, 11, 12, 13, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		1, 2, 3, 5, 6, 8, 9, 12, 13, 15	X	
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit DDX

Total area of wetland? 16,935 (0.40 acres) **Human made?** Yes **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** Yes

Adjacent land use? Transportation **Distance to nearest roadway or other development?** <16.4 ft (5 m)

Dominant wetland systems present? Palustrine emergent

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: DJL **Date:** 6/10/2011

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 4, 7 & 9		
Floodflow Alteration	X		4, 6, 7, 9, 15	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 5, 10, 12	X	
Nutrient Removal	X		3, 8, 9		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		7, 13		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit EE

Total area of wetland? 23,639 square feet (0.54 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Palustrine forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One

Prepared by: SCC, EBW **Date:** November 10, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 16, 18	X	
Fish and Shellfish Habitat	X		4, 8, 14, 16, 17		
Sediment/Toxicant Retention	X		2, 3, 4, 5, 6, 7, 10, 12, 13	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 11, 12, 14, 15	X	
Production Export	X		5, 6, 7, 8, 9, 10, 12, 13	X	
Sediment/Shoreline Stabilization	X		1, 2, 3, 4, 5, 14		
Wildlife Habitat	X		3, 4, 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit FF

Total area of wetland? 17,514 square feet (0.40 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Urban development and agricultural area **Distance to nearest roadway or other development?** 3.3 ft (1 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One

Prepared by: SCC, EBW **Date:** November 11, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 16, 18	X	
Fish and Shellfish Habitat	X		4, 14, 15, 16, 17		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		1, 2, 3, 5, 6, 8, 9, 12, 13, 15	X	
Wildlife Habitat	X		5, 6, 7, 8, 9, 10, 11, 13, 17, 18		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit GG

Total area of wetland? 5,018 square feet (0.12 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Agricultural area and urban development **Distance to nearest roadway or other development?** 32.8 ft (10 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? Yes **If not, where does the wetland lie in the drainage basin?**

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 11, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 3, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		3, 4, 5, 7, 9, 11, 13		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit HH

Total area of wetland? 2,188 square meters (0.05 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Urban development and woods **Distance to nearest roadway or other development?** 19.7 ft (6 m)

Dominant wetland systems present? Palustrine forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 11, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		3, 4, 5, 7, 8, 9, 11, 13, 14, 15, 17, 20 23	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit HHX

Total area of wetland? 6,227 square feet (0.14 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Agriculture; Successional Forest & Shrubland **Distance to nearest roadway or other development?** 420 ft (128 m)

Dominant wetland systems present? Palustrine Forest; Palustrine Scrub-shrub

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: DJL **Date:** 6/1/2011

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 9, 16	X	
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15		
Fish and Shellfish Habitat	X		2, 4, 16		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7	X	
Nutrient Removal	X		2, 3, 5, 7, 8, 9, 11, 12, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		3, 4, 5, 6, 7, 8, 11	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit II

Total area of wetland? 32,850 square feet (0.75 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Woods, field and urban development **Distance to nearest roadway or other development?** 39.4 ft (12 m)

Dominant wetland systems present? Palustrine forest

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One

Prepared by: SCC, EBW **Date:** November 12, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 16, 18	X	
Fish and Shellfish Habitat	X		4, 8, 14, 15, 16, 17		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 16	X	
Nutrient Removal	X		2, 3, 5, 7, 8, 9, 11, 12, 14, 15	X	
Production Export	X		4, 5, 7, 8, 10, 13		
Sediment/Shoreline Stabilization	X		1, 2, 3, 4, 6, 8, 9, 12, 13, 15	X	
Wildlife Habitat	X		3, 4, 5, 6, 7, 8, 9, 11, 13, 14, 15, 17, 18, 19, 20 , 23	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit II (Portion Extended On Wetland Mitigation Site)

Total area of wetland? 235,002 square feet (5.39 acres) includes 32,850 square feet (0.75 acres) before PSA was expanded to include the preferred wetland mitigation site. **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Woods, field and urban development **Distance to nearest roadway or other development?** 39.4 ft (12 m)

Dominant wetland systems present? Palustrine forest

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One

Prepared by: DJL **Date:** January 21, 2014

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 16, 18	X	
Fish and Shellfish Habitat	X		4, 8, 14, 15, 16, 17		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 16	X	
Nutrient Removal	X		2, 3, 5, 7, 8, 9, 11, 12, 14, 15	X	
Production Export	X		4, 5, 7, 8, 10, 13		
Sediment/Shoreline Stabilization	X		1, 2, 3, 4, 6, 8, 9, 12, 13, 15	X	
Wildlife Habitat	X		3, 4, 5, 6, 7, 8, 9, 11, 13, 14, 15, 17, 18, 19, 20 , 23	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat	X		3 (other)	X	Potential bat roost trees suitable to Indiana bats and northern long-eared bats have been documented within the bounds of the preferred wetland mitigation site, including within Wetland II
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit JJ

Total area of wetland? 6,048 square feet (0.14 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Urban development, woods and agricultural area **Distance to nearest roadway or other development?** 9.8 ft (3 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? Unknown **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 12, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 9, 11, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 3, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		4, 5, 7, 8, 9, 11, 12		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit KK

Total area of wetland? Outside PSA **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Woods and agricultural area **Distance to nearest roadway or other development?** 6.6 ft (2 m)

Dominant wetland systems present? Wet meadow

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? Unkown **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 17, 2009

Wetland Impact: N/A
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 9, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 4, 6, 7, 9	X	
Nutrient Removal	X		4, 7, 8, 9, 11, 12	X	
Production Export	X		1, 4, 5, 7, 8		
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		3, 4, 5, 7, 8, 13, 14, 15, 17		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit KKX

Total area of wetland? 39,186 square feet (0.90 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Prepared by: DJL **Date:** 6/1/2011

Wetland Impact: TBD
Type: **Area:**

Adjacent land use? Agriculture; Successional Forest **Distance to nearest roadway or other development?** 1000.7 ft (305 m)

Dominant wetland systems present? Palustrine Scrub-shrub; Palustrine Open Water; Palustrine Emergent

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 9, 16	X	
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 18	X	
Fish and Shellfish Habitat	X		2, 4, 5		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 12	X	
Nutrient Removal	X		2, 3, 4, 5, 6, 7, 8, 9		
Production Export	X		1, 4, 7		
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		4, 5, 6, 7, 8, 13	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit LL

Total area of wetland? Outside PSA **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Old field and woods **Distance to nearest roadway or other development?** 49.2 ft (15 m)

Dominant wetland systems present? Wet meadow

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? Unknown **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 17, 2009

Wetland Impact: N/A
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 6, 8, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 6, 7, 9	X	
Nutrient Removal	X		4, 7, 8, 11, 12		
Production Export	X		1, 4, 5, 7, 8		
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		1, 3, 4, 5, 7, 8, 13, 14, 15, 17, 18		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics	X		3, 7, 9, 11, 12		
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit MM

Total area of wetland? Outside PSA **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Field, woods and agricultural area **Distance to nearest roadway or other development?** **98**.4 ft (30 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? Yes **If not, where does the wetland lie in the drainage basin?**

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 18, 2009

Wetland Impact: N/A
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 9, 11		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		2, 3, 4, 5, 6, 9	X	
Nutrient Removal		X			
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		1, 3, 4, 5, 7, 8, 9, 11, 14, 16, 17, 18, 20, 22	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics	X		2, 3, 5, 7, 8, 11		
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit NN

Total area of wetland? 3,711 square feet (0.08 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Woods **Distance to nearest roadway or other development?** 13.1 ft (4 m)

Dominant wetland systems present? Wet meadow

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? Unkown **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 18, 2009

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 6, 7, 9	X	
Nutrient Removal	X		3, 4, 7, 8, 9, 11, 12	X	
Production Export	X		1, 4, 5, 7, 8		
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		1, 3, 4, 5, 7, 8, 9, 13, 14, 15, 17, 18, 22, 23	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics	X		1, 3, 5, 7, 8, 11, 12	X	
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit OO

Total area of wetland? Outside PSA **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Woods and agricultural area **Distance to nearest roadway or other development?** 23 ft (7 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? Unknown **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 18, 2009

Wetland Impact: N/A
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export	X		1, 4, 5, 7, 8		
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		1, 3, 4, 5, 7, 8, 9, 10, 11, 13, 14, 15, 17, 18	X	
Recreation		X			
Educational/Scientific Value	X		2, 3, 4, 5, 10, 12		
Uniqueness/Heritage		X			
Visual Quality/Aesthetics	X		2, 3, 5, 7, 8, 11, 12	X	
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit PP

Total area of wetland (PP/PPX)? 12,217 square feet (0.28 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Prepared by: SCC, EBW **Date:** November 18, 2009

Adjacent land use? Field, woods and agricultural area **Distance to nearest roadway or other development?** 39.4 ft (12 m)

Wetland Impact:
Type: **Area:**

Dominant wetland systems present? Shallow emergent marsh

Evaluation based on:
Office: **Field:** X

Contiguous undeveloped buffer zone present? Yes

Corps manual wetland delineation completed? Yes

Is the wetland a separate hydraulic system? Unknown **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		2, 3, 5, 6, 8, 15		
Wildlife Habitat	X		1, 3, 4, 5, 7, 8, 9, 11, 13, 14, 15, 17, 18	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics	X		2, 3, 7, 8, 11		
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit PPX

Total area of wetland (PP/PPX)? 12,217 square feet (0.28 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Agriculture; Successional Forest **Distance to nearest roadway or other development?** 699 ft (213 m)

Dominant wetland systems present? Palustrine Emergent Persistent

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One

Prepared by: DJL **Date:** 6/01/2011

Wetland Impact:
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16	X	
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 13, 15	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 10, 13		
Nutrient Removal	X		3, 4, 5, 6, 7, 9, 15		
Production Export		X			
Sediment/Shoreline Stabilization	X		3, 8, 9		
Wildlife Habitat	X		3, 4, 5, 6, 7, 8	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit QQ

Total area of wetland? Outside PSA **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Woods and field **Distance to nearest roadway or other development?** 65.6 ft (20 m)

Dominant wetland systems present? Wet meadow

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? Unknown **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 18, 2009

Wetland Impact: N/A
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 6, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 6, 7, 9	X	
Nutrient Removal	X		7, 8, 9, 11, 12		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		1, 2, 4, 5, 7, 8, 13, 14		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit RR

Total area of wetland (RR/RRX)? 45,341 square feet (1.04 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Agricultural field and woods **Distance to nearest roadway or other development?** 6.6 ft (2 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: SCC, EBW **Date:** November 18, 2009

Wetland Impact:
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 16, 18	X	
Fish and Shellfish Habitat	X		4, 14, 15, 16, 17		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 10, 11, 12, 13, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		2, 3, 4, 6, 8, 9, 12, 13, 15	X	
Wildlife Habitat	X		5, 6, 7, 9, 11, 13		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit RRX

Total area of wetland (RR/RRX)? 45,341 square feet (1.04 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Agriculture; Successional Shrubland & Forest; Urban **Distance to nearest roadway or other development?** 902.2 ft (275 m)

Dominant wetland systems present? Palustrine Emergent Persistent (Phragmites)

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: DJL **Date:** 6/01/2011

Wetland Impact:
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 9, 16	X	
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 13, 15, 16, 18		
Fish and Shellfish Habitat	X		4, 14, 16, 17		
Sediment/Toxicant Retention	X		1, 2, 3, 4, 5, 10, 12, 13, 14, 16	X	
Nutrient Removal	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 14, 15	X	
Production Export		X			
Sediment/Shoreline Stabilization	X		3, 8, 12, 13		
Wildlife Habitat	X		4, 5, 6, 7, 8, 13		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit SS

Total area of wetland? Outside PSA **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Woods and field **Distance to nearest roadway or other development?** 82 ft (25 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? Yes **If not, where does the wetland lie in the drainage basin?**

How many tributaries contribute to the wetland? None

Prepared by: SCC, EBW **Date:** November 23, 2009

Wetland Impact: N/A
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 11, 18		
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		3, 4, 7, 8, 11, 13, 14, 17		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics	X		2, 3, 5, 7, 11, 12		
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit TT

Total area of wetland? 70,085 square feet (1.61 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Prepared by: SCC, EBW **Date:** November 23, 2009

Adjacent land use? Urban development, field and woods **Distance to nearest roadway or other development?** 8.2 ft (2.5 m)

Wetland Impact: TBD
Type: **Area:**

Dominant wetland systems present? Shallow emergent marsh

Evaluation based on:
Office: **Field:** X

Contiguous undeveloped buffer zone present? No

Corps manual wetland delineation completed? Yes

Is the wetland a separate hydraulic system? Unknown **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 16		
Floodflow Alteration	X		2, 3, 4, 5, 6, 7, 8, 9, 11, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 4, 5, 6, 7, 9	X	
Nutrient Removal	X		2, 3, 4, 5, 7, 8, 9, 11, 12	X	
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		3, 4, 5, 7, 8, 11, 13, 14, 16, 17, 18, 19, 23	X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics	X		2, 5, 6, 11		
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit TTX

Total area of wetland? 7,296 square feet (0.17 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Transportation; forest **Distance to nearest roadway or other development?** <16.4 ft (5 m)

Dominant wetland systems present? Palustrine Emergent and Palustrine Forest

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? 1

Prepared by: DJL **Date:** 6/10/2011

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 4, 7, 16	X	
Floodflow Alteration	X		1, 2, 4, 5, 6, 8, 9, 10, 13, 16	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 3, 4, 5, 10	X	
Nutrient Removal	X		3, 5, 6, 7, 8, 9		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		3, 4, 5, 6, 7, 11, 14	**X**	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit UU

Total area of wetland? 8,309 square feet (0.19 acres) **Human made?** Yes **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Urban development and agricultural fields **Distance to nearest roadway or other development?** 6.6 ft (2 m)

Dominant wetland systems present? Shallow emergent marsh

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? None

Prepared by: EBW **Date:** July 21, 2010

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 5, 7, 8, 9, 15, 16		
Floodflow Alteration	X		2, 4, 5, 6, 7, 8, 9, 13, 15, 18	X	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 3, 4, 6	X	
Nutrient Removal	X		3, 7, 8, 9, 12		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit UUX

Total area of wetland? 12,528 square feet (0.29 acres) **Human made?** No **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Transportation; urban **Distance to nearest roadway or other development?** <9.8 ft (3 m)

Dominant wetland systems present? Palustrine Emergent

Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: DJL **Date:** 6/10/2011

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 4, 7, 9, 16		
Floodflow Alteration	X		4, 6, 7, 9, 13	X	Minimal function based on size of wetland and its position in the landscape.
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 3, 4, 5, 10, 12	X	Minimal function based on size of wetland.
Nutrient Removal	X		3, 5, 6, 7		Minimal function based on size of wetland.
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		7		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit VV

Total area of wetland? 5,754 (0.13 acres) **Human made?** No **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Transportation; urban; forest **Distance to nearest roadway or other development?** 16.4 ft (5 m)

Dominant wetland systems present? Palustrine emergent

Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: DJL **Date:** 6/10/2011

Wetland Impact:
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 4, 7, 9, 16		
Floodflow Alteration	X		4, 6, 7, 8, 9, 10, 12	**X**	
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 3, 4, 10, 14		
Nutrient Removal	X		3, 7, 9		
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		5, 6, 7		
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit WW

Total area of wetland? 3,159 square feet (0.073 acres) **Human made?** Yes **Is wetland part of a wildlife corridor?** No **or a "habitat island"?** No

Adjacent land use? Transportation; urban **Distance to nearest roadway or other development?** <9.8 ft (3 m)

Dominant wetland systems present? Palustrine Emergent
Contiguous undeveloped buffer zone present? No

Is the wetland a separate hydraulic system? No **If not, where does the wetland lie in the drainage basin?** Upper

How many tributaries contribute to the wetland? One (1)

Prepared by: DJL **Date:** 6/10/2011

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: X **Field:** X
Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 4, 7, 9		
Floodflow Alteration	X		4, 6, 7, 9, 13, 15	X	Minimal function based on size of wetland.
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 3, 4, 5, 10, 12	X	Minimal function based on size of wetland.
Nutrient Removal	X		3, 5, 7		Minimal function based on size of wetland.
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

Function-Value Evaluation Form - Wetland Unit XX

Total area of wetland? 3,312 square feet (0.08 acres) **Human made?** Yes **Is wetland part of a wildlife corridor?** Yes **or a "habitat island"?** No

Adjacent land use? Transportation; urban **Distance to nearest roadway or other development?** <9.8 ft (3 m)

Dominant wetland systems present? Palustrine Forest

Contiguous undeveloped buffer zone present? Yes, but minimal.

Is the wetland a separate hydraulic system? Yes **If not, where does the wetland lie in the drainage basin?**

How many tributaries contribute to the wetland? None.

Prepared by: DJL **Date:** 6/10/2011

Wetland Impact: TBD
Type: **Area:**

Evaluation based on:
Office: X **Field:** X

Corps manual wetland delineation completed? Yes

Function/Value	Occurrence Y	Occurrence N	Rationale (Condition/Qualifier*)	Principal Function/Value	Comments
Groundwater Recharge/Discharge	X		1, 2, 4, 16		Minimal function based on size of wetland and position in landscape.
Floodflow Alteration	X		6, 7, 9, 15	X	Minimal function based on size of wetland.
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 4, 5, 12		Minimal function based on size of wetland.
Nutrient Removal		X			
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X		7, 11		Minimal function based on size of wetland.
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
Endangered Species Habitat		X			
Other		X			

***Refer to attached list of numbered considerations and qualifiers**

EXHIBIT D
Photographs

Wetland Assessment and Delineation Report
Interstate 87 (I-87) Exit 4 Access Improvements

January 2014

Photo No. 1 Photo Date: September 28, 2009

Description: Wetland A – Wet Plot A-2.

Photo Location indicated on Figure 2-22.

Photo No. 2 Photo Date: September 28, 2009

Description: Looking southwest at Wetland A from near wetland boundary flag A-1.

Photo Location indicated on Figure 2-22.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 3 Photo Date: September 29, 2009

Description: Wetland B – Wet Plot B-2

Photo Location indicated on Figure 2-22.

Photo No. 4 Photo Date: September 29, 2009

Description: Looking northwest at Wetland B from near the shoulder of Old Wolf Road.

Photo Location indicated on Figure 2-22.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 3 Photo Date: September 29, 2009

Description: Wetland B – Wet Plot B-2

Photo Location indicated on Figure 2-22.

Photo No. 4 Photo Date: September 29, 2009

Description: Looking northwest at Wetland B from near the shoulder of Old Wolf Road.

Photo Location indicated on Figure 2-22.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 5 Photo Date: September 29, 2009

Description: Wetland C – Wet Plot C-2.

Photo Location indicated on Figure 2-22.

Photo No. 6 Photo Date: September 29, 2009

Description: Looking north at Wetland C from near the shoulder of I-87 northbound.

Photo Location indicated on Figure 2-22.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 7 Photo Date: September 30, 2009

Description: Wetland D – Wet Plot D-2.

Photo Location indicated on Figure 2-18.

Photo No. 8 Photo Date: September 30, 2009

Description: Looking southeast at Wetland D from near wetland boundary flag D-37.

Photo Location indicated on Figure 2-19.

Photo No. 9 Photo Date: September 30, 2009

Description: Wetland E – Wet Plot E-2.

Photo Location indicated on Figure 2-20.

Photo No. 10 Photo Date: September 30, 2009

Description: Looking southwest at Wetland E from near the intersection of the I-87 southbound On-ramp and Albany Shaker Road.

Photo Location indicated on Figure 2-20.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 11 Photo Date: October 1, 2009

Description: Wetland F - Wet Plot F-2.

Photo Location indicated on Figure 2-15.

Photo No. 12 Photo Date: October 1, 2009

Description: Looking southeast at Wetland F from near the shoulder of I-87 southbound.

Photo Location indicated on Figure 2-15.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 13 Photo Date: October 12, 2009

Description: Wetland G - Wet Plot G-2.

Photo Location indicated on Figure 2-17.

Photo No. 14 Photo Date: October 12, 2009

Description: Looking northwest at Wetland G from the top of the bank near Upland Plot G-1.

Photo Location indicated on Figure 2-17.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 15 Photo Date: October 12, 2009

Description: Wetland H - Wet Plot H-2.

Photo Location indicated on Figure 2-17.

Photo No. 16 Photo Date: October 12, 2009

Description: Looking northwest at Wetland H and unnamed tributary #2 to Ann Lee Pond from near Upland Plot H-1.

Photo Location indicated on Figure 2-17.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 17 Photo Date: October 13, 2009

Description: Wetland I - Wet Plot I-2.

Photo Location indicated on Figure 2-14.

Photo No. 18 Photo Date: October 13, 2009

Description: Looking southeast at Wetland I from the shoulder of I-87 northbound near wetland boundary flag I-22.

Photo Location indicated on Figure 2-14.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 19 Photo Date: October 14, 2009

Description: Wetland J - Wet Plot J-2.

Photo Location indicated on Figure 2-11.

Photo No. 20 Photo Date: October 14, 2009

Description: Looking sout at the Wetland J floodplain forest community from near wetland boundary flag J-17.

Photo Location indicated on Figure 2-11.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 21 Photo Date: October 14, 2009

Description: Wetland J - Wet Plot J-5.

Photo Location indicated on Figure 2-11.

Photo No. 22 Photo Date: October 14, 2009

Description: Looking east at the Wetland J shallow emergent marsh community from the shoulder of I-87 northbound.

Photo Location indicated on Figure 2-11.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 23 Photo Date: October 14, 2009

Description: Wetland K - Wet Plot K-2.

Photo Location indicated on Figure 2-10.

Photo No. 24 Photo Date: October 14, 2009

Description: Looking southwest at Wetland K from near wetland boundary flag K-1.

Photo Location indicated on Figure 2-10.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 25 Photo Date: October 15, 2009

Description: Wetland L - Wet Plot L-2.

Photo Location indicated on Figure 2-39.

Photo No. 26 Photo Date: October 15, 2009

Description: Looking north at Wetland L from near the southern most portion of the wetland.

Photo Location indicated on Figure 2-39.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 27 Photo Date: October 15, 2009

Description: Looking east at Wetland L from near wetland boundary flag L-4.

Photo Location indicated on Figure 2-39.

Photo No. 28 Photo Date: October 15, 2009

Description: Looking south at the Wetland L atypical situation from near the southern most portion of the wetland.

Photo Location indicated on Figure 2-39.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 29 Photo Date: October 26, 2009

Description: Wetland M – Wet Plot M-2.

Photo Location indicated on Figure 2-2.

Photo No. 30 Photo Date: October 26, 2009

Description: Looking southeast at Wetland M from along the northwestern boundary near wetland boundary flag M-6.

Photo Location indicated on Figure 2-2.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 31 Photo Date: October 26, 2009

Description: Wetland N – Wet Plot N-2.

Photo Location indicated on Figure 2-3.

Photo No. 32 Photo Date: October 26, 2009

Description: Looking northwest at Wetland N and unnamed tributary #1 to Shakers Creek from near the top of the box culvert along I-87 northbound.

Photo Location indicated on Figure 2-3.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 33 Photo Date: October 27, 2009

Description: Wetland O – Wet Plot O-2.

Photo Location indicated on Figure 2-2.

Photo No. 34 Photo Date: October 27, 2009

Description: Looking southeast at Wetland O and unnamed tributary #1 to Shakers Creek from near the shoulder of I-87 northbound.

Photo Location indicated on Figure 2-3.

Photo No. 35 Photo Date: October 27, 2009

Description: Wetland P – Wet Plot P-2.

Photo Location indicated on Figure 2-11.

Photo No. 36 Photo Date: October 27, 2009

Description: Looking northeast at Wetland P and Shakers Creek from near wetland boundary flag P-12.

Photo Location indicated on Figure 2-10.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 37 Photo Date: October 27, 2009

Description: Looking northwest at Wetland P from near wetland boundary flag P-17.

Photo Location indicated on Figure 2-11.

Photo No. 38 Photo Date: October 27, 2009

Description: Looking southeast at Wetland P and Shakers Creek from near wetland boundary flag P-9.

Photo Location indicated on Figure 2-10.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 39 Photo Date: October 27, 2009

Description: Wetland Q – Wet Plot Q-2.

Photo Location indicated on Figure 2-12.

Photo No. 40 Photo Date: October 27, 2009

Description: Looking northeast at Wetland Q along the northwestern boundary from near wetland boundary flag Q-1.

Photo Location indicated on Figure 2-12.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 41 Photo Date: October 29, 2009

Description: Wetland R – Wet Plot R-2.

Photo Location indicated on Figure 2-25.

Photo No. 42 Photo Date: October 29, 2009

Description: Looking northwest at the Wetland R floodplain forest community from near wetland boundary flag R-1.

Photo Location indicated on Figure 2-25.

Photo No. 43 Photo Date: October 29, 2009

Description: Wetland R – Wet Plot R-5.

Photo Location indicated on Figure 2-24.

Photo No. 44 Photo Date: October 29, 2009

Description: Looking southwest at the Wetland R shallow emergent marsh community from the shoulder of I-87 northbound near wetland boundary flag R-10.

Photo Location indicated on Figure 2-24.

Photo No. 45 Photo Date: November 3, 2009

Description: Wetland S – Wet Plot S-2.

Photo Location indicated on Figure 2-40.

Photo No. 46 Photo Date: November 3, 2009

Description: Looking northwest at Wetland S from near wetland boundary flag S-2.

Photo Location indicated on Figure 2-40.

Photo No. 47 Photo Date: November 3, 2009

Description: Wetland T – Wet Plot T-2.

Photo Location indicated on Figure 2-40.

Photo No. 48 Photo Date: November 3, 2009

Description: Looking north at Wetland T from near wetland boundary flag T-8.

Photo Location indicated on Figure 2-40.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 49 Photo Date: November 4, 2009

Description: Looking southeast at Wetland U from the top of the concrete box culvert along I-87 southbound.

Photo Location indicated on Figure 2-26.

Photo No. 50 Photo Date: November 4, 2009

Description: Looking northwest at Wetland U from the top of the concrete box culvert along I-87 northbound.

Photo Location indicated on Figure 2-26.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 51 Photo Date: November 4, 2009

Description: Looking northwest along I-87 northbound at Wetland V from near wetland boundary flag V-12.

Photo Location indicated on Figure 2-28.

Photo No. 52 Photo Date: November 4, 2009

Description: Looking northwest at Wetland V from near Upland Plot V-1.

Photo Location indicated on Figure 2-28.

Photo No. 53 Photo Date: November 4, 2009

Description: Looking northwest at Wetland W from near Upland Plot W-1.

Photo Location indicated on Figure 2-28.

Photo No. 54 Photo Date: November 4, 2009

Description: Looking southeast at Wetland W from near wetland boundary flag W-9.

Photo Location indicated on Figure 2-28.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 55 Photo Date: November 4, 2009

Description: Wetland X – Wet Plot X-2.

Photo Location indicated on Figure 2-27.

Photo No. 56 Photo Date: November 4, 2009

Description: Looking northwest at Wetland X from near Upland Plot X-1.

Photo Location indicated on Figure 2-26.

Photo No. 57 Photo Date: November 5, 2009

Description: Wetland Y – Wet Plot Y-2.

Photo Location indicated on Figure 2-25.

Photo No. 58 Photo Date: November 5, 2009

Description: Looking southeast at Wetland Y from near Upland Plot Y-1.

Photo Location indicated on Figure 2-25.

Photo No. 59 Photo Date: November 5, 2009

Description: Wetland Z – Wet Plot Z-2.

Photo Location indicated on Figure 2-24.

Photo No. 60 Photo Date: November 5, 2009

Description: Looking southeast at Wetland Z and unnamed tributary #4 to Ann Lee Pond from near Upland Plot Z-1.

Photo Location indicated on Figure 2-24.

Photo No. 61 Photo Date: November 5, 2009

Description: Wetland AA – Wet Plot AA-2.

Photo Location indicated on Figure 2-26.

Photo No. 62 Photo Date: November 5, 2009

Description: Looking southeast at Wetland AA from near Upland Plot AA-1.

Photo Location indicated on Figure 2-26.

Photo No. 63 Photo Date: November 6, 2009

Description: Wetland BB – Wet Plot BB-2.

Photo Location indicated on Figure 2-28.

Photo No. 64 Photo Date: November 6, 2009

Description: Looking south at Wetland BB from between wetland boundary flags BB-20 and BB-21.

Photo Location indicated on Figure 2-28.

Photo No. 65 Photo Date: November 9, 2009

Description: Wetland CC – Wet Plot CC-2.

Photo Location indicated on Figure 2-21.

Photo No. 66 Photo Date: November 9, 2009

Description: Looking southwest at Wetland CC from near Upland Plot CC-1.

Photo Location indicated on Figure 2-21.

Photo No. 67 Photo Date: November 10, 2009

Description: Wetland DD – Wet Plot DD-2.

Photo Location indicated on Figure 2-30.

Photo No. 68 Photo Date: November 10, 2009

Description: Looking southeast at Wetland DD and unnamed tributary #2 to Shakers Creek from the shoulder of I-87 northbound nearest wetland boundary flag DD-9.

Photo Location indicated on Figure 2-30.

Photo No. 69 Photo Date: November 10, 2009

Description: Wetland EE – Wet Plot EE-2.

Photo Location indicated on Figure 2-3.

Photo No. 70 Photo Date: November 10, 2009

Description: Looking northwest at Wetland EE from near Wet Plot EE-2.

Photo Location indicated on Figure 2-3.

Photo No. 71 Photo Date: November 10, 2009

Description: Wetland EE – Wet Plot EE-4.

Photo Location indicated on Figure 2-3.

Photo No. 72 Photo Date: November 10, 2009

Description: Looking northwest at Wetland EE from near wetland boundary flag EE-20.

Photo Location indicated on Figure 2-3.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 73 Photo Date: November 11, 2009

Description: Wetland FF – Wet Plot FF-2.

Photo Location indicated on Figure 2-14.

Photo No. 74 Photo Date: November 11, 2009

Description: Looking northeast at Wetland FF and unnamed tributary #2 to Ann Lee Pond from near wetland boundary flag FF-26.

Photo Location indicated on Figure 2-14.

Photo No. 75 Photo Date: November 11, 2009

Description: Looking southwest at Wetland GG from near wetland boundary flag GG-11.

Photo Location indicated on Figure 2-14.

Photo No. 76 Photo Date: November 11, 2009

Description: Looking northeast at Wetland GG from near wetland boundary flag GG-6.

Photo Location indicated on Figure 2-13.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 77 Photo Date: November 11, 2009

Description: Wetland HH – Wet Plot HH-2.

Photo Location indicated on Figure 2-12.

Photo No. 78 Photo Date: November 11, 2009

Description: Looking northwest at Wetland HH from the top of the concrete box culvert along I-87 southbound near wetland boundary flag HH-9.

Photo Location indicated on Figure 2-12.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 79 Photo Date: November 12, 2009

Description: Wetland II – Wet Plot II-2.

Photo Location indicated on Figure 2-4.

Photo No. 80 Photo Date: November 12, 2009

Description: Looking northwest at Wetland II and Shakers Creek from near wetland boundary flag II-34.

Photo Location indicated on Figure 2-4.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 81 Photo Date: November 12, 2009

Description: Wetland JJ – Wet Plot JJ-2.

Photo Location indicated on Figure 2-11.

Photo No. 82 Photo Date: November 12, 2009

Description: Looking north at Wetland JJ from the backslope of I-87 southbound nearest wetland boundary flag JJ-6.

Photo Location indicated on Figure 2-11.

Photo No. 83 Photo Date: November 16, 2009

Description: Wetland KK – Wet Plot KK-2.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Photo No. 84 Photo Date: November 16, 2009

Description: Looking north at Wetland KK from near wetland boundary flag KK-9.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Photo No. 85 Photo Date: November 16, 2009

Description: Wetland LL – Wet Plot LL-2.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Photo No. 86 Photo Date: November 16, 2009

Description: Looking south at Wetland LL from near wetland boundary flag LL-3.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

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Town of Colonie
Albany County, New York
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Photo No. 87 Photo Date: November 16, 2009

Description: Looking south at Wetland MM from near wetland boundary flag MM-6.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Photo No. 88 Photo Date: November 16, 2009

Description: Looking north at Wetland MM from near wetland boundary flag MM-3.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 89 Photo Date: November 16, 2009

Description: Wetland NN – Wet Plot NN-2.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Photo No. 90 Photo Date: November 16, 2009

Description: Looking south at Wetland NN from near wetland boundary flag NN-5.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 91 Photo Date: November 17, 2009

Description: Wetland OO – Wet Plot OO-2.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Photo No. 92 Photo Date: November 17, 2009

Description: Looking southwest at Wetland OO from near wetland boundary flag OO-12.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 93 Photo Date: November 18, 2009

Description: Wetland PP – Wet Plot PP-2.

Photo Location indicated on Figure 2-5.

Photo No. 94 Photo Date: November 18, 2009

Description: Looking northwest at Wetland PP from near wetland boundary flag PP-19.

Photo Location indicated on Figure 2-5.

Photo No. 95 Photo Date: November 18, 2009

Description: Wetland QQ – Wet Plot QQ-2.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Photo No. 96 Photo Date: November 18, 2009

Description: Looking northwest at Wetland QQ from near wetland boundary flag QQ-5.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Photo No. 97 Photo Date: November 19, 2009

Description: Wetland RR – Wet Plot RR-2.

Photo Location indicated on Figure 2-8.

Photo No. 98 Photo Date: November 19, 2009

Description: Looking southwest at Wetland RR from near Wet Plot RR-2.

Photo Location indicated on Figure 2-8.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
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Photo No. 99 Photo Date: November 19, 2009

Description: Looking northwest at Wetland SS from near wetland boundary flag SS-5.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Photo No. 100 Photo Date: November 19, 2009

Description: Looking southeast at Wetland SS from near wetland boundary flag SS-3.

Photo Location not shown on Figure 2 – outside of PSA.

Wetland location is shown on Figure 2 Key Map.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 101 Photo Date: November 19, 2009

Description: Wetland TT – Wet Plot TT-2

Photo Location not shown on Figure 2 – outside of PSA.

Photo No. 102 Photo Date: November 19, 2009

Description: Looking northwest at Wetland TT from the shoulder of Albany Shaker Road near wetland boundary flag TT-21.

Photo Location indicated on Figure 2-36.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 103 Photo Date: July 21, 2010

Description: Wetland UU – Wet Plot UU-2

Photo Location not shown on Figure 2.

Photo No. 104 Photo Date: July 21, 2010

Description: Looking southwest at Wetland UU from along the backslope of the Interstate 87 southbound and Old Wolf Road on-ramp.

Photo Location indicated on Figure 2-27.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 105 Photo Date: September 29, 2009

Description: Looking at Ditch A along the I-87 northbound on-ramp from the top of the inlet pipe in the southeast.

Photo Location indicated on Figure 2-22.

Photo No. 106 Photo Date: September 29, 2009

Description: Looking at Ditch A from near flag DA-8.

Photo Location indicated on Figure 2-22.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 107 Photo Date: October 1, 2009

Description: Looking at Ditch B from the top of the outlet pipe that carries flow to Ditch A.

Photo Location indicated on Figure 2-22.

Photo No. 108 Photo Date: October 1, 2009

Description: Looking northeast at Ditch B from the shoulder of the intersection of Albany Shaker Road and the I-87 northbound on-ramp.

Photo Location indicated on Figure 2-22.

Photo No. 109 Photo Date: October 1, 2009

Description: Looking at Ditch C from near boundary flag DC-2 at the outlet pipe that carries flow to Wetland E.

Photo Location indicated on Figure 2-20.

Photo No. 110 Photo Date: October 1, 2009

Description: Looking southeast at Ditch C from near the central portion of the ditch.

Photo Location indicated on Figure 2-20.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 111 Photo Date: October 13, 2009

Description: Looking south at Ditch D from the backslope of I-87 northbound.

Photo Location indicated on Figure 2-13.

Photo No. 112 Photo Date: October 13, 2009

Description: Looking northeast at Ditch D from the backslope of I-87 northbound.

Photo Location indicated on Figure 2-13.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 113 Photo Date: October 14, 2009

Description: Looking southwest at Ditch E from near the concrete box culvert outlet along I-87 northbound.

Photo Location indicated on Figure 2-11.

Photo No. 114 Photo Date: October 14, 2009

Description: Looking northeast at Ditch E from near flag DE-10.

Photo Location indicated on Figure 2-10.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 115 Photo Date: November 3, 2009

Description: Looking southwest at Ditch F from between flags DF-3 and DF-4.

Photo Location indicated on Figure 2-41.

Photo No. 116 Photo Date: November 3, 2009

Description: Looking southwest at Ditch G from between flags DG-2 and DG-3.

Photo Location indicated on Figure 2-40.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 117 Photo Date: November 5, 2009

Description: Looking southwest at Ditch H from near flag DH-7.

Photo Location indicated on Figure 2-27.

Photo No. 118 Photo Date: November 5, 2009

Description: Looking northeast at Ditch H from near flag DH-1.

Photo Location indicated on Figure 2-27.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 119 Photo Date: November 4, 2009

Description: Looking southwest toward Wetland U at the NYSDOT naturalized swale area located northeast of Wetland U.

Photo Location indicated on Figure 2-27.

Photo No. 120 Photo Date: November 4, 2009

Description: Looking northeast toward Wetland U at the NYSDOT naturalized swale area located southwest of Wetland U.

Photo Location indicated on Figure 2-26.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

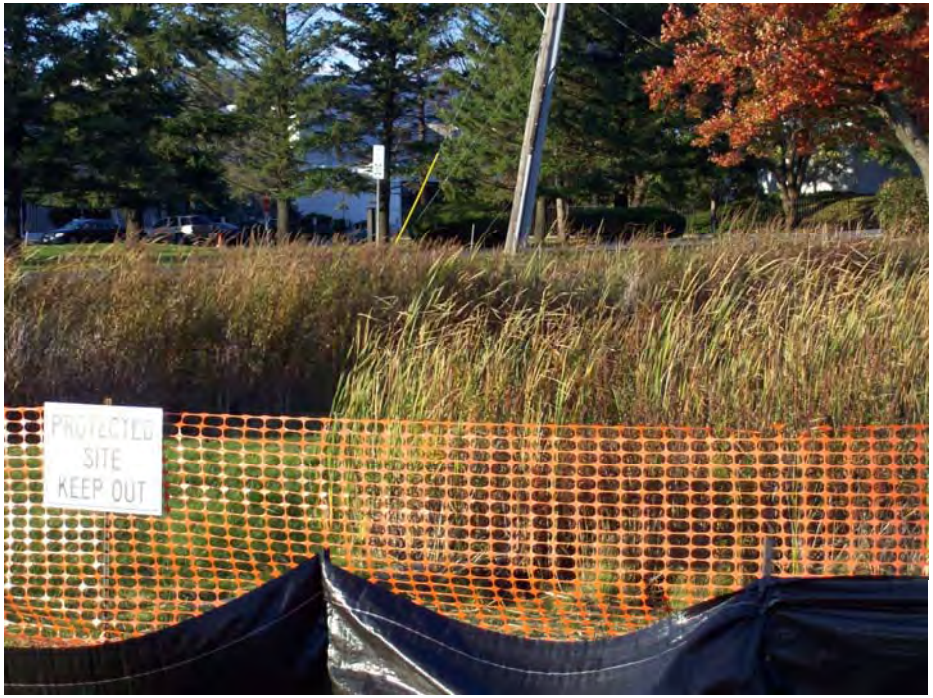

Photo No. 121 Photo Date: October 13, 2009

Description: Looking northeast at the stormwater detention basins from the shoulder of Albany Shaker Road.

Photo Location indicated on Figure 2-19.

Photo No. 122 Photo Date: October 13, 2009

Description: Looking at pipe overflow outlet from stormwater detention basins to Wetland D.

Photo Location indicated on Figure 2-19.

Photo No. 123 Photo Date: June 8, 2011

Description: View of soils at ROP MX-1.

Photo Location indicated on Figure 2-1.

Photo No. 124 Photo Date: June 8, 2011

Description: View from I-87 southbound embankment looking east toward ROP MX-1.

Photo Location indicated on Figure 2-1.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 125 Photo Date: June 8, 2011

Description: View from I-87 northbound embankment looking west toward ROP MX-1

Photo Location indicated on Figure 2-1.

Photo No. 126 Photo Date: June 8, 2011

Description: View of soil at ROP OX-1

Photo Location not shown on Figure 2 – outside of PSA.

Interstate 87 Exit 3 Airport Connector
Town of Colonie
Albany County, New York
PIN 1721.51

Photo No. 127 Photo Date: June 8, 2011

Description: View of Wetland OX looking south.

Photo Location indicated on Figure 2-1.

Photo No. 128 Photo Date: June 8, 2011

Description: View from ROP OX-1 looking up at I-87 northbound embankment.

Photo Location indicated on Figure 2-1.

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Photo No. 129 Photo Date: June 8, 2011

Description: View from ROP OX-1 looking at road embankment along Computer Drive.

Photo Location not shown on Figure 2; location is beyond PSA.

Photo No. 130 Photo Date: June 8, 2011

Description: View of soil at ROP VXT1U.

Photo Location indicated on Figure 2-31.

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Photo No. 131 Photo Date: June 8, 2011

Description: View from behind ROP VXT1U looking southeast toward ROP VXT1W.

Photo Location indicated on Figure 2-31.

Photo No. 132 Photo Date: June 8, 2011

Description: View of soil at ROP VXT1W.

Photo Location indicated on Figure 2-31.

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Albany County, New York
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Photo No. 133 Photo Date: June 8, 2011

Description: View from behind ROP VXT1W looking northwest toward ROP VXT1U.

Photo Location indicated on Figure 2-31.

Photo No. 134 Photo Date: June 8, 2011

Description: View of northern end of Wetland WX with back toward I-87 infield area looking southwest.

Photo Location indicated on Figure 2-31.

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Photo No. 135 Photo Date: June 8, 2011

Description: View from northern end of Wetland WX looking north toward the I-87 infield area.

Photo Location indicated on Figure 2-29.

Photo No. 136 Photo Date: May 3, 2011

Description: View of soil at ROP PPX1.

Photo Location indicated on Figure 2-5.

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Photo No. 137 Photo Date: May 3, 2011

Description: View from behind ROP PPX1 looking northerly at Wetland PPX.

Photo Location indicated on Figure 2-5.

Photo No. 138 Photo Date: May 3, 2011

Description: View from Wetland PPX looking southerly toward ROP PPX1.

Photo Location indicated on Figure 2-5.

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Photo No. 139 Photo Date: May 3, 2011

Description: View of soil at ROP PPX2.

Photo Location indicated on Figure 2-5.

Photo No. 140 Photo Date: May 3, 2011

Description: View from behind ROP PPX2 looking southerly toward Wetland PPX..

Photo Location indicated on Figure 2-5.

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Photo No. 141 Photo Date: May 3, 2011

Description: View from Wetland PPX looking northerly toward ROP PPX2.

Photo Location indicated on Figure 2-5.

Photo No. 142 Photo Date: June 8, 2011

Description: View of soil at ROP DDXT1U.

Photo Location indicated on Figure 2-31.

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Photo No. 143 Photo Date: June 8, 2011

Description: View from behind ROP DDXT1U looking southerly toward ROP DDXT1W.

Photo Location indicated on Figure 2-31.

Photo No. 144 Photo Date: June 8, 2011

Description: View of soil at ROP DDXT1W.

Photo Location indicated on Figure 2-31.

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Photo No. 145 Photo Date: June 8, 2011

Description: View from behind ROP DDXT1W looking northerly toward ROP DDXT1U.

Photo Location indicated on Figure 2-31.

Photo No. 146 Photo Date: May 3, 2011

Description: View of soil at ROP HHX1.

Photo Location indicated on Figure 2-5.

Interstate 87 Exit 3 Airport Connector
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Albany County, New York
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Photo No. 147 Photo Date: May 3, 2011

Description: View from behind ROP HHX1 looking northerly toward Wetland HHX.

Photo Location indicated on Figure 2-5.

Photo No. 148 Photo Date: May 3, 2011

Description: View of soil at ROP HHX2.

Photo Location indicated on Figure 2-6.

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Photo No. 149 Photo Date: May 3, 2011

Description: View from behind ROP HHX2 looking southerly towards Wetland HHX.

Photo Location indicated on Figure 2-6.

Photo No. 150 Photo Date: May 3, 2011

Description: View from Wetland HHX looking northerly toward ROP HHX2.

Photo Location indicated on Figure 2-6.

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Photo No. 151 Photo Date: May 3, 2011

Description: View of soil pit at ROP KKXT1U.

Photo Location indicated on Figure 2-7.

Photo No. 152 Photo Date: May 3, 2011

Description: View from behind ROP KKXT1U looking westerly toward ROP KKXT1W.

Photo Location indicated on Figure 2-7.

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Photo No. 153 Photo Date: May 3, 2011

Description: View of soil pit at ROP KKXT1W.

Photo Location indicated on Figure 2-7.

Photo No. 154 Photo Date: May 3, 2011

Description: View from behind ROP KKXT1W looking easterly toward ROP KKXT1U.

Photo Location indicated on Figure 2-7.

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Photo No. 155 Photo Date: May 2, 2011

Description: View from behind ROP RRXT1U looking northeast toward ROP RRXT1W.

Photo Location indicated on Figure 2-8.

Photo No. 156 Photo Date: May 2, 2011

Description: View from behind ROP RRXT1W looking southwest toward ROP RRXT1U.

Photo Location indicated on Figure 2-8.

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Photo No. 157 Photo Date: June 7, 2011

Description: View of soil at ROP TTXT1U.

Photo Location indicated on Figure 2-37.

Photo No. 158 Photo Date: June 7, 2011

Description: View from behind ROP TTXT1U looking southwesterly toward ROP TTXT1W.

Photo Location indicated on Figure 2-37.

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Photo No. 159 Photo Date: June 7, 2011

Description: View of soil at ROP TTXT1W.

Photo Location indicated on Figure 2-37.

Photo No. 160 Photo Date: June 7, 2011

Description: View from behind ROP TTXT1W looking northeasterly toward ROP TTXT1U.

Photo Location indicated on Figure 2-37.

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Photo No. 161 Photo Date: June 7, 2011

Description: View of from west side of I-87 on/off ramp looking westerly toward ROP UUX1

Photo Location indicated on Figure 2-30.

Photo No. 162 Photo Date: June 7, 2011

Description: View of soil at ROP VVT1U.

Photo Location indicated on Figure 2-38.

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Photo No. 163 Photo Date: June 7, 2011

Description: View from behind ROP VVT1U looking southwest towards ROP VVT1W.

Photo Location indicated on Figure 2-38.

Photo No. 164 Photo Date: June 7, 2011

Description: View of soil at ROP VVT1W.

Photo Location indicated on Figure 2-38.

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Photo No. 165 Photo Date: June 7, 2011

Description: View from behind ROP VVT1W looking northeast towards ROP VVT1U.

Photo Location indicated on Figure 2-38.

Photo No. 166 Photo Date: June 7, 2011

Description: View of Wetland WW looking southwesterly from the west shoulder of the I-87 on/off ramp.

Photo Location indicated on Figure 2-31.

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Albany County, New York
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Photo No. 167 Photo Date: June 7, 2011

Description: View of Wetland WW looking southeasterly from a swale toward I-87 on/off ramp and I-87 southbound lanes.

Photo Location indicated on Figure 2-31.

Photo No. 168 Photo Date: June 7, 2011

Description: View of soil at ROP XXT1U.

Photo Location indicated on Figure 2-29.

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Photo No. 169 Photo Date: June 7, 2011

Description: View from behind ROP XXT1U looking north-easterly toward ROP XXT1W.

Photo Location indicated on Figure 2-29.

Photo No. 170 Photo Date: June 7, 2011

Description: View of soil at ROP XXT1W.

Photo Location indicated on Figure 2-29.

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Photo No. 171 Photo Date: June 7, 2011

Description: View from behind ROP XXT1W looking south-westerly toward ROP XXT1U.

Photo Location indicated on Figure 2-29.

Photo No. 172 Photo Date: June 7, 2011

Description: View of Wetland Mitigation Area sign.

Photo Location indicated on Figure 2-37.

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Photo No. 173 Photo Date: June 7, 2011

Description: View of Wetland Mitigation Area with back toward Albany Shaker Road looking northwesterly.

Photo Location indicated on Figure 2-38.

Photo No. 174 Photo Date: June 7, 2011

Description: View of soil from Wetland Mitigation Area.

Photo Location indicated on Figure 2-38.

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Photo No. 175 Photo Date: Unknown

Description: Bird's eye View of Ditch I.

Photo Location indicated on Figure 2-1.

Photo No. 176 Photo Date: Unknown

Description: Bird's eye view of Ditch I.

Photo Location indicated on Figure 2-1.

Photo No. 177 Photo Date: June 7, 2011

Description: View of Ditch J with back toward Albany Shaker Road looking westerly.

Photo Location indicated on Figure 2-38.

Photo No. 178 Photo Date: June 7, 2011

Description: View of Ditch J with back to the west looking easterly toward Albany Shaker Road.

Photo Location indicated on Figure 2-38.

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Photo No. 179 Photo Date: May 3, 2011

Description: View of Wetland CCX from flag CCX5 looking easterly.

Photo Location indicated on Figure 2-9.

Photo No. 180 Photo Date: May 3, 2011

Description: View of Wetland CCX from edge of access road looking easterly.

Photo Location indicated on Figure 2-9.

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Photo No. 181 Photo Date: May 3, 2011

Description: View of Wetland CCX from spoil pile near flag CCX39 looking southwesterly.

Photo Location indicated on Figure 2-9.

Photo No. 182 Photo Date: May 3, 2011

Description: View of Wetland CCX from edge of access road looking easterly.

Photo Location indicated on Figure 2-9.

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Photo No. 183 Photo Date: May 3, 2011

Description: View of soil at ROP CCU1.

Photo Location indicated on Figure 2-9.

Photo No. 184 Photo Date: May 3, 2011

Description: View of soil pit at ROP CCU1.

Photo Location indicated on Figure 2-9.

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Photo No. 185 Photo Date: May 3, 2011

Description: View from behind ROP CCU1 looking westerly toward access road.

Photo Location indicated on Figure 2-9.

Photo No. 186 Photo Date: May 3, 2011

Description: View from access road looking easterly toward ROP CCU1.

Photo Location indicated on Figure 2-9.

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Photo No. 187 Photo Date: December 1, 2011

Description: View of Wetland SX with back toward Wetland S looking northeasterly.

Photo Location indicated on Figure 2-42.

Photo No. 188 Photo Date: December 1, 2011

Description: View of Wetland SX looking southwesterly toward Wetland S.

Photo Location indicated on Figure 2-42.

Photo No. 189 Photo Date: December 1, 2011

Description: View of Wetland SX from previous photo location looking northeasterly.

Photo Location indicated on Figure 2-42.

Photo No. 190 Photo Date: December 1, 2011

Description: View of Wetland SX looking northeasterly in the direction of Ditch EX which is connected to Wetland J.

Photo Location indicated on Figure 2-42.

EXHIBIT E
References

Wetland Assessment and Delineation Report
Interstate 87 (I-87) Exit 4 Access Improvements

January 2014

REFERENCES

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EXHIBIT F
Resumes

Wetland Assessment and Delineation Report
Interstate 87 (I-87) Exit 4 Access Improvements

January 2014

SHUMAKER
Consulting Engineering & Land Surveying, P.C.

KELLY J. SALADIS

Senior Environmental Scientist

Education

B.S., Chemistry/Environmental Science, Binghamton University-1999

Additional Training and Certification

Stormwater Management Program FSH-004, Syracuse University

40 Hour OSHA Hazardous Material Training-2000

Advanced ARCView GIS Certification

Army Corps of Engineers Wetlands Delineation & Management Training

Planning, Site Selection, and Hydrology Models for Constructed Wetlands

Northeast Regional Supplement Training - 2010

Years of Experience **10**

Ms. Saladis is an environmental scientist whose qualifications and training encompass a variety of field and laboratory techniques, including wetlands delineation and environmental assessments.

Ms. Saladis has been responsible for performing Phase I site assessments, general ecology/endangered species review, the surface water identification and evaluation, the delineation of state and federal wetlands, agency coordination and obtaining required nationwide and individual permits, in support of many locally administered, bridge rehabilitation, trail and highway projects.

Lewiston at Clinton Street Wetland Investigation, Town of Kirkland, County of Oneida, NY - SCE provided wetland investigation services, wetland delineation tasks, obtained a jurisdictional determination, designed a wetland mitigation area, and provided support during the construction phase of the mitigation site. Post construction wetland monitoring tasks are ongoing in support of the Lewiston housing development project at Clinton Street in the Town of Kirkland, County of Oneida, NY. As Environmental Scientist, Ms. Saladis was responsible for completing this project assignment. Ms. Saladis is currently providing oversight for the post construction Wetland Monitoring task.

D008528 PIN 1804.42, Glenridge Road (Route 50 to Route 146) Wetlands, City of Clifton Park, Counties of Schenectady and Saratoga, NY – As Environmental Scientist, Ms. Saladis managed or performed the General Ecology and Endangered Species tasks, delineation of federal wetlands, the preparation of the Wetland Delineation Report and wetland mitigation design. Ms. Saladis also coordinated with the USACE and NYSDEC to obtain Jurisdictional Determinations and prepared the permit application package to obtain authorization for stream and wetland impacts.

D010116 PIN 8006.72 NYS Route 17 and I- 86 Exit 122 Reconstruction, Town of Walkill, County of Orange, NY – The scope of this ongoing project is to address operation and capacity improvements to Exit 122 on Route 17. Ms. Saladis was responsible for the delineation of approximately 25 wetlands, a hazardous waste screening, general ecology/endangered species review, surface water identification/evaluation and the design of several wetland mitigation sites. The following reports were prepared as appendices to the Environmental Impact Statement: Wetland Delineation Report, Hazardous Waste Assessment Report, and a Biological Assessment for the Indiana bat (*Myotis sodalis*) and the Bog turtle (*Clemmys muhlenbergii*). Ms. Saladis also coordinated with the USACE for a jurisdictional determination for the site, and assisted with the development of the Individual Permit Application Package.

D010293 PIN 4040.38 NYR 390 from I-490 Interchange to NYR 104, Towns of Greece and Gates, County of Monroe, NY– This roadway project includes a bicycle/pedestrian trail link between the Route 390 multi-use trail and the Erie Canal Trailway. Ms. Saladis was responsible for providing the General Ecology/Endangered Species Review, the Surface Water Identification and Evaluation, the delineation of federal wetlands, and preparation of the Wetland Delineation Report.

D015382 Interstate-81 to Fort Drum Construction and Rehabilitation of Interstate Interchange, Fort Drum Military Reservation, County of Jefferson, NY – This ongoing project is providing an Environmental Impact Statement and other environmental design services for a federally funded project for construction and rehabilitation of a 6.5 to 8.0 km transportation link between Interstate Route 81 and the Main Gate of Fort Drum under PIN 7804.26. Ms. Saladis has performed a screening of the Project Study Area (PSA), which is approximately 25 square miles, for the presence of federal/state wetlands and surface water bodies and generated electronic files to assist the NYSDOT with their initial design efforts. Ms. Saladis supervised the field delineation effort, which involved 37 wetlands, assisted with the development of the delineation report, coordinated with involved agencies and assisted with the identification/design of a 7 acre wetland mitigation site. Project deliverables included a Wetland Delineation Report and contract documents for the Wetland Mitigation Design.

SHUMAKER
Consulting Engineering & Land Surveying, P.C.

DONALD J. LOCKWOOD, P.W.S.

Environmental Scientist III

Education

Bachelors of Technology, Agriculture, SUNY College of Agriculture and Technology at Cobleskill-1997

Associates in Applied Science,Fisheries and Wildlife Technology, SUNY College of Agriculture and Technology at Cobleskill-1995

Certifications

Professional Wetland Scientist-2010

Years of Experience 13

Mr. Lockwood is a Professional Wetland Scientist with thirteen years of experience in the field of Environmental Science. He is experienced in conducting wetland delineations according to specifications outlined by the Army Corps of Engineers. Additional experience, in support of various transportation projects, includes general ecology/endangered species review, surface water identification and evaluation, wetland mitigation design, stream bank stabilization and corridor restoration, agency coordination and obtaining Section 404 nationwide and individual permits. He routinely coordinates and communicates with regulatory agencies, and maintains positive working relationships with state and federal regulatory agency representatives. He is familiar with Arcview GIS Software and Trimbel GPS operation, as well as CAD for creating figures and graphics for reports and wetland mitigation design. Mr. Lockwood has received certifications and special training in a wide variety of disciplines including: Society of Wetlands Scientists, Methodology for Delineating Wetlands, and Hydric Soils.

Previous Related Experience Prior to SCE Employment

NYSTA I-90 Rochester/Mendon Ponds area – conducted a wetland delineation in association with a road surface and drainage repair project.

Hale Eddy 9066.91, Towns of Deposit and Hancock, Delaware County, NY - Rte 17 from Hale Eddy to Hancock will be improved to FHWA's Interstate standards in preparation for designation as I-86. Project includes local access roads, interchange(s), mainline reconstruction & storm water management, Town of Hancock, Delaware Co. Conducted wetland delineation and obtained an Approved Jurisdictional Determination from the USACE, New York District. Evaluated wetland mitigation sites for selection and began design on wetland mitigation site.

17/I-81 Interchange 9500.61, Town of Dickinson and the City of Binghamton, Broome County, NY - Project will replace the bridges carrying Rte 17 & I-81 over the Chenango River, Mygatt St & Chenango St. It will replace existing WB off-ramp at Mygatt St and the merge/diverge points will be adjusted to improve visibility. City of Binghamton, Broome Co. Conducted wetland delineation and obtained a Preliminary Jurisdictional Determination and responsible for design of a small wetland mitigation site.

Parksville 9066.74 Town of Liberty, Sullivan County, New York - This project will reconstruct 4.6 kilometers of NYS Route 17 to Interstate standards. Designed two wetland mitigation sites and developed and implemented a special study regarding the thermal effects of stormwater discharges into an adjacent trout stream before, during, and after construction.

CR 21 Corridor Study, Towns of Franklin and Walton, Delaware County, NY – conducted a wetland delineation and obtained an Approved Jurisdictional Determination from USACE New York District.

Auburn Trail 4760.35 Town of Victor, Ontario County and the Towns of Pittsford and Perington, Monroe County – extension of a multiuse rail trail. Performed a wetland delineation and ecological screenings.

Route 15 6008.02 from Watsons Creek Road to Presho, Phase 2 - Construct 7 bridges to complete the expressway, Town of Lindley, Stueben County – Wetland mitigation site selection, wetland mitigation site design, and stream bank stabilization and stream mitigation design.

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Consulting Engineering & Land Surveying, P.C.

ERIC WATKINS

Environmental Scientist

Education

B.S. Forestry/Water Resources SUNY College of Environmental Science and Forestry, 2002

Professional Training

Vernal Pool Construction, Wetland Site Evaluation, Wetland Monitoring, and Surveying

Watershed Management, Stream Monitoring (Physical, Biological & Chemical), GIS

ARC Map 9.1, Pond Construction and Management, Interest Based Negotiation,

Northeastern Flora Identification, Amphibian Monitoring

Mr. Watkins is an environmental scientist who has had formal education and training that encompasses field and laboratory techniques required for wetlands delineation and environmental assessments.

His coursework includes: Watershed Hydrology, Watershed Ecology, Limnology, Soil and Water Conservation Policy, Environmental Impact Analysis, Soils, Freshwater Wetland Ecosystems, River Environments, Watershed Management, and Forest Ecology / Silviculture

Mr. Watkins is currently providing service in support of a stormwater management project. He is providing technical field support for the data collection effort associated with a regional update of the NYSDOT stormwater outfall system in the greater New York City area.

D015673 PIN S080.00 SPDES MS4 Stormwater Outfall Mapping, NYSDOT Regions 8, 10, and 11, NY, 2007 – This project involves GIS mapping and environmental review of MS4 Outfalls in Regions 8, 10 & 11. SCE is responsible for all aspects of work in Region 8. The objective of the project is to locate system elements, record observational data, and map certain stormwater outfalls from State Highway drainage systems. The mapping and data will be collected using portable GPS-equipment and software specified by the NYSDOT Operations Division. The work includes reviewing any as-built plans/records available in the Regional office: field data collection using GPS equipment/software and transferring data to the Regional/Main Office server. M & PT may be required during the field mapping process, based on the MUTCD, NYSDOT Specifications, the duration of the site visit and varying highway conditions such as sight distance, traffic volume and the off-set from the travel lane of each location. Mr. Watkins is providing technical support for the field data collection and reporting tasks associated with this project.

Tioga County Soil & Water Conservation District, **County of Tioga, NY, 2006-2007** – Mr. Watkins offered professional support to area landowners by providing technical assistance in managing natural resources. From 2005-2007, he was responsible for monitoring, evaluating and reporting on a created wetland site for the Army Corps of Engineers.

D025304, PIN 8006.82, Highway Safety Improvements for Upgrade to Interstate 86, Towns of Wallkill, Goshen, Chester, Blooming Grove, Monroe, and Woodbury, NYSDOT Region 8, County of Orange, NY – This project involves improvements to NYS Route 17 between Exits 122 and 131. SCE is responsible for the delineation of federal and state regulated wetlands, preparation of the Wetland Delineation Report and wetland mitigation design. The wetland delineation effort is ongoing. As Environmental Scientist, Mr. Watkins has delineated approximately eighty (80) wetlands in support of this project.

Lewiston at Clinton Street Wetland Investigation, Town of Kirkland, County of Oneida, NY - SCE provided wetland investigation services, wetland delineation tasks, obtained a jurisdictional determination, designed a wetland mitigation area, and provided support during the construction phase of the mitigation site. Post construction wetland monitoring tasks are ongoing in support of the Lewiston housing development project at Clinton Street in the Town of Kirkland, County of Oneida, NY. Mr. Watkins assisted with the assessment of vegetation, soils and hydrology of the mitigation area during its second growing season, and prepared a letter that included planting/seeding recommendations.

D010116, PIN 8006.48, NYS Route 17 over Wallkill River, NYSDOT Region 8, Town of Wallkill, County of Orange, NY– This project provides for operational and capacity improvements to Exit 122 on Route 17. Mr. Watkins assisted with a supplemental wetland delineation effort that was required because of an expanded project area and preparation of the wetland delineation report.