



New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

David A. Paterson
Governor

Carol Ash
Commissioner

August 26, 2010

RECEIVED

AUG 30 2010

McFARLAND-JOHNSON, INC.

Rosemary Aures
McFarland-Johnson
Metrocenter
49 Court St
Binghamton, New York 13902

Re: FAA
Buffalo Niagara International Airport
Airport Master Plan Update/CHEEKTOWAGA,
Erie County
10PR05280

Dear Ms. Aures:

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

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

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

Sincerely,

Ruth L. Pierpont
Director

Enclosure

**REQUEST FOR ADDITIONAL INFORMATION
ARCHEOLOGY**

PROJECT NUMBER 10PR05280

**(Buffalo Niagara International Airport/Airport Master Plan
Update/T/CHEEKTOWAGA)**

In order for us to complete our evaluation of the Archaeological sensitivity of your project will need the following additional information

- Full project description showing area of potential effect.
- Clear, original photographs of the project area from all directions, keyed to a site plan.
- Brief history of property.
- Clear, original photographs of the following:
- Other:
- Other:
- Complete Set of Engineering Plans
- The boundaries of the project area should be clearly delineated on a United States Geological Survey (USGS) Quadrangle, or New York State Department of Transportation (DOT) 7.5-minute (scale 1=24,000) map. Original scale should be used if photocopying and a label providing map title should be included. There are several "on-line" resources for these maps. Some examples include: terraserver.com and topozone.com.

Please provide only the additional information checked above. for archaeological review. If you have any questions concerning this request for additional information, please call Daniel A. Bagrow at 518-237-8643. ext 3254

**PLEASE BE SURE TO REFER TO THE PROJECT NUMBER NOTED ABOVE WHEN
RESPONDING TO THIS REQUEST**

**REQUEST FOR ADDITIONAL INFORMATION
BUILDINGS/STRUCTURES/DISTRICTS**

PROJECT NUMBER 10PR05280

**(Buffalo Niagara International Airport/Airport Master Plan
Update/T/CHEEKTOWAGA)**

In order for us to complete our evaluation of the historic signification of all buildings/structures/districts within or adjacent to your project area we will need the following additional information

- Full project description showing area of potential effect.
- Clear, original photographs of buildings/structures 50 years or older.
 - within or immediately adjacent to the project area
 - ** key all photographs to a site map*
- Clear, original photographs of the surroundings looking out from the project site in all direction, *keyed to a site map.*
- Date of construction.
- Brief history of property.
- Clear, original photographs of the following:
- Other:

McFarland Johnson needs to supply information about buildings and structures within the project area that may be potentially eligible for the National Register. If the Master Plan identifies areas where the BNI Airport intends to expand, information about areas of potential effect should be supplied. Please feel free to call the number below to coordinate clearance on buildings & structures.

Please provide only the additional information checked above. If you have any question concerning this request for additional information, please call Daniel McEneny at 518-237-8643. ext 3257

**PLEASE BE SURE TO REFER TO THE PROJECT NUMBER NOTED ABOVE WHEN
RESPONDING TO THIS REQUEST**



Erie County

Federally Listed Endangered and Threatened Species and Candidate Species

Except for occasional transient individuals, no Federally-listed or proposed endangered or threatened species, or candidate species under our jurisdiction are known to exist in this county.

Information current as of: 6/24/2010



United States Department of the Interior

FISH AND WILDLIFE SERVICE



New York Field Office
3817 Luker Road, Cortland, NY 13045
Phone: (607) 753-9334
Fax: (607) 753-9699

Long Island Field Office
3 Old Barto Rd., Brookhaven, NY 11719
Phone: (631) 776-1401
Fax: (631) 776-1405

Endangered Species Act List Request Response Cover Sheet

This cover sheet is provided in response to a search of our website* for information regarding the potential presence of species under jurisdiction of the U.S. Fish and Wildlife Service (Service) within a proposed project area.

Attached is a copy of the New York State County List of Threatened, Endangered, and Candidate Species for the appropriate county(ies). The database that we use to respond to list requests was developed primarily to assist Federal agencies that are consulting with us under Section 7(a)(2) of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Our lists include all Federally-listed, proposed, and candidate species known to occur, as well as those likely to occur, in specific counties.

The attached information is designed to assist project sponsors or applicants through the process of determining whether a Federally-listed, proposed, or candidate species and/or “critical habitat” may occur within their proposed project area and when it is appropriate to contact our offices for additional coordination or consultation. You may be aware that our offices have provided much of this information in the past in project-specific letters. However, due to increasing project review workloads and decreasing staff, we are now providing as much information as possible through our website. We encourage anyone requesting species list information to print out all materials used in any analyses of effects on listed, proposed, or candidate species.

The Service routinely updates this database as species are proposed, listed, and delisted, or as we obtain new biological information or specific presence/absence information for listed species. If project proponents coordinate with the Service to address proposed and candidate species in early stages of planning, this should not be a problem if these species are eventually listed. However, we recommend that both project proponents and reviewing agencies retrieve from our online database an *updated* list every 90 days to append to this document to ensure that listed species presence/absence information for the proposed project is *current*.

Reminder: Section 9 of the ESA prohibits unauthorized taking** of listed species and applies to Federal and non-Federal activities. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to “take**” any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for “take**,” or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the Service, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species.

For instance, work in certain waters of the United States, including wetlands and streams, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*), the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).*

For additional information on fish and wildlife resources or State-listed species, we suggest contacting the appropriate New York State Department of Environmental Conservation regional office(s) and the New York Natural Heritage Program Information Services.*

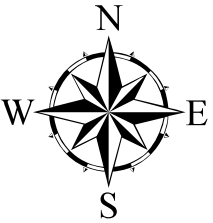
Since wetlands, ponds, streams, or open or sheltered coastal waters may be present in the project area, it may be helpful to utilize the National Wetlands Inventory (NWI) maps as an initial screening tool. However, they may or may not be available for the project area. Please note that while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Online information on the NWI program and digital data can be downloaded from Wetlands Mapper, http://wetlands.fws.gov/mapper_tool.htm.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. After reviewing our website and following the steps outlined, we encourage both project proponents and reviewing agencies to contact our office to determine whether an accurate determination of species impacts has been made. If there are any questions about our county lists or agency or project proponent responsibilities under the ESA, please contact the New York or Long Island Field Office Endangered Species Program at the numbers listed above.

Attachment (county list of species)

*Additional information referred to above may be found on our website at:
<http://www.fws.gov/northeast/nyfo/es/section7.htm>

** Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to *take* (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.



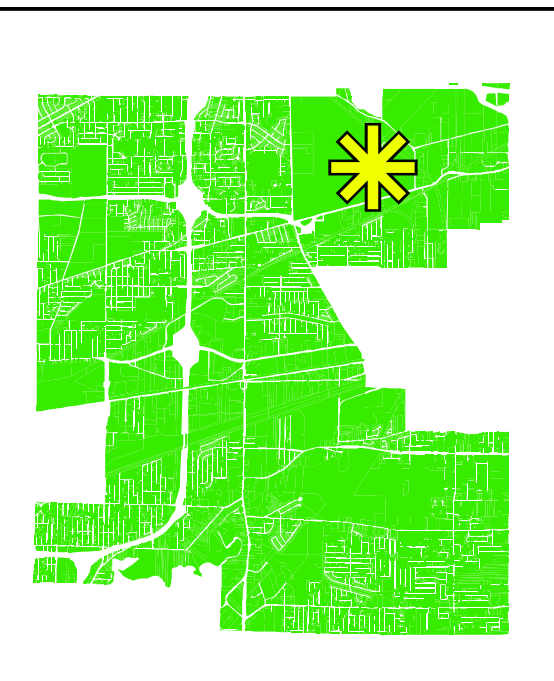
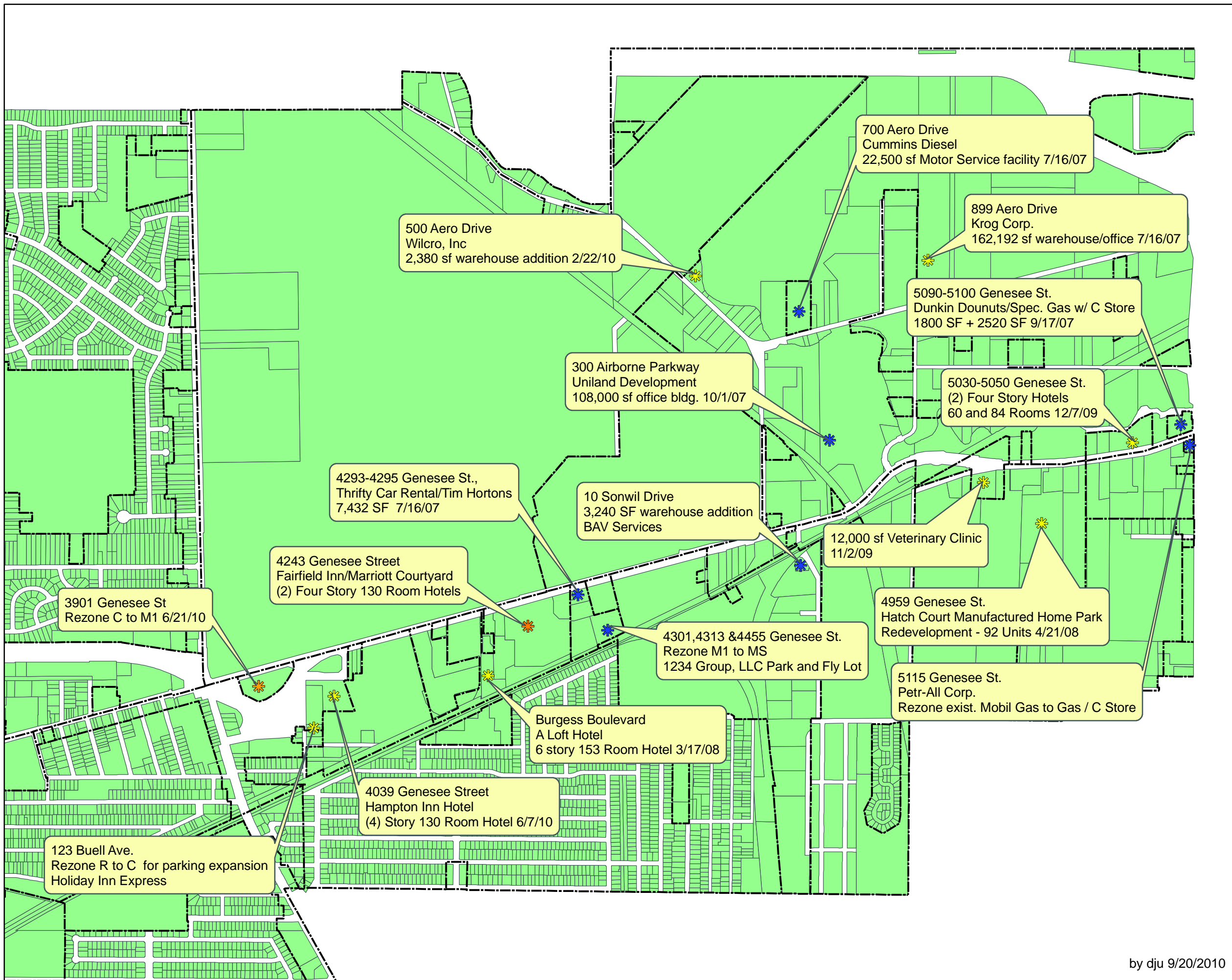
Figure

Development Projects Near BNIA

January 2007 - September 2010

Legend

- Zoning District Lines
- ✱ Not Constructed / Permit Not Filed
- ✱ Under Construction
- ✱ Project Constructed





TECHNICAL MEMO

PROJECT NO. 17493.00 Telephone Call Meeting Record Site Visit

SUBJECT: Buffalo Niagara International Airport
Wetland Verification Site Visit

DATE: July 6 - 7, 2010

PARTICIPANTS: Donald Lockwood (DJL), McFarland Johnson Environmental Scientist
Rose Aures (REA), McFarland Johnson Environmental Analyst

DISCUSSION:

McFarland Johnson (MJ) conducted an on-site assessment of the Buffalo Niagara International Airport (BNIA) on July 6 - 7, 2010 for the purposes of verifying the presence, extent and locations of wetlands previously identified within the airport property boundary. US Fish and Wildlife Service National Wetland Inventory (NWI) Maps, NY State Department of Environmental Conservation (NYSDEC) Wetland Mapping, and previous wetland mapping completed by McFarland Johnson, Inc. for the delineation completed in 2000 were referenced to aid in verifying the presence of wetlands on and adjacent to the BNIA property.

Wetlands are waters of the US and are protected under the Clean Water Act (as amended) to maintain and restore the chemical, physical, and biological integrity of the waters of the United States. Under the Act, wetlands are considered to be “waters of the United States.” Section 404 of the Act authorizes the US Army Corps of Engineers (ACOE) to regulate the discharge and dredging of fill materials in such waters via permitting. In 1987, the ACOE issued the *Wetland Delineation Manual* (Manual) to define the methodology of identifying wetlands. In the Manual, the ACOE along with the Environmental Protection Agency (EPA) define wetlands for regulatory purposes under the Act as those areas that are “inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstance do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Such areas would typically include swamps, marshes, bogs, and similar areas. The Manual requires that all three of the following criteria are present in order for an area to meet the ACOE and EPA mutual definition of a wetland. These include:

- Hydrophytic vegetation (macrophytic vegetation adapted to saturated conditions)
- Hydric Soils (affected by inundation and or chemical reduction)
- Hydrology (surface water or groundwater source)

Both the 2000 and 2010 delineations of the BNIA property were conducted using the 1987 Manual methodologies. All figures referenced in this memo are contained in Appendix A *Maps and Figures*. Appendix B: *Aerial Images of Wetland Areas* shows approximate not delineated boundaries of the airport wetlands as a point of reference for the wetland’s position in the landscape.

Figure 1: *Topographic Map* shows the BNIA vicinity. Figure 2 *National Wetland Inventory Map* shows wetland complexes on either side of the Runway 23 end. The complexes are associated with either Ellicott Creek or Aero Lake and its drainage channels. It also shows a small wetland area off the Runway 14 end labeled PEM1B which is a constructed detention basin discussed below as Basin A. Another wetland is shown in area between the Runway 23 end and the Lake Aero drainage channel. It is a large expanse of flat terrain which appeared to be covered with cattails (*Typhya latifolia*) and Phragmites (*Phragmites australis*). The NWI shows these wetland areas are a combination of several wetland types as shown on Table 1: *National Wetlands Inventory Descriptions of Areas On or Closest to BNIA*.

Figure 3 *NYSDEC Wetlands* shows no state regulated wetlands on the BNIA property. An area identified as L-5 is the closest state regulated wetland area to the airport. It is located to the east of the Runway 23 end. L-5 surrounds Aero Lake. The wetland's associated state regulated wetland checkzone surrounds L-5 and also follows the lake's drainage channel that to its outlet at Ellicott Creek. The checkzone is a mapped sector where the wetland border has yet to be determined by a delineation. The NYSDEC Resource Mapper image shows the checkzone terminating at the south side of the Runway 23 end. This wetland complex is a state Class I wetland consisting of approximately 81.4 acres. The wetlands recorded on these maps were confirmed by visual observations of the area.

The 2000 wetland delineation of BNIA on airport property identified several wetland areas. As displayed on Figure 4 *Drainage Basins and SPDES Discharge Points*, the airport is basically divided into two drainage basins within the confines of the main airport property. The area designated as the "Northern Drainage Basin" on Figure 4 directs surface flow to Ellicott Creek and encompasses approximately 443 of the airport's 1000 acres. Ellicott Creek flows into the Niagara River. The "Southern Drainage Basin" covers approximately 513 acres that direct surface flow into the U-Crest Ditch on the south side of Genesee Street. This ultimately drains into the Buffalo River. The 2000 wetland delineation identified all wetlands areas on airport property to the northeast of Runway 14/32. These wetlands as delineated in 2000, as shown on Figure 5 *Wetland Boundaries and Project Limits (July 2002)*, are wholly within the airport's Northern Drainage Basin (Ellicott Creek drainage area).

Figure 5 shows the locations and extent of the previously delineated on-airport wetlands. They were described as several areas of riverine (stream) associated wetland areas; Palustrine emergent wetlands; or Palustrine open water wetland areas. Table 2: *BNIA Delineated Wetlands* shows the wetland description information. Each of the previously identified areas occupied the same surface area and dimensions. Each seemed to be functioning in a similar manner with the unchanged vegetative coverage.

The July 2010 evaluation of these areas confirmed that:

- each of the NWI wetlands cover the areas identified in the mapping and have similar vegetation as described with the map legend and wetland codes
- the NY State identified wetland complex extends and functions in a similar manner as shown on the NYSDEC mapping, and in fact may extend closer to the airport than shown
- on-airport wetlands still exist in the same areas and function in the same manner described in the 2000 delineation report.

Several additional wetland areas were noted off the main airport property. These were generally small in size and located in areas not likely to be further developed due to their proximity in areas owned by BNIA

to maintain open space for the MALSRs, other airport equipment or obstacle free space. Wetland areas discussed below are labeled as shown on Figure 6: *Wetland Delineation 2010*.

Wetland Area “A” is an expanse shown on the attached aerial image that is located on the northwest corner of the intersection of the Kensington Expressway and Cayuga Street is a mostly mowed expanse with a tree and shrub mix in the center. The area abuts an unnamed tributary of the U-Crest Creek and is adjacent to the model noise abatement house. The center of the area contains an isolated lowland depression that was determined to be wetland. The area GPs points were recorded. The area also contained a billboard and a large concrete covered manhole structure. It is a mixture of a Palustrine scrub/shrub and forested broad-leaved wetland complex surrounded by upland mowed lawn. The area exhibited evidence of temporary flooding during precipitation events.

Wetland Area “B” is a small wetland area associated with the U-Crest Creek behind the houses along Roxborough Avenue. This low lying area is between the Creek and the backyards of the houses. The willow tree section is also in the MALSR no development area. The area is a Palustrine forested broad leaved wetland consisting of a dozen or so willows. It was surrounded by upland mowed lawns and hedges. The area exhibited evidence of temporary ponding during precipitation events.

Wetland Area “C” is additional wetland located on the north side of the right-of-way fencing north of the westbound lanes of the New York State Thruway Route 90. The area is a wetland meadow community adjacent to the ALSF2 approach light line northeast of the Runway 23 end. This area is a Palustrine emergent wetland in a low relief catchment.

Area “D” was delineated under the previous airport study. This area is shown in the NWI mapping and is classified as PEM1/SS1Bd. This classification states that the site is Palustrine emergent wetland with a mix of persistent wetland vegetation or scrub-shrub broad leaved deciduous growth with soils that are saturated for most of the growing season and areas that are partially drained or ditched. The wetland appeared to be unchanged from the size and function described during that prior study; however, since there was a large pile of excess dirt that potentially presented the disruption of the site’s surface hydrology, the area was more closely scrutinized. Area D was at a lower elevation than the Runway 23 end, which was constructed with abundant amounts of fill when the runway was extended to its current length. The lower wetland site has very flat terrain with no trees or shrub cover. At first look, the area appeared to be an upland meadow dominated by grasses. Closer examination provided confirmation of hydric soils, adequate hydrology and a patchwork of hydrophytic and upland vegetation. The variation of plant growth seemed to result from only subtle variations in ground elevation on this plain. As noted on the data sheet, this area exhibits only a marginal hydrophytic community; however the soil exhibited significant redox depletions and concretions indicative of a fluctuating water table. The site closely resembles the NWI description of its plant communities, hydrology and ditched conditions. This study concluded that the area was still an active wetland and that because of its nexus with surrounding channels leading to Ellicott Creek it would be considered to be a jurisdictional wetland under Army Corps of Engineers guidance.

Area “E” was a long narrow strip of land located to the north of the Sleep Inn on Holtz Road. Inspection of the site concluded that it was an upland area that had been filled with construction debris. Reportedly this narrow strip of airport property was a former railroad bed, although there was no evidence of railroad bed materials, tracks or rails observed. This area was dismissed from further consideration or study as a jurisdictional wetland.

On the airport’s western side, BNIA has constructed an engineered wetland that provides biological

treatment for their waste propylene glycol used to deice aircraft. The engineered wetlands consist of four underground rectangular football field sized cells. From the surface these cells look like flat upland meadows with occasional piping surfacing on the edges. The biological activity inside the cells breaks down the glycol into non-toxic materials that can be safely sent offsite without additional treatment. These same areas are used for flood attenuation of stormwater during increased precipitation or rapid snow melt events. Although these areas do not function in the same manner as natural or surface wetlands, they are referred to by BNIA and concerned agencies as “underground wetlands” or “dry wetlands.” Despite the reference to these cells as wetlands, the site was dismissed from further consideration as jurisdictional wetlands as they do not meet the three parameters required by the 1987 ACOE Manual.

Detention “Basin A” near the Runway 14 end covers the same footprint as designed and as observed in 2000. The rectangular structure is surrounded by a slight berm with the interior having been excavated to form an infiltration bed. Only a small area of the interior of this rectangular depression exhibits wetland vegetation. The remainder is a mowed upland meadow community. This area is identified on the NWI mapping as a Palustrine emergent wetland with persistent wetland vegetation and saturated soil conditions for much of the growing season (PEM1B).

Detention “Basin B” is a newer, smaller detention basin just north of the fuel farm. It is adjacent to the west side of the perimeter road. The area is used to manage melt off from snow piles placed on the apron near the Prior company hangars. The site is considered a bio-remediation site for sand and grit materials incorporated into the plowed snow. Reportedly, the grit and sands remaining after the snow melts are collected in the spring and recycled by distributing the materials to neighboring municipalities for use on local roadways in the following winter. The rectangular structure is surrounded by a slight berm with the interior having been excavated to form an infiltration bed. Only a small area of the interior of this rectangular depression exhibited wetland vegetation. The remainder is a mowed upland meadow community. This site is not shown on the NWI mapping.

The July 2010 MJ assessment observed no significant changes to the BNIA wetlands or surface water patterns from the 2000 delineation wetland boundaries and conditions. Areas identified on the 2000 delineation map remain unchanged in value or dimension. Therefore, no further wetland study of the current BNIA property is recommended as part of the Master Plan Update. Any projects that would disturb or fill sites that have been identified as wetland on Figure 3 *Delineated Wetlands* would need an Army Corps of Engineers Jurisdictional Determination and Section 404 permit authorization.

ACTION REQUIRED:

None at this time.

ATTACHED:

Exhibit A

- Figure 1: USGS Topographic Map
- Figure 2: National Wetlands Inventory Map
- Figure 3: NYSDEC Wetland Inventory Map
- Figure 4: Drainage Basins and SPDES Discharge Points
- Figure 5: Wetland Boundaries (*July 2002*)
- Figure 6: Wetland Delineation (*July 2010*)

Exhibit B

Aerial Overviews of Areas A, B, C, D

Exhibit C

Data Sheets

Exhibit D

BNIA Wetland Photo Logue for 2010

Exhibit E

NRCS Soils Report for Erie County (Hydric Soils at BNIA)

COPIES: file; Master Plan Update

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Exhibit A

Tables, Maps and Figures

Table 1: National Wetland Inventory Wetlands Descriptions of Areas On or Closest to BNIA Property

AREA	ACREAGE	COWARDIAN CLASSIFICATION	EXPLANATION OF CLASSIFICATION DESCRIPTION
Ellicott Creek	n/a	R2UBH	Open Stream Class B Water
Wetland northwest of RW 23 end	24.05	PFO1/SS1E	Palustrine Wetland with Forested growth and scrub/shrub intermixed; soils are saturated for most of the growing season
Wetland northwest of RW 23 end	13.14	PSS1E	Palustrine Wetland with scrub shrub growth; soils are saturated for most of the growing season
Wetland east of RW 23 end	25.5	PEM1Ed	Palustrine emergent wetland ; surface soils are seasonally saturated with the substrate soils saturated for most of the growing season; part of the area is drained or ditched
Aero Lake	81.5	L1UBHx	Open Water; permanently flooded; an excavated area
		L2USCx	Seasonably flooded; an excavated area; Regulated Checkzone under NYSDEC
Retention Basin "A" off the Runway 14 end	1.64	PEM1B	Palustrine emergent wetland with persistent wetland vegetation in saturated soil conditions for most of the growing season

Table 2: BNIA Delineated Wetland Information

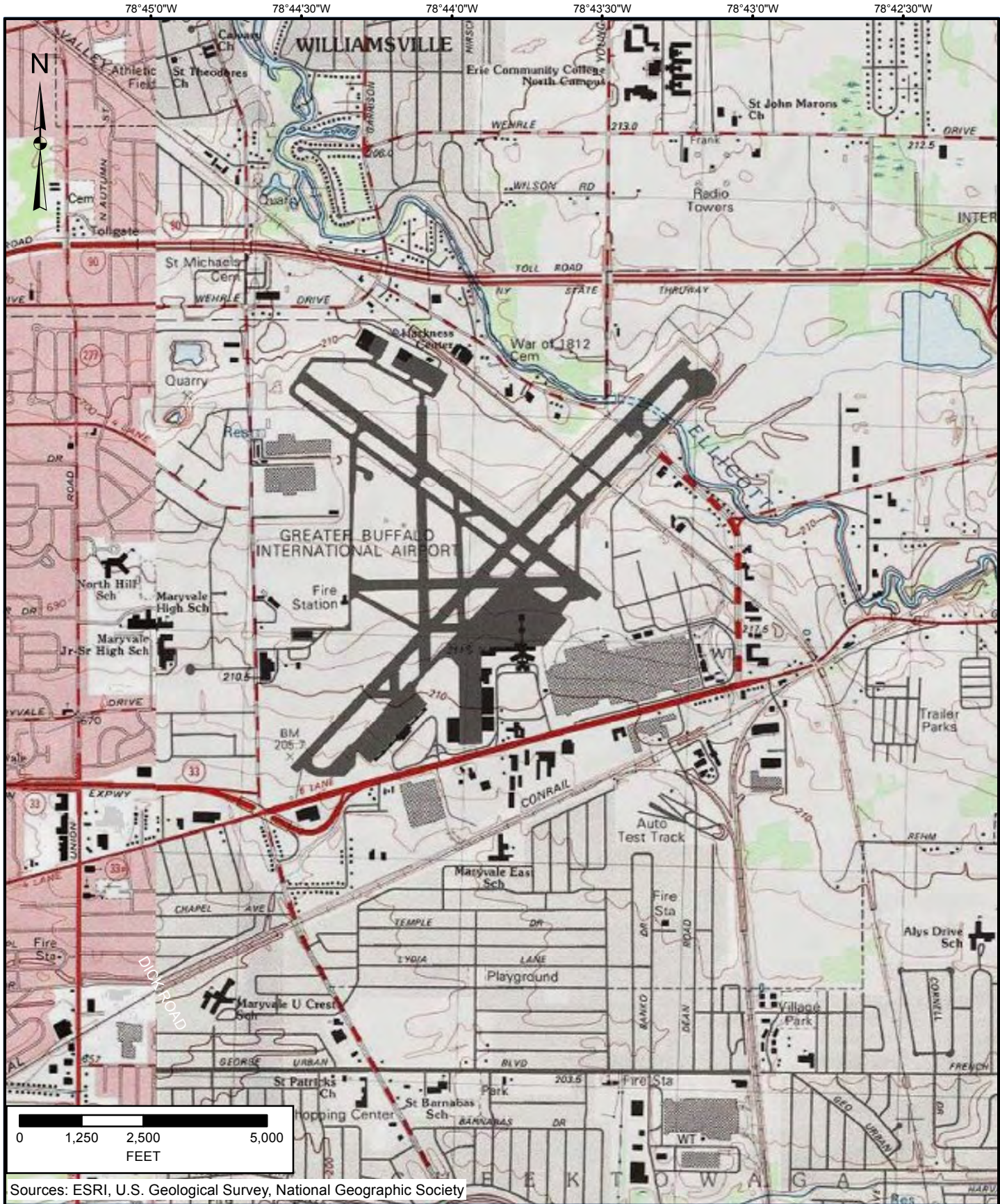
AREA	ACREAGE or DESCRIPTION	DELINEATION CLASSIFICATION CODE	CLASSIFICATION DESCRIPTION
Beyond Runway 14 end	1.64	POW2x	Palustrine Open Water Intermittently Exposed/Permanent Excavated
North of Runway 14 end	Drainage Swale	R4x	Intermittent Riverine Excavated
By the GA Hangar		POW	Palustrine Open Water
Below Fuel Farm		PEM	Palustrine Emergent
Below Fuel Farm		PEM	Palustrine Emergent
Circumventing the 319 Aero Drive Building Driveway off of Aero Drive	Four (4) Drainage Swales	R4x	Intermittent Riverine Excavated
Parallel to the north side of Runway 23 middle by golf driving range on Aero Drive	Drainage Swale	R4x	Intermittent Riverine Excavated
Parallel to the east side of the Runway 23 end along security fencing	Drainage Swale	R3x	Intermittent Riverine Excavated
Parallel to southeast side of Taxiway "A" between Taxiways "C" and "B"	Three (3) Drainage Swales	R4x	Intermittent Riverine Excavated
Northwest of the Runway 23 end, by golf practice area adjacent to the NYS Thruway		PEM	Palustrine Emergent
Off the Runway 23 end west of the drainage ditch		PEM	Palustrine Emergent
Off Runway 23 end east of the drainage ditch		PEM/SS	Palustrine Emergent/ Scrub Shrub
Southeast of Runway 23 end adjacent to BNIA property line		R3x	Upper Perennial Riverine Excavated

Ellicott Creek		R2OWH	Riverine Lower Perennial Open Water Permanent
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In Addition to 2000 Delineation:

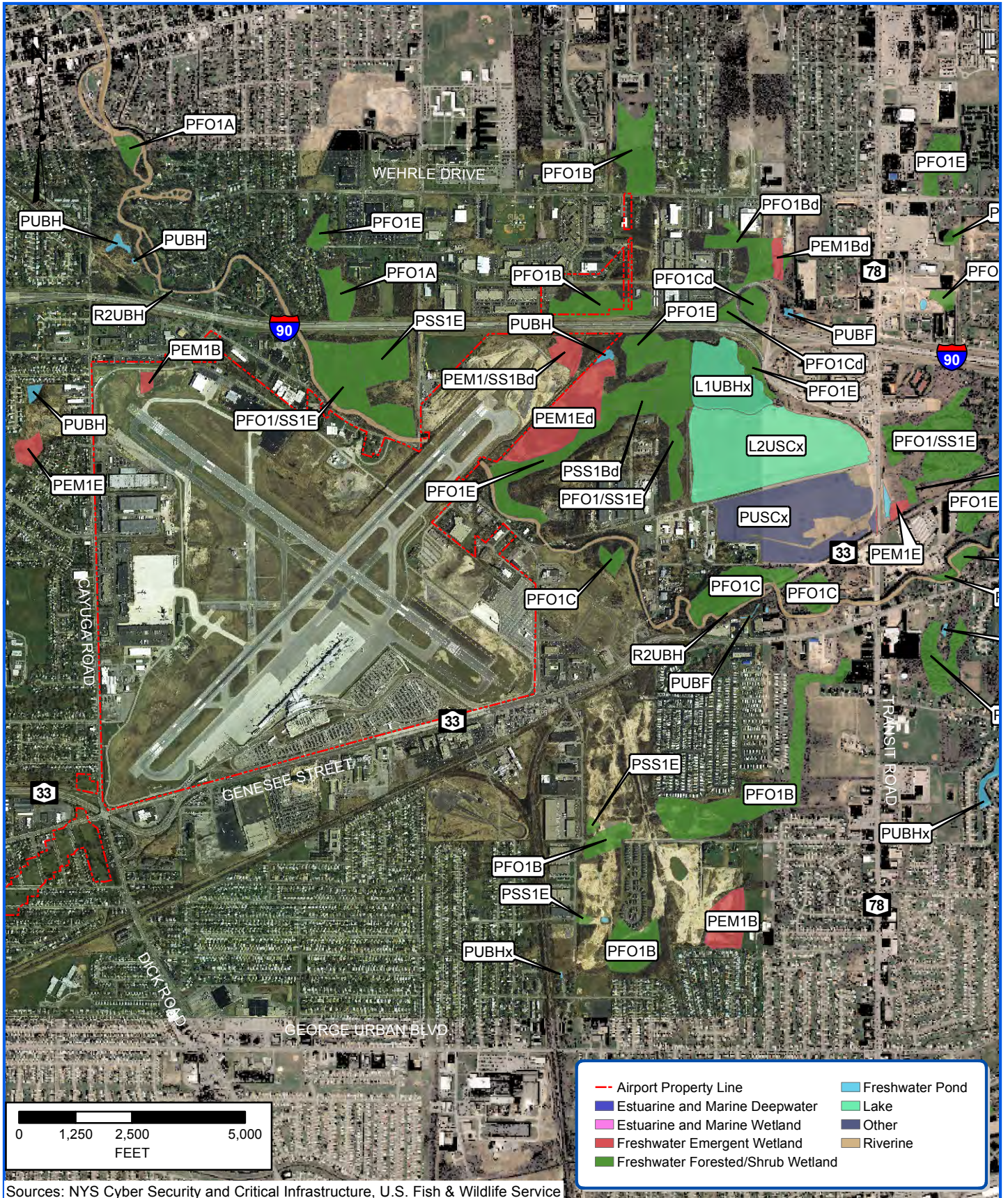
North of NYS Thruway		PEM	Palustrine Emergent
Glycol Wetland Treatment Area		Engineered	Upland

TOPOGRAPHIC MAP



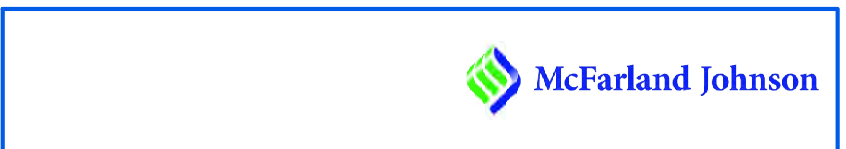
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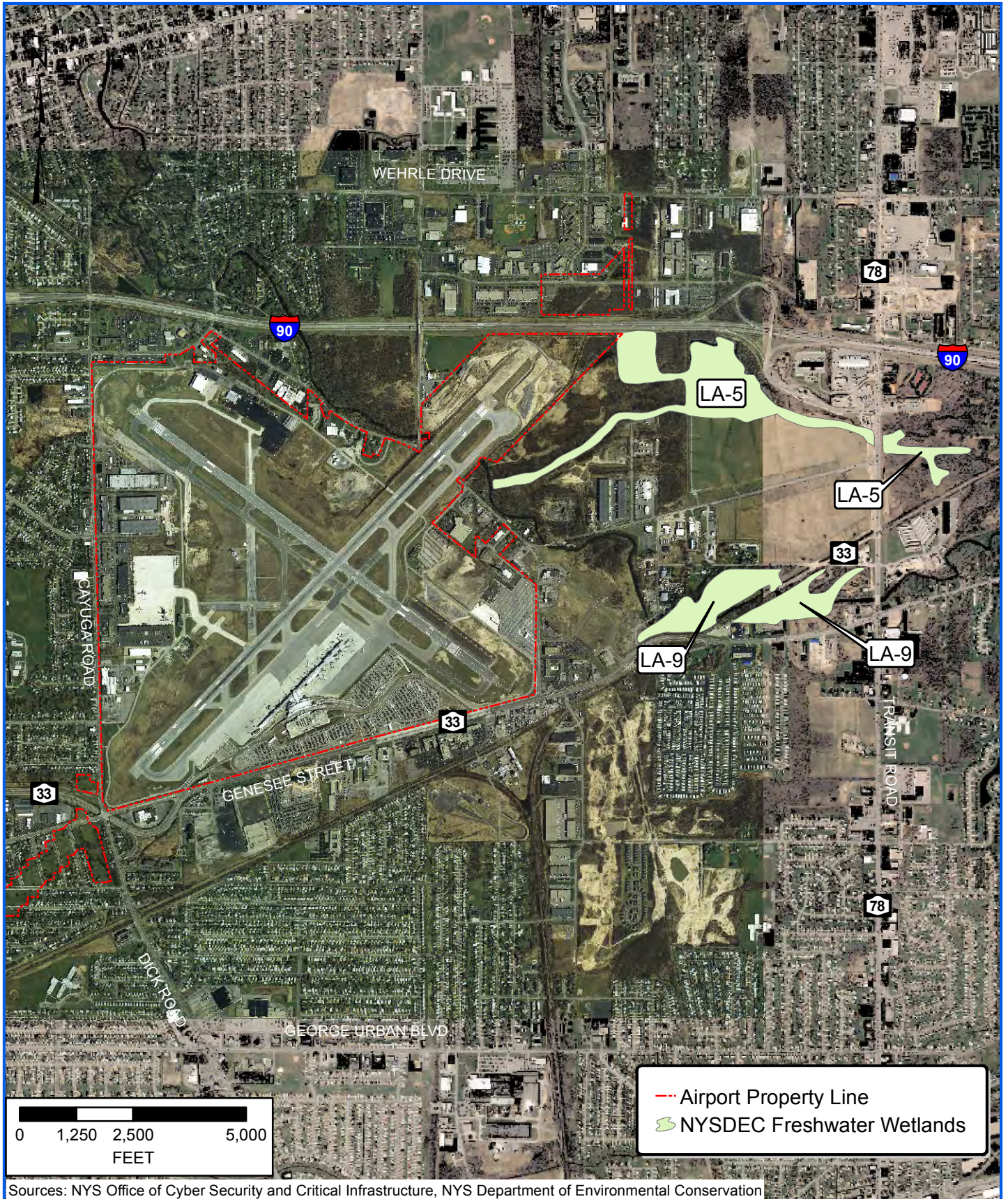




Sources: NYS Cyber Security and Critical Infrastructure, U.S. Fish & Wildlife Service

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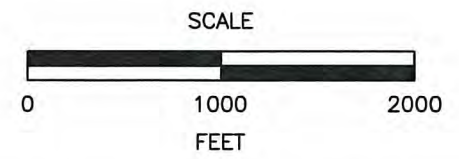
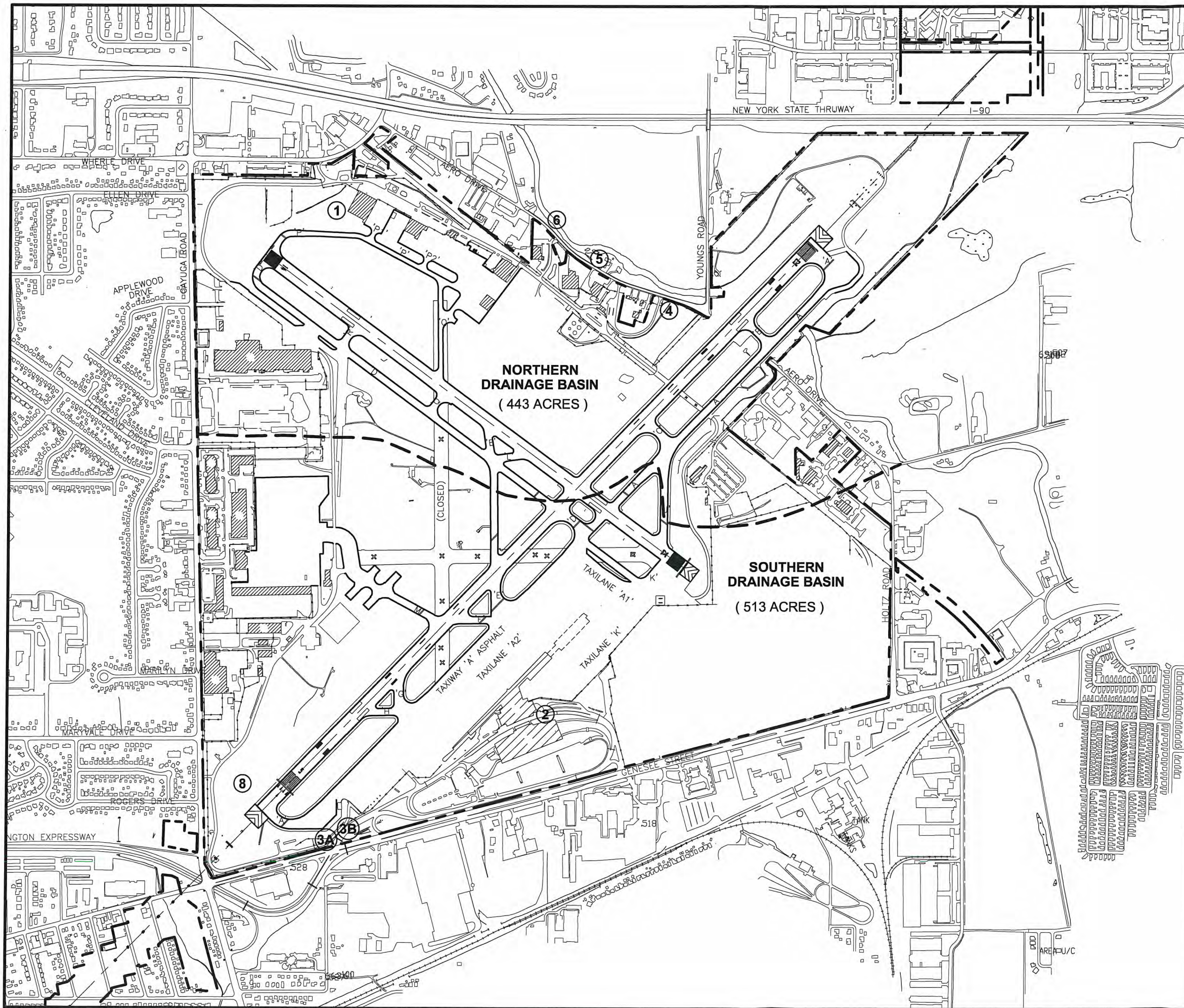




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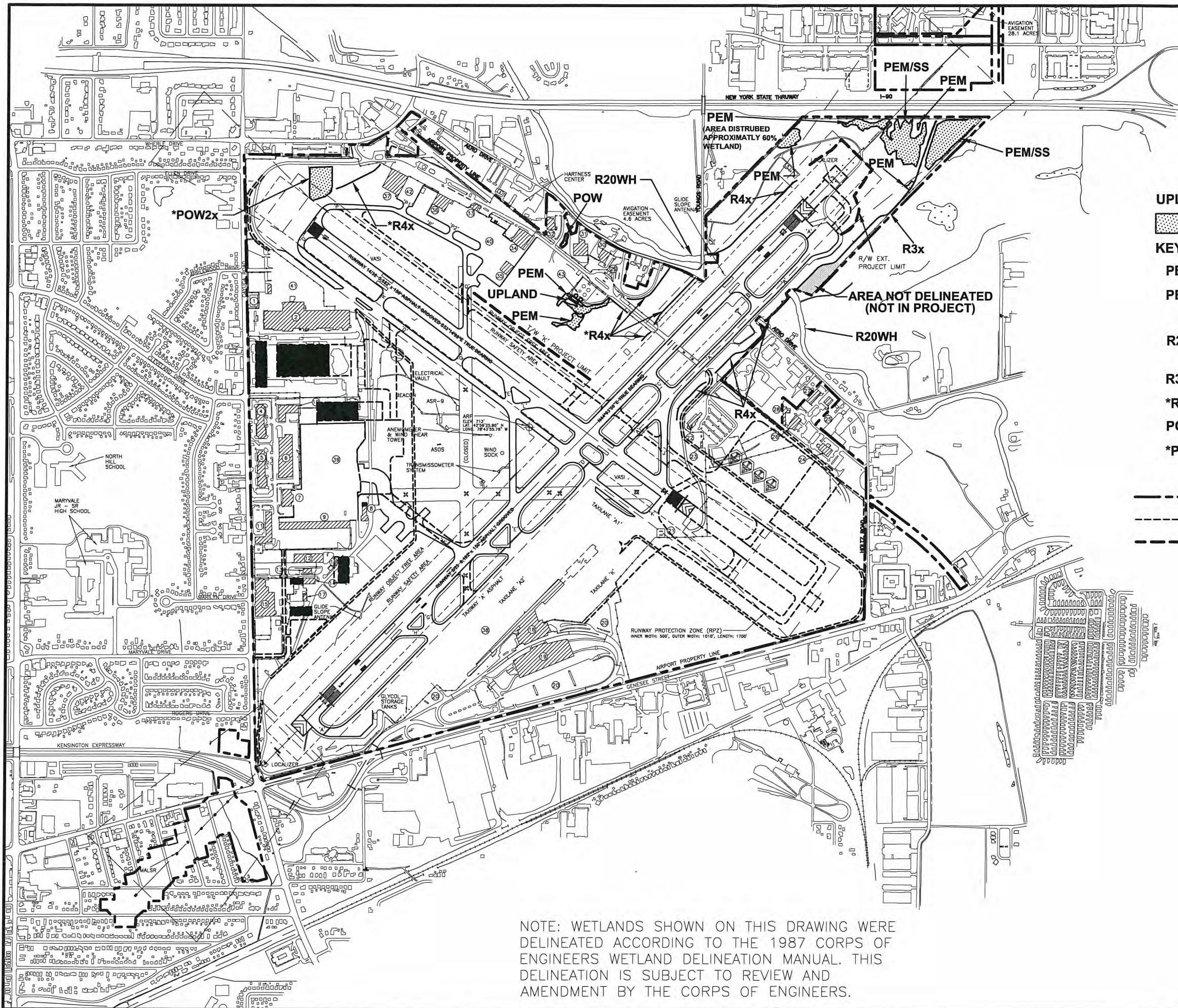


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BUFFALO NIAGARA INTERNATIONAL AIRPORT ERIE COUNTY, NEW YORK		
DRAINAGE BASINS AND SPDES DISCHARGE POINTS SPDES PERMIT # NY 017 1409		
SCALE: AS SHOWN	DATE: 9/10	FIGURE: 4
 McFarland Johnson		
		

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LEGEND

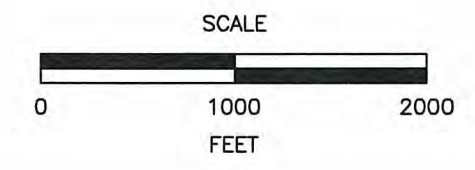
- UPLAND - UPLAND
- WETLAND

KEY TO WETLAND CLASSIFICATION

- PEM - PALUSTRINE EMERGENT
- PEM/SS - MIXED PALUSTRINE EMERGENT / PALUSTRINE SCRUB-SHRUB
- R20WH - RIVERINE LOWER PERENNIAL OPEN WATER PERMANENT
- R3x - UPPER PERENNIAL RIVERINE EXCAVATED
- *R4x - INTERMITTENT RIVERINE EXCAVATED
- POW - PALUSTRINE OPEN WATER
- *POW2x - PALUSTRINE OPEN WATER INTERMITTENTLY EXPOSED / PERMANENT EXCAVATED

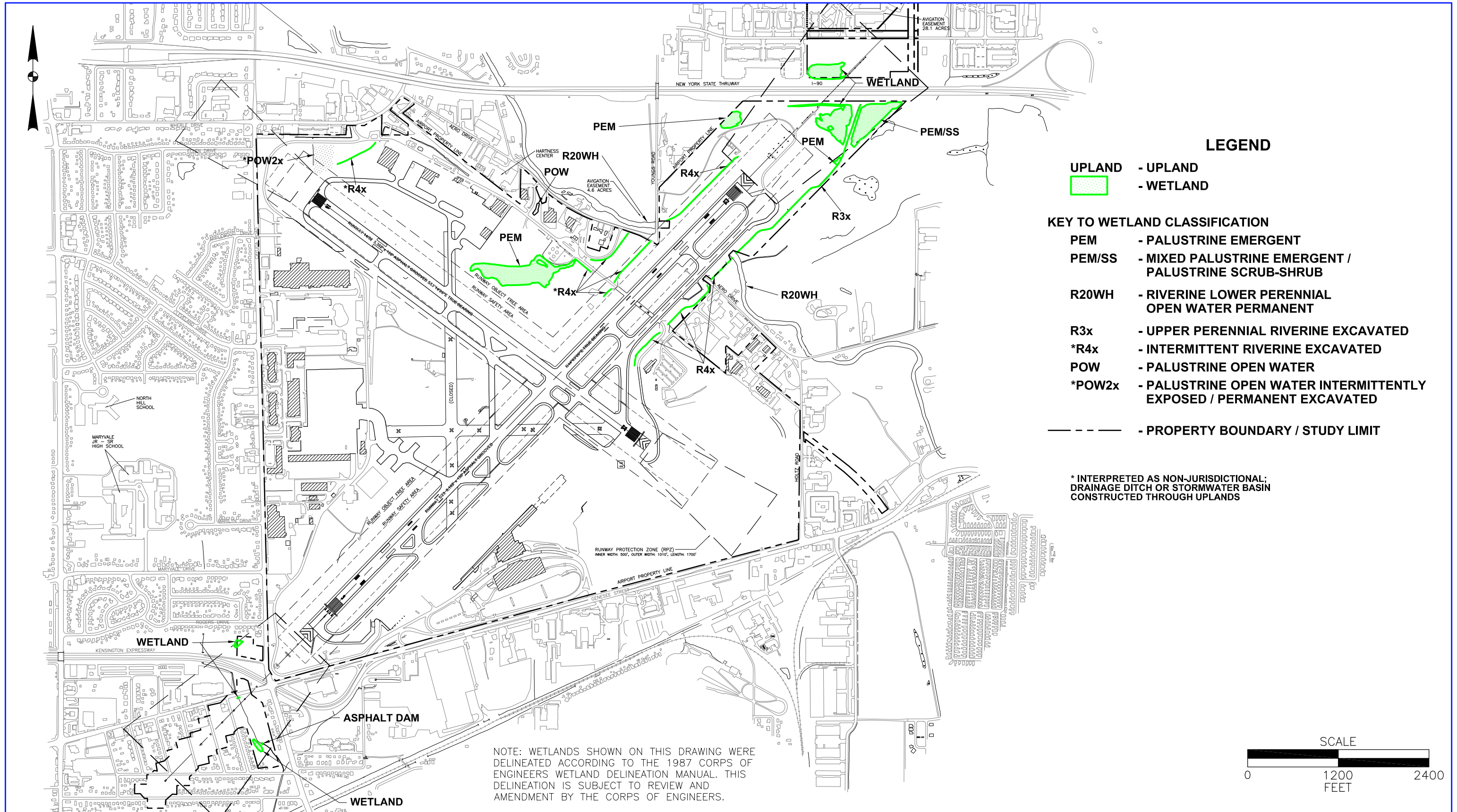
- PROPERTY BOUNDARY / STUDY LIMIT
- PROPOSED PROJECTS
- PROJECT LIMITS

* INTERPERTED AS NON-JURISDICTIONAL; DRAINAGE DITCH OR STORMWATER BASIN CONSTRUCTED THROUGH UPLANDS



BUFFALO NIAGARA INTERNATIONAL AIRPORT ERIE COUNTY, NEW YORK		
WETLAND BOUNDARIES		
SCALE: AS SHOWN	DATE: 9/10	FIGURE: 5

NOTE: WETLANDS SHOWN ON THIS DRAWING WERE DELINEATED ACCORDING TO THE 1987 CORPS OF ENGINEERS WETLAND DELINEATION MANUAL. THIS DELINEATION IS SUBJECT TO REVIEW AND AMENDMENT BY THE CORPS OF ENGINEERS.



K:\NFTA\1-17493-00_BNIA Master Plan Update\Airport Planning\Drawn & AutoCAD\Figures\DELINEATED WETLANDS.dwg, 12/1/2010 12:08:44 PM



Exhibit B

Aerial Images of Wetland Areas

BUFFALO NIAGARA INTERNATIONAL AIRPORT WETLAND PHOTO LOGUE for 2010



Wetland Area "A": Intersection of Kensington Expressway and Cayuga Street.

BUFFALO NIAGARA INTERNATIONAL AIRPORT WETLAND PHOTO LOGUE for 2010



Wetland Area "B" near U-Crest Creek.

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



Wetland Areas C, D and the drainage channel.

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



Wetland Area F adjacent to the Fuel Farm area off of the airport's perimeter road.

Exhibit C
Data Sheets

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: BNIA lot City/County: Chester Township (Erie) Sampling Date: 7/16/10
 Applicant/Owner: NFTA State: NY Sampling Point: A
 Investigator(s): RESA DJL Section, Township, Range: U-Chest
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): Flat
 Slope (%): 0 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: C.PA NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (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 <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: (Explain alternative procedures here or in a separate report.)			If yes, optional Wetland Site ID: _____

Low lying depression of Wetland / mowed

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	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)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	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 = _____
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	_____	_____	_____	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)	_____	_____	_____	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Canary Reed grass</u>	_____	_____	_____	
2. <u>Poa spp</u>	_____	_____	_____	
3. <u>Soft Rush</u>	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. <u>N/A</u>	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: "A"

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, S)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)
	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, S)
	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
	<input type="checkbox"/> Dark Surface (S7) (LRR K, L)
	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
	<input type="checkbox"/> Iron-Manganese Masses (F12)
	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
	<input type="checkbox"/> Red Parent Material (TF2)
	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators 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 _____
--------------------------------------------------------------------------	-----------------------------------------

Remarks: *No Sampling done*

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Moss Trim Lines (B16)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Microtopographic Relief (D4)
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No _____ Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: BNIA MALSR RW 5 City/County: Chester/Orange/Erie Sampling Date: 7/16/10
 Applicant/Owner: NFTA State: NY Sampling Point: "B"
 Investigator(s): REA, DTL Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Lake Terrace Local relief (concave, convex, none): Flat
 Slope (%): 0 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (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 <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Willow</u>	<u>100</u>			Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. <u>Weeping</u>				Total Number of Dominant Species Across All Strata: _____ (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____				
5. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. _____				<input checked="" type="checkbox"/> Rapid Test for Hydrophytic Vegetation
2. _____				___ Dominance Test is >50%
3. _____				___ Prevalence Index is ≤3.0 ¹
4. _____				___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____				___ Problematic Hydrophytic Vegetation ¹ (Explain)
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present?
1. _____				Yes <input checked="" type="checkbox"/> No _____
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: 11B¹¹

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, S)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)	
<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)	
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)	
<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, S)	
<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

³Indicators 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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Moss Trim Lines (B16)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? Yes No Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: BNTA ALSFA off RD 23 City/County: Williamsville/Serie Sampling Date: 7/6/10
 Applicant/Owner: NFTA State: NY Sampling Point: "C"
 Investigator(s): REA, DJL Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Lake terrain Local relief (concave, convex, none): None
 Slope (%): 0 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (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 <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

VEGETATION – Use scientific names of plants. Meadow

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	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)
2. <u>N/A</u>	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				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 = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. <u>N/A</u>	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Soft Rush</u>	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 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.
2. <u>Silphium laciniatum</u>	_____	_____	_____	
3. <u>crabgrass</u>	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. <u>N/A</u>	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: "C"

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3) (except MLRA 143)
- 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) (Drop in LRR R?)
- Dark Surface (S7) (MLRA 149B of LRR S)
- Polyvalue Below Surface (S8) (LRR R, S)
- Thin Dark Surface (S9) (LRR R, S)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (LRR K, L, S)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12)
- Piedmont Floodplain Soils (F19)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators 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

Remarks:

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 (B2)
- 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 Soil Cracks (B6)
- Drainage Patterns (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)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: BNTA off R1123 end City/County: Cherokee/Eric Sampling Date: 7/7/10
 Applicant/Owner: NFTA State: NY Sampling Point: D
 Investigator(s): REA DJL Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Lake terrace Local relief (concave, convex, none): _____
 Slope (%): < 3% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: CoA Churchville silt loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)
Low lying area off of the Runway 23 end. Area looked like only a mowed grass expanse until further inspection concluded it was an active wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>N/A</u>				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
4. _____				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>2</u> x 1 = <u>2</u> FACW species <u>1</u> x 2 = <u>2</u> FAC species <u>1</u> x 3 = <u>3</u> FACU species <u>4</u> x 4 = <u>16</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>8</u> (A) <u>23</u> (B) Prevalence Index = B/A = <u>2.9</u>
5. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Soft Rush (Juncus effusus)</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
2. <u>Poa spp</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
3. <u>Dipsacus sylvestris</u>	<u>10</u>		<u>-</u>	
4. <u>Birdsfoot Tarsier (Lotus corniculata)</u>	<u>10</u>		<u>FACU</u>	
5. <u>Alsike (Trifolium hybridum)</u>	<u>5</u>		<u>FACU</u>	
6. <u>Poa pratensis</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	
7. <u>Agrostis alba</u>	<u>30</u>		<u>-</u>	
8. <u>Schizachyrium scoparium</u>	<u>10</u>		<u>FACU</u>	
9. <u>Clocharis orata</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
10. <u>Juncus canadensis</u>	<u>10</u>		<u>OBL</u>	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2. _____				
_____ = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)
The area is a mix of vegetation. Wetland adaptations were dependent on only a slight change of ground surface elevation.

SOIL

Sampling Point: D

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
18"	2.5JR 6/1	50	2.5JR 4/8	50	RM		L	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3) (except MLRA 143)
- 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) (Drop in LRR R7)
- Dark Surface (S7) (MLRA 149B of LRR S)
- Polyvalue Below Surface (S8) (LRR R, S)
- Thin Dark Surface (S9) (LRR R, S)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (LRR K, L, S)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12)
- Piedmont Floodplain Soils (F19)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators 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 _____

Remarks: *CoA is a poorly drained soil, but is not listed by NRCS as hydric.*

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 (B2)
- 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 Soil Cracks (B6)
- Drainage Patterns (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)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes No _____ Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No _____ Depth (inches): _____

Wetland Hydrology Present? Yes No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: BNIA Near Fuel Farm City/County: Chickamauga/Sumner Sampling Date: 7/7/10
 Applicant/Owner: NFTA State: NY Sampling Point: F
 Investigator(s): RSA Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): lake terrace Local relief (concave, convex, none): N/A
 Slope (%): 0-2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (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 _____ Hydric Soil Present? Yes _____ No _____ Wetland Hydrology Present? Yes _____ No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <p align="center" style="font-size: 1.2em;"><i>Snail, leopard frog</i></p>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Aspen (Big Tooth)</u>				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)
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				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 = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. <u>Stag horn Sumac</u>				
2. <u>J.J. tree</u>				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Fragmites</u>				
2. <u>Hydrilla</u>				
3. <u>RAH</u>				
4. <u>Birds foot Creeper</u>				
5. <u>Old red @ gall</u>				
6. <u>Milkweed</u>				
7. <u>Rush 150ft</u>				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No _____
1. <u>N/A</u>				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: F

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, S)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)
	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, S)
	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
	<input type="checkbox"/> Dark Surface (S7) (LRR K, L)
	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
	<input type="checkbox"/> Iron-Manganese Masses (F12)
	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
	<input type="checkbox"/> Red Parent Material (TF2)
	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators 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

Remarks: *No hydric inclusion*

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: *Show piles melt of*

Exhibit D

BNIA Wetland Photo Logue

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



Photograph 1: Wetland Area "A" northwest of intersection of Kensington Expressway and Cayuga Road looking toward Runway 5 end. (MJ Photo 07/06/10)



Photograph 2: Wetland Area "B" situated within the Runway 5 MALSR area south of houses along Genesee Street. (MJ Photo 07/06/10)

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



Photograph 3: Wetland Area "C" on the north side of the NYS Thruway Route 90 westbound fence along the Runway 23 MALS light area. (MJ Photo 07/06/10)



Photograph 4: Northern reach of U-Crest Creek near the Genesee Street culvert. (MJ Photo 07/06/10)

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



Photograph 5: Wetland Area “D” off of Runway 23 (PEM) looking to the southeast. An excavated drainage channel flows through the far tree line. The mound is an excavated pile that is below the elevation of the end of Runway 23 to the southwest. (MJ Photo 07/06/10)



Photograph 6: Wetland Area “D” beyond Runway 23 end looking southwest toward the runway end.

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**

(MJ Photo 07/06/10)



Photograph 7: Drainage channel outside of the NYS Thruway eastbound right-of-way fence. Channel is along the north edge of the wetland on the Runway 23 end, but is divided by the mowed berm pictured along the left side of this photograph. (MJ Photo 07/06/10)



Photograph 8: Excavated channel located along the southwest edge of the wetland off the Runway 23 end. Beyond the chain link fence at the upper portion of this photograph is the checkzone of NYS Wetland LA-5. (MJ Photo 07/06/10)

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



**Photograph 9: Area behind Sleep Inn off the north bound lane of Holtz Road. The area was first presumed to be a stream bed, but it was concluded that the area was a debris fill site.
(MJ Photo 07/07/10)**



**Photograph 10: Retention Basin "A" at the Runway 14 end near Werle Drive looking to the south from the perimeter road. The area is a rectangular basin identified as wetland in the previous study.
(MJ Photo 07/07/10)**

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



Photograph 11: BNIA's engineered underground wetland for glycol treatment. This photograph shows the #4 cell looking towards the west. (MJ Photo 07/07/10)



Photograph 12: BNIA's engineered underground wetland for glycol treatment. This photograph shows the #2 cell looking the eastward towards the terminal. (MJ Photo 07/07/10)

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



Photograph 13: Bio-remediation Basin “B” site between the fuel farm and Prior hangar #1 looking northwest from the airport perimeter road. Site is used for snow melt. (MJ Photo 07/07/10)



Photograph 14: Poned area outside of BNIA security fencing, but on airport property. This pond is across the perimeter road from the bio-remediation area and just east of the automated flight service station. (MJ Photo 07/07/10)

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



**Photograph 15: Wetland Area "F" south of the fuel farm complex looking to the south.
(MJ Photo 07/07/10)**



Photograph 16: Wetland area identified during the previous 2000 study located along the northwestern property edge near Runway 23 end. The site is inside BNIA security fencing, looking north onto a golf practice range. (MJ Photo 07/07/10)

**BUFFALO NIAGARA INTERNATIONAL AIRPORT
WETLAND PHOTO LOGUE for 2010**



Photograph 17: Ellicott Creek upstream of Runway 23 culvert. (MJ Photo 07/07/10)



Photograph 18: Ellicott Creek downstream of Runway 23 culvert, across from the Garrison Cemetery on Aero Drive. (MJ Photo 07/07/10)

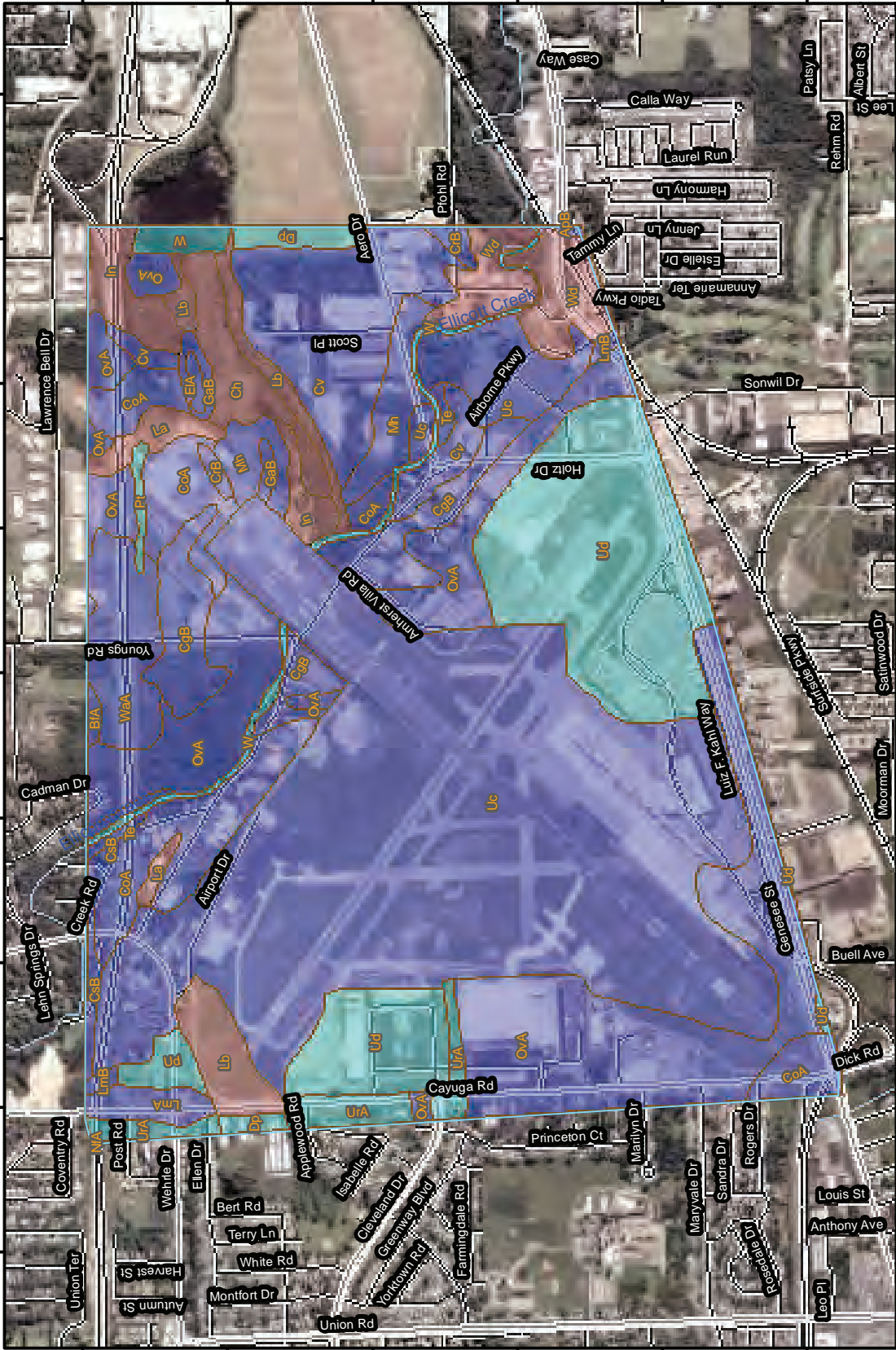
Exhibit E

NRCS Soils Report

Hydric Soils at BNIA

Custom Soil Resource Report Map—Hydric Rating by Map Unit (Buffalo Niagara International Airport)

78° 45' 18" 78° 45' 15" 78° 41' 51" 42° 57' 18" 42° 55' 38" 42° 57' 34"

















Map Scale: 1:22,000 if printed on A size (8.5" x 11") sheet.



78° 45' 19"

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 -  Soil Map Units
- Soil Ratings**
 -  All Hydric
 -  Partially Hydric
 -  Not Hydric
 -  Unknown Hydric
 -  Not rated or not available
- Political Features**
 -  Cities
- Water Features**
 -  Oceans
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads

MAP INFORMATION

Map Scale: 1:22,000 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:15,840.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 17N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Erie County, New York
 Survey Area Data: Version 10, Feb 8, 2010

Date(s) aerial images were photographed: 6/21/2006; 8/5/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydric Rating by Map Unit (Buffalo Niagara International Airport)

Hydric Rating by Map Unit— Summary by Map Unit — Erie County, New York				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ApA	Appleton silt loam, 0 to 3 percent slopes	Not Hydric	0.0	0.0%
ApB	Appleton silt loam, 3 to 8 percent slopes	Not Hydric	0.9	0.1%
BfA	Benson very channery loam, 0 to 3 percent slopes	Not Hydric	2.2	0.1%
CgB	Cazenovia silt loam, 3 to 8 percent slopes	Not Hydric	63.0	3.8%
Ch	Cheektowaga fine sandy loam	All Hydric	26.4	1.6%
CoA	Churchville silt loam, 0 to 3 percent slopes	Not Hydric	101.4	6.1%
CrB	Claverack loamy fine sand, 3 to 8 percent slopes	Not Hydric	6.2	0.4%
CsB	Collamer silt loam, 3 to 8 percent slopes	Not Hydric	6.8	0.4%
Cv	Cosad loamy fine sand	Not Hydric	103.7	6.2%
Dp	Dumps	Unknown Hydric	13.0	0.8%
EIA	Elnora loamy fine sand, 0 to 3 percent slopes	Not Hydric	2.0	0.1%
GaB	Galen very fine sandy loam, 3 to 8 percent slopes	Not Hydric	6.7	0.4%
In	Ilion silt loam	All Hydric	27.3	1.6%
La	Lakemont silt loam	All Hydric	13.7	0.8%
Lb	Lakemont mucky silt loam	All Hydric	38.0	2.3%
LmA	Lima loam, 0 to 3 percent slopes	Not Hydric	12.0	0.7%
LmB	Lima loam, 3 to 8 percent slopes	Not Hydric	3.3	0.2%
Mh	Minoa very fine sandy loam	Not Hydric	32.9	2.0%
NfA	Niagara silt loam, 0 to 3 percent slopes	Not Hydric	0.1	0.0%
OvA	Ovid silt loam, 0 to 3 percent slopes	Not Hydric	270.3	16.1%
Pt	Pits, borrow	Unknown Hydric	3.8	0.2%
Te	Teel silt loam	Not Hydric	4.7	0.3%
Uc	Udorthents, smoothed	Not Hydric	600.7	35.9%
Ud	Urban land	Unknown Hydric	203.9	12.2%
UrA	Urban land-Lima complex 1 to 6 percent slopes	Unknown Hydric	26.2	1.6%
W	Water	Unknown Hydric	22.3	1.3%
WaA	Wassaic silt loam, 0 to 3 percent slopes	Not Hydric	39.6	2.4%
Wd	Wayland silt loam	All Hydric	43.3	2.6%
Totals for Area of Interest			1,674.4	100.0%