New Buffalo Bills Stadium
Erie County, New York

Ecological Review

PREPARED FOR:

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September 2022

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1.0 Introduction

The following report was developed for Phillips Lytle LLP on behalf of Erie County by CC Environment and Planning. The purpose of the report is to provide wetland and stream delineation, ecological communities identification, and listed species review for the proposed development of the new Buffalo Bills Stadium in the Towns of Orchard Park and Hamburg, Erie County, New York (Figure 1).

1.1 Project Description and Need

The New Buffalo Bills Stadium Project is evaluating the proposed construction of a new National Football League (NFL) stadium to replace the existing Highmark Stadium, the current home of the Buffalo Bills (Western New York's NFL franchise team). The existing stadium, opened in 1973, is approaching the end of its useful life, particularly in light of change in NFL stadium requirements over the last 50 years. The Project would include: (1) the transfer of land (SBLs: 161.00-5-3.1; 161.00-5-1; 161.00-5-16.1; 161.17-6-1; 161.17-1-3; 161.17-1-4.2; and 161.17-6-10) from Erie County to the Erie County Stadium Corporation (ECSC) and the subsequent lease of these parcels to Buffalo Bills, LLC (the Team); (2) the construction of a new stadium across Abbott Road from the existing stadium; (3) the demolition of the existing Highmark Stadium; and (4) the continued operation of the Team's complex.

The existing stadium and Team Complex, including Team practice facility, administrative offices, and surface parking lots, is currently located on the east side of Abbott Road along with parking located west of Abbott Road on SBL 161-5-3.1 (Figure 1). West of Abbott Road and the Team lots is the State University of New York (SUNY) Erie Community College – South Campus (ECC South). These Team parking lots and portions of the ECC South campus containing vacant athletic fields will be the location of the new, 1.325-million-square-foot stadium. Additionally, an approximately 75,000-square-foot auxiliary building will be constructed just south of new stadium. Surface parking lots will fill the remainder of the project site on the west side of Abbott Road. See Figure 1 for the area of investigation (AOI) and conceptual site plan. Once construction is completed on the new stadium, the old stadium will be demolished, and parking lots constructed in its place.

This environmental review provides information within the designated AOI to support the design, permitting, and development of the proposed project. Existing ecological resources are identified, mapped, and assessed for potential impacts associated with the proposed new stadium. These include wetlands, streams, drainage ways, and a three-acre forested area on the north central edge of the AOI.

1.2 Project Location

The AOI includes approximately 182 acres located along Abbott Road and Big Tree Road (NYS Route 20A), in the Towns of Orchard Park and Hamburg, Erie County, New York (central Lat/Long: 42.773241, -78.792905; Figures 1 and 2). The AOI encompasses all or portions of five parcels (SBLs 161.00-5-16.1, 161.00-5-3.1, 161.00-5-1, 160.16-1-12, and 160.19-1-4.1). The AOI includes the area identified within the Concept Site Plan as containing the Project's boundaries, including the limits of disturbance. East of Abbott Road, the Site includes the existing Highmark Stadium and some surface parking lots. West of Abbott Road, the Site includes several large stadium parking lots, numerous smaller parking lots servicing the ECC

South Campus, vacant athletic fields and other mowed open space on the ECC South Campus, an approximately 3-acre patch of forest along the northern boundary, and a small patch of forest along a stream that marks a portion of the southern boundary.

The Village of Orchard Park is approximately 1.8 miles to the southeast, the Village of Hamburg is approximately 3.0 miles to the southwest, and the Village of Blasdell is approximately 2.0 miles northwest. Most of the Site, including all land that will be transferred, is within the Town of Orchard Park (Figure 2). The remainder of the Site, which is proposed for use as temporary construction staging and laydown areas, is located within the Town of Hamburg.

2.0 Existing Conditions Summary

Topography

The AOI is relatively flat, with a high point of 771 feet above mean sea level located in the northeast (Figure 3). The land gently slopes away from that high point to a low of 730 feet on the western edge of the AOI. A steep, forested hillside extends from the current stadium complex to Smoke Creek, outside of the AOI boundary.

Wetlands and Streams

Two federally and state-mapped streams are within the AOI. No federally or state-mapped wetlands are present. Field mapped aquatic areas within the AOI consist of floodplain forest (Wetland 1), shrub swamp (Wetland 2), shallow emergent marsh (Wetland 2), intermittent stream (Stream 1), and ditch/artificial intermittent stream (Drainages 1 – 4). See Section 3.0 for details of mapped wetlands and streams.

Significant Communities and Listed Species

The New York State Department of Conservation Environmental Resource Mapper does not indicate any significant ecological communities or listed species on the Site or in the vicinity. The U.S. Fish & Wildlife Service (USFWS) indicate northern long-eared bat and monarch butterfly. See Section 4.0 for details.

Ecological Communities

Ecological community types were noted during field visits and are designated in accordance with community descriptions in Edinger et al. 2014 *Ecological Communities of New York State* (https://www.nynhp.org/documents/39/ecocomm2014.pdf). Upland areas are predominantly paved road/path (parking lots), urban structure exterior, and mowed lawn. The only natural, unmanaged upland ecological communities within the AOI include a portion of the three-acre forest along the north-central boundary and the smaller forest along the south-central boundary. Both forests are classified as floodplain forest based on species composition.

3.0 Wetlands and Streams

Appendix A provides a detailed wetland and stream delineation report for the Site, including data on soils, wetlands, and streams. Refer to Appendix A for aerial photos, data point photos, delineation datasheets, and maps showing topography, soils, state and federal wetland mapping, and delineation data.

The delineation was conducted in accordance with the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual Tech Report Y-87-1, and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (v. 2.0), dated January 2012. Results of this delineation will allow the USACE and New York State Department of Environmental Conservation (NYSDEC) to determine the jurisdictional authority of the investigation area, pursuant to §404 of the Clean Water Act (CWA) and Article 24 (Freshwater Wetlands) of the New York State Environmental Conservation Law.

CC Environment & Planning conducted the delineation on July 12 and 26, 2022. As a result of the on-site field investigation, two wetlands, one stream, and four stormwater drainages were identified within the Site (Table 1; Figure 2). A second stream lies just east of the AOI but was also mapped for reference purposes.

Table 1. Delineated Wetlands, Streams, and Drainages

Identifier	Latitude	Longitude	Area in AOI	Cowardin Class	Connectivity Landscape	Data Point # / Photo #	USACE Jurisdiction
Wetland 1	42.774423	-78.794124	0.555 ac	Palustrine Forested	No connection. Isolated.	DP 1/ 1-5, 11-16	Unknown
Wetland 2	42.768748	-78.795962	0.074 ac	Palustrine Scrub-Shrub/ Emergent	Drains south through culvert into S1	NA/ 37-43	Likely
Stream 1	42.768480	-78.795147	1,322.39 LF	Riverine-Intermittent (R4SBC)	Flows west to Rush Creek	NA/ 47-57	Likely
Stream 2	42.773918	-78.784043	0 LF	Riverine - Lower Perennial (R2UBH)	Flows NW to Lake Erie	NA/ 58-76	Likely
Drainage 1	42.774216	-78.796513	751.14 LF 0.107 ac	N/A	Flows north to stormwater grate	NA/ 17-22	Unknown
Drainage 2	42.769597	-78.794347	824.52 LF 0.081 ac	N/A	Directs runoff from parking lot south then west through culvert to D3	NA/ 23-30	Unknown
Drainage 3	42.768681	-78.795484	277.4 LF 0.032 ac	N/A	Directs runoff to the west	NA/ 31-36, 42-43	Likely

Table 1. Delineated Wetlands, Streams, and Drainages							
Identifier	**Latitude**	**Longitude**	**Area in AOI**	**Cowardin Class**	**Connectivity Landscape**	**Data Point # / Photo #**	**USACE Jurisdiction**
					from parking lot to W2		
Drainage 4	42.768598	-78.796724	200.8 LF 0.018 ac	N/A	Directs runoff south to S1	NA/ 44-46	Unknown

Wetland 1 may not fall under current federal jurisdiction due to its isolation. State jurisdiction under Article 24 requires a wetland to be 12.4 acres in size or larger and/or be considered of unusual local importance. The wetland is not currently part of a state-jurisdictional wetland, nor does it meet the size requirements. Wetland 2 likely meet federal, but not state, jurisdiction due to its hydrological connection to Stream 1, a jurisdictional water body. Since it is a man-made basin created for the purposes of stormwater retention, USACE does not always take jurisdiction over these features.

While Streams 1 and 2 are jurisdictional, the jurisdiction status of the stormwater drainages is less clear. Drainage 1 is likely non-jurisdictional, as it has no connection to "Waters of the US", but Drainages 2 – 4 are connected and eventually drain into Stream 1. The ephemeral nature of Drainages 2 and 4 may make them non-jurisdictional. Drainage 3, due to its location, size, and flow, likely is jurisdictional. A jurisdictional determination (JD) by both state and federal agencies is required to confirm the jurisdiction of all these aquatic habitats.

4.0 Threatened and Endangered Species

An agency database review via online consultation tools was conducted on July 26, 2022, to determine whether state- or federally-listed threatened or endangered species may be present within the Site. Review of NYSDEC's Environmental Resource Mapper and Environmental Assessment Form (EAF) Mapper does not show any state-listed plant or animal species within the Site (Appendix B).

No state-listed species were indicated for this Site. Review of U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) identified two species as potentially occurring within the Project site (Appendix B). Northern long-eared bat (NLEB; *Myotis septentrionalis*) is a federally-listed threatened species. USFWS has indicated that there are no known NLEB maternity roost trees within 1.5 miles or winter hibernacula within 5 miles of the Site (i.e., no on-site occupied habitat or designated critical habitat present, https://www.fws.gov/office/new-york-ecological-services-field/species). NLEB does not appear on the NYSDEC Environmental Resource Mapper, thus NYSDEC indicates that no known occurrences of the species are within the vicinity of the Site. Due to tree cutting that is necessary for development of the Project, the NLEB key within IPaC was consulted to determine the likelihood of potential "take" of the species. Based on the submission, USFWS determined that the Project "is not likely to result in unauthorized take of the northern long-eared bat" (Appendix B).

The second species listed on the USFWS IPaC Official Species List is the monarch butterfly (*Danaus plexippus*). This is a candidate species for federal listing and currently is not listed, thus impacts to the

species do not need to be formally evaluated. However, it is recommended that conservation of the species be considered whenever possible. We recommend landscaping with native plants, especially milkweeds, eliminating or reducing the use of pesticides, and leaving some areas unmown during the growing season to encourage flowering herbaceous plants.

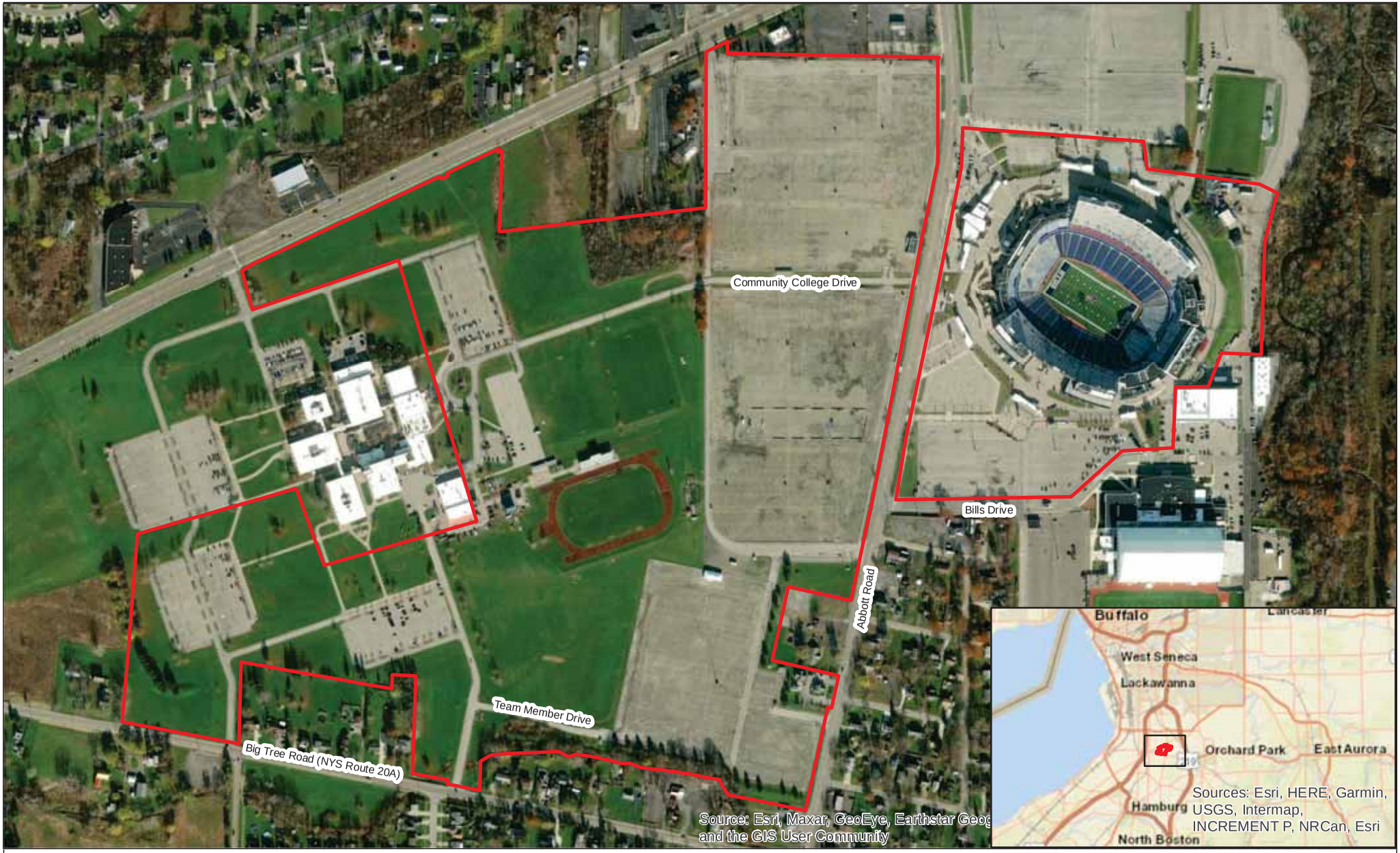
5.0 Ecological Impacts

Except for the three-acre forest and the associated wetland (Wetland 1) along the northern boundary of the AOI, most of the Site is already developed or highly managed or will be avoided. As per existing data and field investigations, no significant natural communities or listed species occur within the AOI or the vicinity. Therefore, the Project will not cause significant impacts to natural communities, wildlife habitat, or sensitive species. The small size of the three-acre forest patch combined with the surrounding development limit its suitability as habitat and any impacts associated with its loss will be minimal. While the northern long-eared bat, a federal and state threatened species, was noted as having the potential to occur on the Site, USFWS determined that the proposed tree cutting will likely not adversely affect this species. We recommend that any tree cutting occur during the bats' hibernation period (November 1 – April 14), if possible, to eliminate any potential direct impacts to bats utilizing the trees.

Wetland and stream jurisdiction should be sought prior to development, as impacts to any federal or state jurisdictional features requires a permit. This is especially necessary for Wetland 1, the removal of which is noted within the current Project plans. While the plan is to continue to utilize Drainage 3 and Wetland 2 as stormwater management features, jurisdiction must be established if any alterations to these features, including the removal of any existing vegetation, is proposed.

Overall, the proposed Project will have minimal negative impacts to ecological resources. Avoidance and minimization measures should be utilized to the greatest extent possible to further limit impacts to the few natural ecological features that currently exist on the Site.

Figures



0 0.075 0.15 0.3 Miles

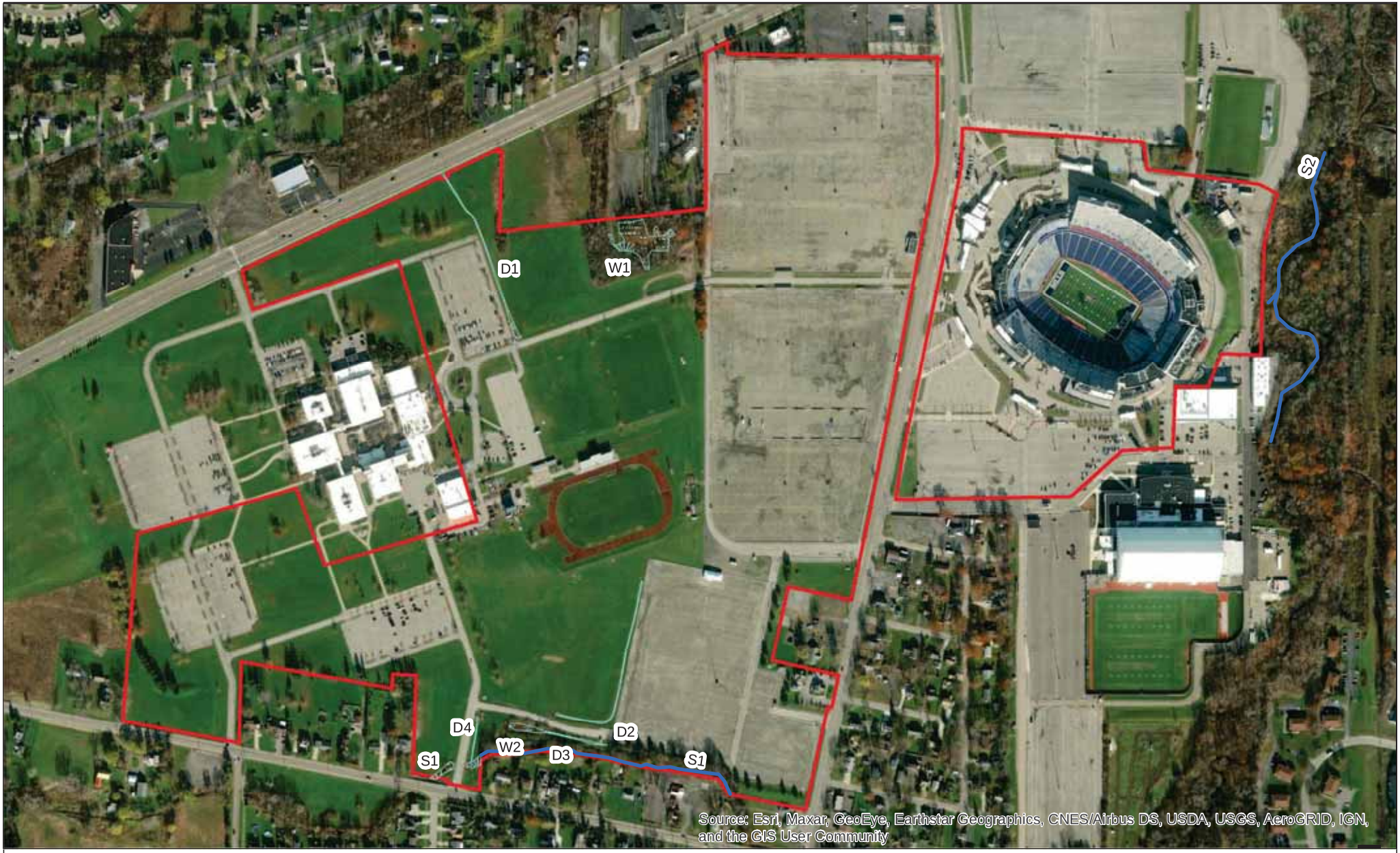
Location Map

New Buffalo Bills Stadium
Towns of Orchard Park and Hamburg
Erie County, New York

K. Hojnacki, Date: 7/29/2022

Area of Investigation

Figure 1



0 0.075 0.15 0.3 Miles

Field Mapped Hydrologic Features

New Buffalo Bills Stadium
Towns of Orchard Park and Hamburg
Erie County, New York

K. Hojnacki, Date: 9/16/2022

Stream OHWM
Wetlands and Streams
Area of Investigation

Figure 2

Appendix A

Wetland and Stream Delineation Report

New Buffalo Bills Stadium
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September 2022

CC Environment & Planning

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Executive Summary

Phillips Lytle LLP on behalf of Erie County has retained the services of CC Environment & Planning to complete a wetland and stream delineation on portions of five parcels (161.00-5-16.1, 161.00-5-3.1, 161.00-5-1, 160.16-1-12, 160.19-1-4.1) located along Abbott and Big Tree Roads in the Towns of Orchard Park and Hamburg, Erie County, New York (central Lat/Long: 42.773241, -78.792905). The delineation was conducted within an approximately 182-acre Area of Investigation (AOI, Figure 1) in accordance with the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual Tech Report Y-87-1, and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (v. 2.0), dated January 2012. Results of this delineation will allow the USACE and New York State Department of Environmental Conservation (NYSDEC) to determine the jurisdictional authority of the investigation area, pursuant to §404 of the Clean Water Act (CWA) and Article 24 (Freshwater Wetlands) of the New York State Environmental Conservation Law.

CC Environment & Planning conducted the delineation on July 12 and 26, 2022. A review of existing information on soils, topography, vegetation, and hydrology in the project area was conducted prior to field delineation and illustrated in Figures 1 – 4. Sources of information included the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) Web Soil Survey, United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map, and NYSDEC Environmental Resource Mapper. The Site is primarily developed including the current Highmark Stadium and associated building and parking lots, and State University of New York (SUNY) Erie Community College – South Campus. Soils are predominantly classified as non-hydric across the Site. Two federally and state-mapped streams are within the AOI. No federally or state-mapped wetlands are present. As a result of the on-site field investigation, CC Environment & Planning identified two wetlands, one stream, and four stormwater drainages within the Site. A second stream lies just east of the AOI but was also mapped for reference purposes.

Delineated Wetlands, Streams, and Drainages							
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				Perennial (R2UBH)			
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1.0 Introduction

Phillips Lytle LLP on behalf of Erie County has retained the services of CC Environment & Planning to complete a wetland and stream delineation on portions of five parcels (161.00-5-16.1, 161.00-5-3.1, 161.00-5-1, 160.16-1-12, 160.19-1-4.1) located along Abbott and Big Tree Roads in the Towns of Orchard Park and Hamburg, Erie County, New York (central Lat/Long: 42.773241, -78.792905; Figure 1). The area of investigation (AOI) comprises approximately 182 acres and is located in the U.S. Geological Survey (USGS) 7.5-minute quadrangle indexed as Buffalo SE (2019). The AOI includes the current Highmark Stadium and associated building and parking lots, as well as portions of the State University of New York (SUNY) Erie Community College – South Campus including extensive mowed lawn, parking lots, and a track/stadium complex.

The purpose of the investigation was to determine the location and extent of any potential waters of the United States (WOUS) and state-regulated waters, including wetlands and streams. The results of the delineation will allow the USACE and NYSDEC to determine jurisdictional authority pursuant to §404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act and Article 24 (Freshwater Wetlands) of the New York State Environmental Conservation Law. Article 24 protects New York's freshwater wetlands that are greater than 12.4 acres or any size wetland that possesses unique qualities along with a 100-foot adjacent area.

CC Environment & Planning has performed a delineation study at the Site under guidelines specified by the *Corps of Engineers Wetlands Delineation Manual* (1987, hereafter referred to as the Corps Manual) and *Regional Supplement to Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (2012, hereafter referred to as the Regional Supplement) with reference to the NYSDEC Freshwater Wetlands Delineation Manual.

This report provides a summary of delineation methods, results, and conclusions with respect to wetlands and streams at the Site.

2.0 Summary of Preliminary Data Review

A review of existing information on soils, topography, vegetation, and hydrology in the project area was conducted prior to field delineation and illustrated in Figures 1 – 4. Sources of information included the USDA NRCS Web Soil Survey, USFWS National Wetland Inventory (NWI) map, and NYSDEC Environmental Resource Mapper.

2.1 Watershed

The Site is located in the Smoke Creek – Front Lake Erie sub-watershed (HUC: 0412010304), which is part of the Buffalo – Eighteen Mile (HUC 04120103) watershed. This watershed is part of the larger Eastern Lake Erie Watershed.

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2.2 USGS Quadrangle Map

The USGS has produced topographic maps for every county of the United States. These maps are useful in aquatic resource delineations for the purpose of identifying areas of interest within a parcel. In addition to civil works and boundaries, indicators of marshes, swamps, perennial and intermittent streams, and contours are depicted. The investigation area itself is flat, with a high point of 771 feet above mean sea level located within the northeast (Figure 2). The land gently slopes away from that high point to a low of 730 feet on the western edge of the AOI. A steep, forested hillside extends from the current stadium complex to Smoke Creek. The AOI is located in the USGS 7.5-minute quadrangle indexed as Buffalo SE (2019).

2.3 USDA Soils Map

The United States Department of Agriculture Natural Resources Conservation Service soils map shows the soil types present within the Site (Table 1, Figure 3).

Table 1 – USDA Soil Site Composition

Description	Soil Codes	Acres	Percent of Site	Hydric Rating
Angola silt loam, 0 to 3 percent slopes	AoA	46.0	25.3	5
Angola silt loam, 3 to 8 percent slopes	AoB	27.2	14.9	5
Canadice silt loam, channery till substratum	Cb	0.5	0.3	90
Darien silt loam, 0 to 3 percent slopes	DbA	51.6	28.3	5
Fluvaquents and Udifluvents, frequently flooded	Fu	1.7	0.9	65
Ilion silt loam	In	13.0	7.1	90
Manlius channery silt loam, 3 to 8 percent slopes	MaB	16.5	9.1	0
Manlius channery silt loam, 8 to 15 percent slopes	MaC	5.5	3.0	0
Marilla channery silt loam, 0 to 3 percent slopes	MfA	17.9	9.8	0
Pits, borrow	Pt	1.8	1.0	5
Remsen silty clay loam, 0 to 3 percent slopes	RfA	0.0	0.0	5
Wayland soils complex, 0 to 3 percent slopes, frequently flooded	Wd	0.4	0.2	90

Poorly drained soils with a high hydric rating are typically hydric soils that support wetland plant communities; however, regulated wetlands can and do occur outside of mapped hydric soil groups, as the scale of the USDA NRCS soil survey is large enough that inclusions of hydric soil within larger soil groups often remain unmapped. The majority of the soils mapped at the Site are well drained and considered non-hydric, but a small portion of the Site is mapped as hydric soils, particularly in the Ilion silt loam soil class.

2.4 Federal and State Wetland Maps

The U.S. Fish and Wildlife Service's National Wetland Inventory map shows two federally mapped streams within the AOI boundary (Figure 4). One is the South Branch of Smoke Creek, located along the east side

of the AOI. The second is an unnamed tributary of Rush Creek, flowing along the southern boundary of the AOI, separating the AOI from residential properties. Both of these are also state-mapped, Class C streams. No federally or state-mapped wetlands lie within the AOI.

The presence of federally and state mapped streams within the Site supports the need for a field investigation to determine if any wetlands or streams are present and their boundaries.

2.5 Historical Photos

Historical images available on Google Earth were reviewed prior to any site visit to determine the location of potential wetland areas based on drainage patterns and land use. These photos are available in Appendix A.

3.0 Delineation Methods

Methods listed in the Corps Manual and Regional Supplement with reference to the NYSDEC Freshwater Wetlands Delineation Manual were used to conduct this delineation and are summarized below. Prior to initiating sampling, a site walk-over was performed to identify the general site topography, drainage patterns, dominant plant communities, and evidence of disturbance.

A field visit to the Site determined that normal environmental conditions were present (Appendix C). The Regional Supplement defines the growing season as beginning when one of the following indicators of biological activity are evident in a given year: (1) above-ground growth and development of vascular plants and/or (2) soil temperature measured at 12" below ground surface reaches 41ºF. The end of the growing season is defined as the point at which deciduous species lose their leaves or the last herbaceous plants cease flowering and their leaves become dry or brown, whichever comes latest. Based on this definition, the fieldwork was performed during the growing season.

3.1 Hydrophytic Vegetation

Hydrophytic vegetation was assessed by visually estimating cover of plant species in each stratum in each vegetation unit as a whole. Vegetation was assessed separately for trees, woody vines, shrubs, and herbs. As outlined in the Corps Manual, a tree is considered any woody plant of any height with a diameter at breast height (DBH) greater than 3 inches, a shrub is any woody plant greater than 3.28 feet tall with a DBH of less than 3 inches, a woody vine is any woody vine greater than 3.28 feet tall, and an herb is any herbaceous plant regardless of size and any woody plant less than 3.28 feet tall and with a DBH of less than 3 inches.

Each identified plant species was assigned a wetland indicator status according to the USACE *2020 Wetland Plant List*. Plant data from each observation point were then tested according to the procedures outlined in the Corps Manual and Regional Supplement. Wetland indicator statuses are as follows:

> OBL – Plants that occur almost always (estimated probability >99 percent) in wetlands under natural conditions, but which may also occur rarely (estimated probability < 1 percent) in non-wetlands.

FACW – Plants that occur usually (estimated probability >67 percent to 99 percent) in wetlands, but also occur (estimated probability 1 percent to 33 percent) in non-wetlands.

FAC – Plants with a similar likelihood (estimated probability 33 percent to 67 percent) of occurring in both wetlands and non-wetlands.

FACU – Plants that occur sometimes (estimated probability 1 percent to <33 percent) in wetlands but occur more often (estimated probability >67 percent to 99 percent) in non-wetlands.

UPL – Plants that occur rarely (estimated probability < 1 percent) in wetlands but occur almost always (estimated probability >99 percent) in non-wetlands under natural conditions.

3.2 Hydric Soils

Soil samples were taken with a soil auger down to the depth necessary to identify hydric soil indicators. Samples were then assessed for hydric soil indicators as outlined in the Regional Supplement.

3.3 Wetland Hydrology

Wetland hydrology was assessed at each point according to the wetland hydrology indicators listed in the Regional Supplement. Indicators listed in the Regional Supplement are either primary or secondary; a single primary indicator or two secondary indicators were sufficient to prove wetland hydrology. If surface water was not present, a hole was dug to assess the water table and soil saturation depth.

3.4 Wetland Determination

If a point met wetland vegetation, soils, and hydrology conditions, it was considered to be within a wetland.

3.5 Wetland Delineation

Wetland and stream boundaries within the site were established based on the results at each sample point. Neon pink flagging was used to mark the wetland boundary, and a Juniper Systems Geode GPS, which is rated as sub-meter accuracy, was used to create an electronic record of wetland boundaries and high-water marks of streams/drainages.

3.6 Streams and Drainages

Stream and drainages crossing the investigation area were evaluated to enable regulatory to ascertain federal jurisdiction under the CWA. All mapped and unmapped streams and drainages that potentially met the criteria listed below were further investigated to describe flow regime, bed and bank properties, substrate, and edge characteristics. Photographs were taken and the location of the streams and drainages were recorded with a Juniper Systems Geode GPS. Data collection was completed for streams and drainages that had one or more of the following characteristics:

1. Appeared to flow year-round
2. Appeared to have continuous seasonal flow
3. Associated with WOUS (flowed into, out of, or abutted)
4. Had definable bed and bank features and/or an ordinary high-water mark
5. Had wetland characteristics

4.0 Delineation Results and Conclusions

One wetland data point and one upland data point were sampled and recorded on July 26, 2022, to support the location of the wetland/upland boundaries. Site photos were taken and are provided in Appendix B. A digital copy of the datasheets can be found in Appendix C. Based on the results of field investigation, two wetlands, one stream, and four stormwater drainages were identified within the AOI. A second stream (Smoke Creek) lies just east of the AOI but was also mapped for reference purposes. See Tables 2 and 3 and Figures 5 and 6.

4.1 Ecological Communities

During field investigations, ecological communities were identified within the investigation area. Ecological community types are based on Edinger et al. (2014). Upland areas at the Site were predominantly paved road/path (parking lots), urban structure exterior, and mowed lawn. Aquatic areas consist of floodplain forest, shrub swamp, shallow emergent marsh, intermittent stream, and ditch/artificial intermittent stream.

4.2 Delineated Wetlands

Two wetlands were mapped at the Site (Table 2, Figures 5 and 6). Wetland 1 is a mix of emergent and forested wetlands while Wetland 2 is a mix of emergent and shrub wetlands. Forested areas are characterized by woody vegetation that is 6 meters (20 feet) tall or taller with 30 percent or more areal canopy cover consisting of tree-sized species. Shrub wetlands consist of woody vegetation greater than 1 meter tall with a diameter-at-breast-height less than 3 inches. Emergent areas are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years and is usually dominated by perennial plants.

Table 2 provides details associated with the wetland including connectivity, area, and the associated figure and photo numbers. Copies of the datasheets and recorded plant species are in Appendix B.

Table 2 – Delineated Wetlands							
Identifier	**Latitude**	**Longitude**	**Area in AOI**	**Cowardin Class**	**Landscape Connectivity**	**Data Point #/ Photo #**	**USACE Jurisdiction**
Wetland 1	42.774423	-78.794124	0.555 ac	Palustrine Forested	No connection. Isolated.	DP 1/ 1-5, 11-16	Unknown
Wetland 2	42.768748	-78.795962	0.074 ac	Palustrine Scrub-Shrub/ Emergent	Drains south through culvert into S1	NA/ 37-43	Likely

Wetland 1 is located in the northwestern portion of the Site, within the only forest block within the AOI (Figures 5 & 6, Photos 1-5, 11-16, and Datasheet 1). It is primarily floodplain forest, dominated by red maple (*Acer rubrum*), dead or dying green ash (*Fraxinus pennsylvanica*), and shagbark hickory (*Carya ovata*). The forest understory contains glossy buckthorn (*Frangula alnus*), gray dogwood (*Cornus racemosa*), devil's beggar ticks (*Bidens frondosa*), spotted jewelweed (*Impatiens capensis*), goldenrod, (*Solidago spp.*), and jumpseed (*Persicaria virginiana*), among others. Two small, low portions of the wetland contain primarily emergent marsh vegetation. The western one is dominated by common reed (*Phragmites australis*) and narrow-leaved cattail (*Typha angustifolia*). The eastern emergent marsh is dominated by cattail and purple loosestrife (*Lythrum salicaria*), with a higher diversity of herbaceous plants along the edge, including devil's beggar ticks, fowl manna grass (*Glyceria striata*), common rush (*Juncus effusus*), broom sedge (*Carex scoparia*), and grass-leaved goldenrod (*Euthamia graminifolia*).

This wetland is isolated, with no hydrological connection. While it does continue north onto the neighboring property, the wetland ends at US Route 20 (Southwestern Boulevard) with no continuation of flow. It is surrounded to the south and west by mowed lawn, to the east by a large parking lot, and to the north by paved and gravel parking lots. Hydrological indicators noted at this site were water-stained leaves and FAC-neutral test (Datapoint 12). The hydric soil indicator was a redox dark surface (F6). One upland data point was used for comparison purposes and to locate the wetland edge (Datasheet 2). This datapoint failed to meet all wetland indicators.

Wetland 2 is located in the southern portion of the Site, just north of Stream 1 (Figures 5 & 6, Photos 37-43). It is part of the stormwater system for this portion of the AOI. The wetland sits in a deep basin (approximately 8 feet below grade) with a narrow stream channel coursing through the center of it. Drainage 2 enters Drainage 3 through a culvert (Photo 42), which marks the beginning of Wetland 2. It is a mix of shrub and emergent wetlands. Dominate species include pussy willow (*Salix discolor*), silky dogwood (*Cornus amomum*), green ash (*Fraxinus pennsylvanica*), narrow-leaved cattail, purple loosestrife, and common rush. The wetland drains through a 140-ft long culvert pipe into Stream 1.

The delineated wetlands likely provide many ecological services, including flood attenuation, wildlife habitat, as well as sediment and nutrient removal. Federally or state listed threatened or endangered species were not observed during the field investigation however a formal survey was not conducted.

4.3 Delineated Streams and Drainages

One intermittent stream and three stormwater drainages were mapped within the investigation area, while the western edge of Smoke Creek, located just outside of the AOI, was mapped as well for reference purposes (Table 3, Figures 5 & 6). Table 3 provides details associated with each stream including connectivity, area, and the associated figure and photo numbers.

Table 3 – Delineated Streams and Drainages

Identifier	Latitude	Longitude	Area in AOI	Cowardin Class	Connectivity Landscape	Photo #	USACE Jurisdiction
Stream 1	42.768480	-78.795147	1322.39 LF	Riverine-Intermittent (R4SBC)	Flows west to Rush Creek	47-57	Likely
Stream 2	42.773918	-78.784043	0 LF	Riverine - Lower Perennial (R2UBH)	Flows NW to Lake Erie	58-76	Likely
Drainage 1	42.774216	-78.796513	751.14 LF 0.107 ac	N/A	Flows north to stormwater grate	17-22	Unknown
Drainage 2	42.769597	-78.794347	824.52 LF 0.081 ac	N/A	Directs runoff from parking lot south then west through culvert to D3	23-30	Unknown
Drainage 3	42.768681	-78.795484	277.4 LF 0.032 ac	N/A	Directs runoff to the west from parking lot to W2	31-36, 42-43	Likely
Drainage 4	42.768598	-78.796724	200.8 LF 0.018 ac	N/A	Directs runoff south to S1	44-46	Unknown

Stream 1 (S1) is an unnamed tributary of Rush Creek. It flows along the southern edge of the AOI, separating the AOI from residential properties. Only the northern high-water mark was mapped, except along the western end where the full stream was within the AOI (Figures 5 & 6, Photos 47-57). The stream bed is primarily bare mud, with some rocks present along most of the length. The banks are clearly defined, with thick shrubs and trees growing along the bank. The width, measured at the high-water mark, ranges from approximately 10 to 30 feet.

Stream 2 (S2) is the South Branch of Smoke Creek. Although a portion of this was federally mapped as occurring within the AOI (Figure 4) no portion of the creek occurred within the AOI (Figures 5 & 6, Photos 58-76). The western high-water mark was mapped for reference purposes. A steep bank extends from the stadium complex to the creek. One stormwater drainage was mapped as well, although this also occurred outside of the AOI. S2 is a confined, perennial river with a rocky bed and clearly defined banks. It averages 20 feet in width within the area of the AOI.

Drainage 1 (D1) is a stormwater drainage in the northwestern portion of the AOI (Figures 5 & 6, Photos 17-22). It begins at Community Campus Drive, at which point thick cattails conceal. The cattails extend for approximately 115 feet before giving way to grasses. The drainage becomes narrow and much shallower at this point as well. These characteristics continue to the north, where the channel nearly disappears at the end of the parking lot. This portion of the drainage is regularly mowed, but a slight channel can still be seen until it reaches a stormwater grate along Southwestern Boulevard.

Drainage 2 (D2) is located within the southern portion of the AOI, conveying stormwater from the large parking lot to its east (Figures 5 & 6, Photos 23-30). The drainage is very narrow with poorly defined banks within the northern portion, becoming wider with more defined banks as it progresses to the south. It bends 90 degrees just prior to reaching Team Member Drive, continuing to flow to the west before entering a culvert pipe underneath Team Member Drive. D2 is fully vegetated, with a mix of FAC and FACW herbaceous plants. A small patch of dense, shrubby willows (*Salix sp.*) is present at the western end of the drainage, surrounding the culvert pipe.

Drainage 3 (D3) lies just south of D2, on the south side of Team Member Drive (Figures 5 & 6, Photos 31-36, 42-43). It begins at the south end of the large parking lot, flowing to the west. The eastern approximately 50 feet is regularly mowed and has a poorly defined bed and bank. The next approximately 230 feet have a well-defined bank and is a mix of herbaceous vegetation and small shrubs, including willow and boxelder (*Acer negundo*). Just west of the outflow of D2, D3 expands into W2.

Drainage 4 (D4) is immediately west of D2 and D3 (Figures 5 & 6, Photos 44-46). It begins at a small culvert pipe just north of Team Member Drive. It continues on the south side of Team Member Drive, where it flows through a narrow, shallow channel to S1.

5.0 Recommendations

Based on the results of the field delineation, two wetlands, one stream, and four drainages were mapped in the investigation area with a second stream mapped just outside the AOI. Wetland 1 may not fall under current federal jurisdiction due to its isolation. State jurisdiction under Article 24 requires a wetland to be 12.4 acres in size or larger and/or be considered of unusual local importance. The wetland is not currently part of a state-jurisdictional wetland, nor does it meet the size requirements. Wetland 2 likely meet federal, but not state, jurisdiction due to its hydrological connection to Stream 1, a jurisdictional water body. That being said, since it is a man-made basin created for the purposes of stormwater retention, USACE does not always take jurisdiction over these features.

While Streams 1 and 2 are jurisdictional, the jurisdiction status of the stormwater drainages is less clear. Drainage 1 is likely non-jurisdictional, as it has no connection to "Waters of the US", but Drainages 2 – 4 are connected and eventually drain into Stream 1. That being said, the ephemeral nature of Drainages 2 and 4 may make them non-jurisdictional. Drainage 3, due to its location, size, and flow, likely is jurisdictional. A jurisdictional determination (JD) by both state and federal agencies is required to confirm the jurisdiction of all these aquatic habitats.

Recommended next steps include:

1. Submission of this report and delineation map to regulatory agencies to request a JD. This typically involves a site visit and wetland boundary confirmation/refinement. A preliminary JD from USACE is generally sufficient if all delineated wetlands are avoided or none are potentially non-jurisdictional. An approved JD is required if potential impacts include wetlands that are potentially non-jurisdictional.
2. If impacts are proposed to any jurisdictional wetlands, a permit is required. A Joint Permit Application and supporting information should be submitted to both USACE and NYSDEC. For USACE permits, if proposed impacts are reduced to less than 0.50 acres or 300 linear feet the project may qualify under a USACE Nationwide Permit. Projects under 0.10 acres generally do not require mitigation. No permit is necessary for proposed impacts to non-jurisdictional wetlands as identified by an approved JD. Impacts to NYSDEC-regulated wetlands include a 100-foot adjacent area that is also regulated. A Joint Permit Application and this delineation report may be submitted concurrently. It is recommended that direct, permanent impacts to all wetlands and streams are avoided to the maximum extent practicable.
3. If no impacts to wetlands or streams or state regulated adjacent areas are proposed, no wetland permits are required. In this case, a "No Permit Required" letter may be requested from USACE and NYSDEC. Note that other federal, state, or local regulations may be applicable at the site.

6.0 References

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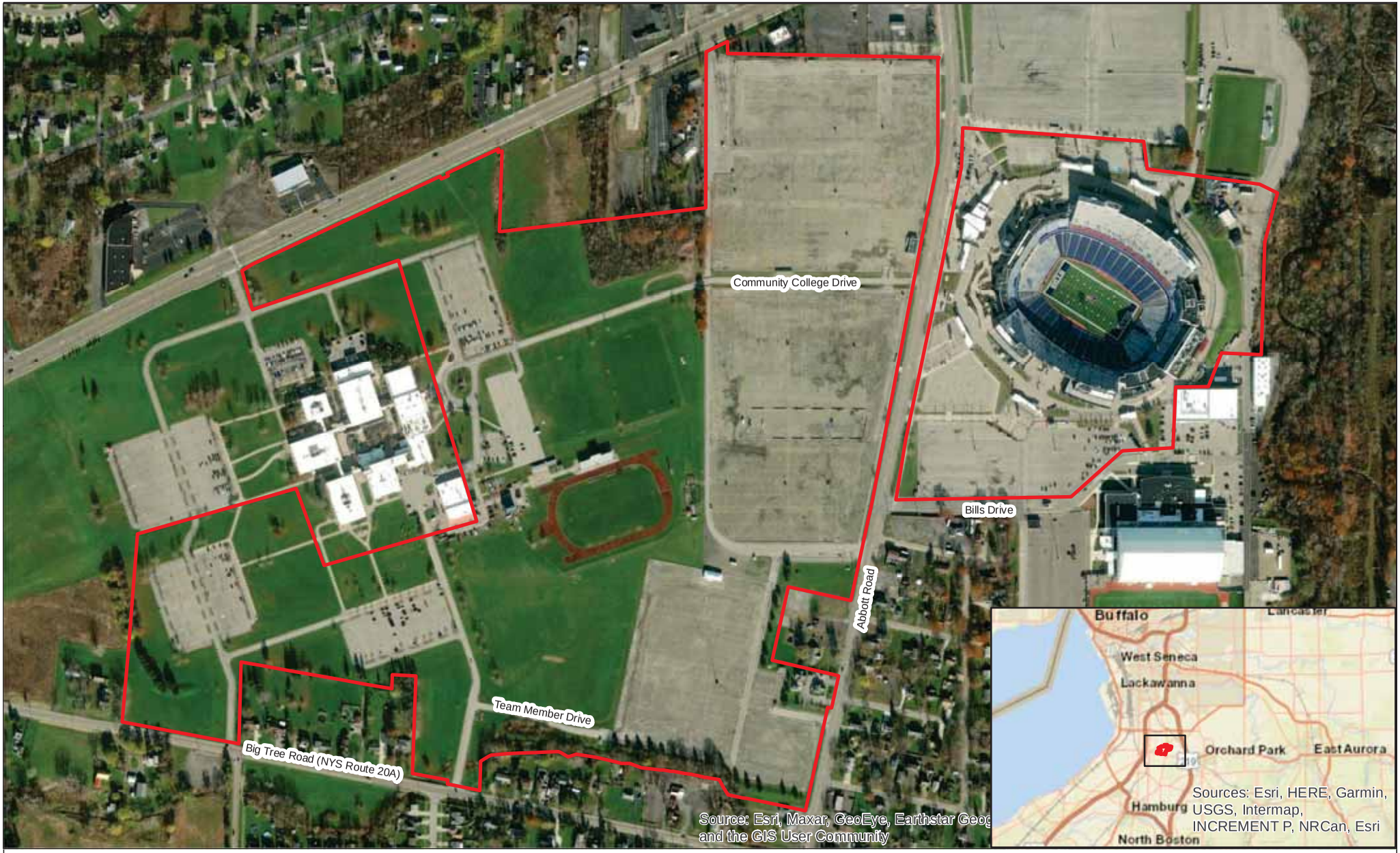
U.S. Army Corps of Engineers. 2020. National Wetland Plant List, version 3.5. <http://wetland-plants.usace.army.mil/>. U.S. Army Corps of Engineers. Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH.

Figures



0 0.075 0.15 0.3 Miles

Location Map

New Buffalo Bills Stadium
Towns of Orchard Park and Hamburg
Erie County, New York

K. Hojnacki, Date: 7/29/2022

Area of Investigation

Figure 1

0 0.075 0.15 0.3 Miles

Topographic Map

New Buffalo Bills Stadium
Towns of Orchard Park and Hamburg
Erie County, New York

K. Hojnacki, Date: 7/29/2022

Elevation Contours (2ft)

Area of Investigation

Figure 2

0 0.075 0.15 0.3 Miles

USDA NRCS Soils Map

New Buffalo Bills Stadium
Towns of Orchard Park and Hamburg
Erie County, New York

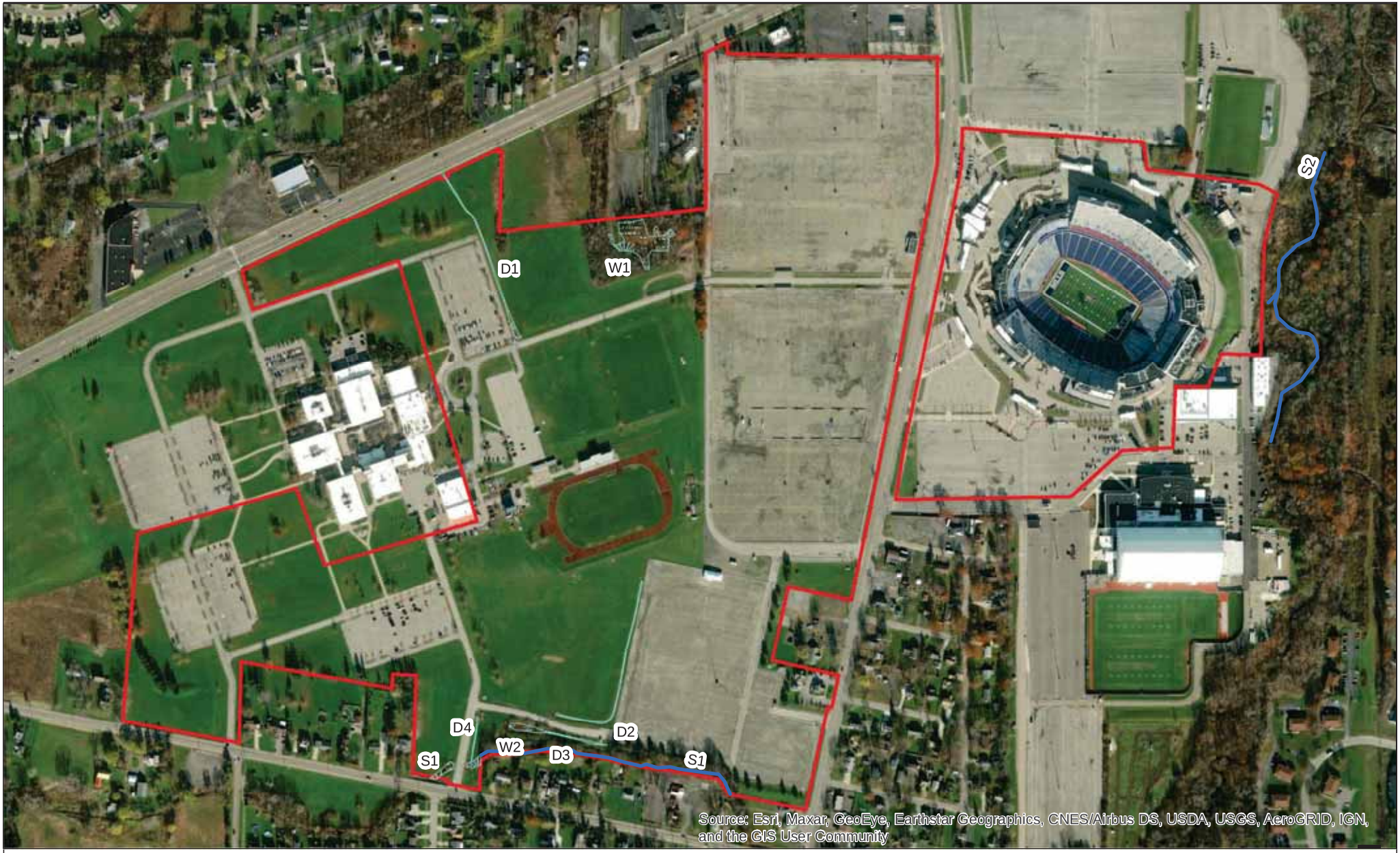
K. Hojnacki, Date: 7/29/2022

Area of Investigation

Hydric Rating

- 0
- 5
- 65
- 90

Figure 3



0 0.075 0.15 0.3 Miles

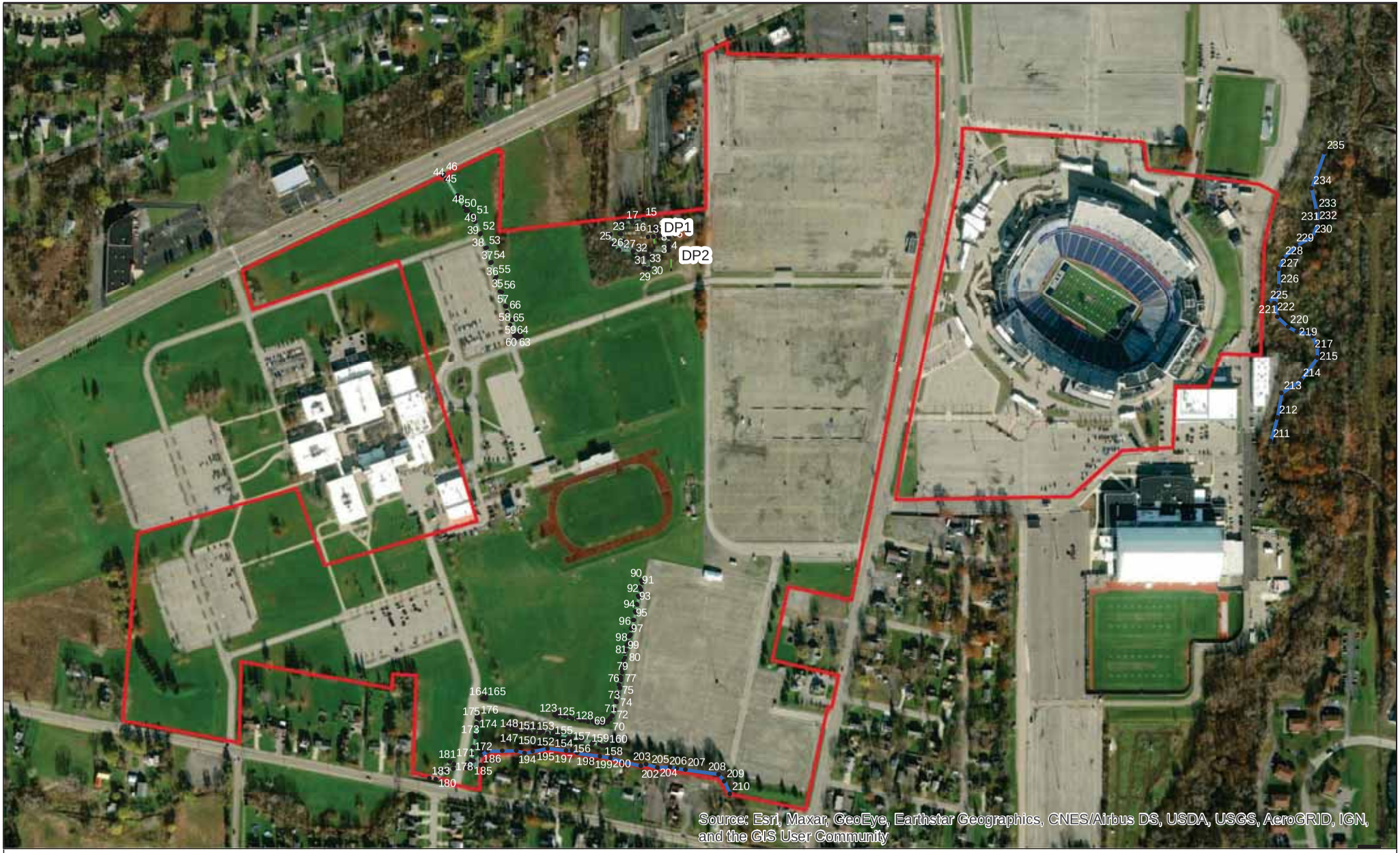
Field Mapped Hydrologic Features

New Buffalo Bills Stadium
Towns of Orchard Park and Hamburg
Erie County, New York

K. Hojnacki, Date: 9/15/2022

Stream OHWM
Wetlands and Streams
Area of Investigation

Figure 5



0 0.075 0.15 0.3 Miles

Field Mapped Hydrologic Features

New Buffalo Bills Stadium
Towns of Orchard Park and Hamburg
Erie County, New York

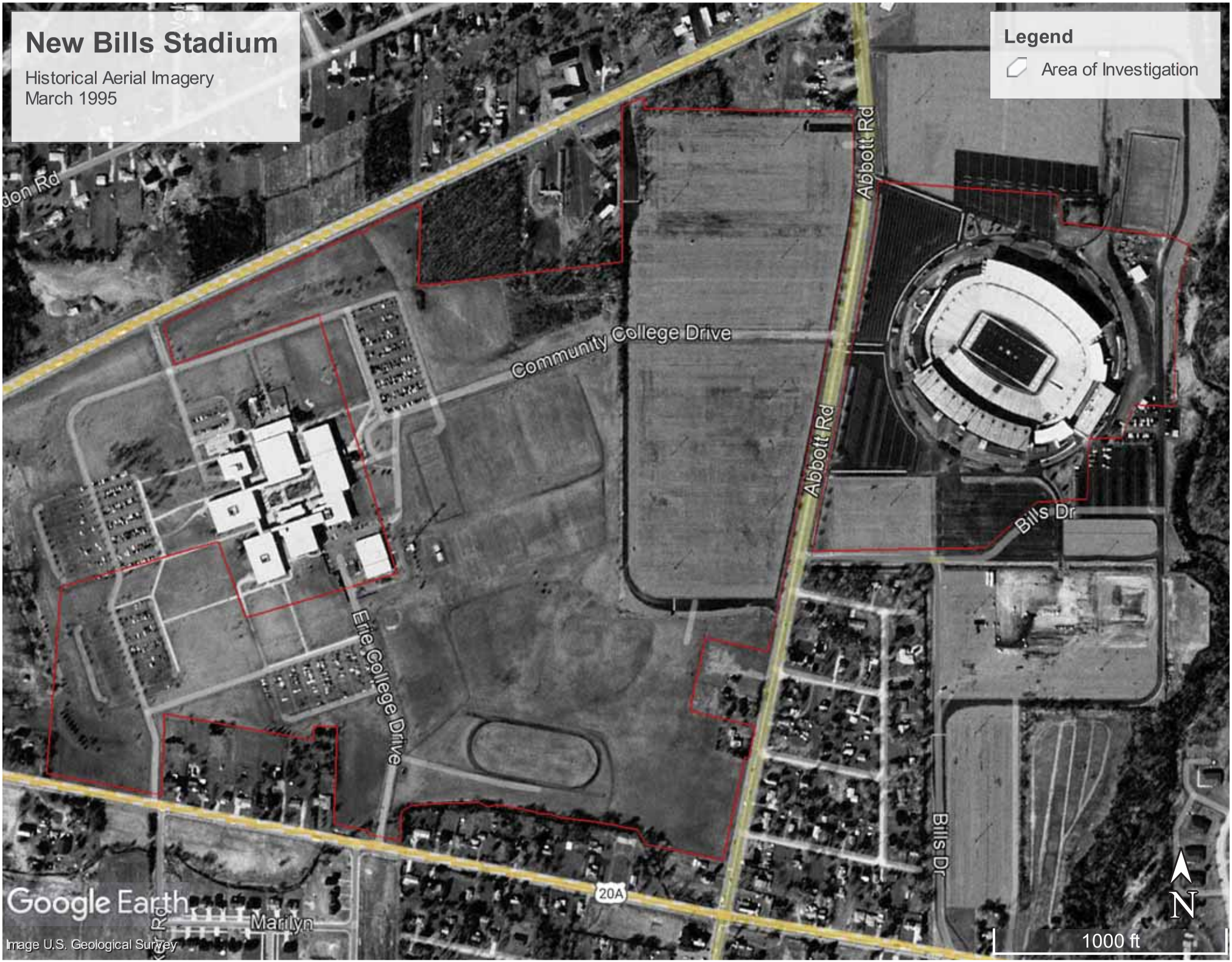
K. Hojnacki, Date: 9/15/2022

CC Environment & Planning

- Waypoints
- Datapoints
- Stream OHWM
- Wetlands and Streams
- Area of Investigation

Figure 6

Appendix A – Historical Aerial Imagery


New Bills Stadium
Historical Aerial Imagery
March 1995
Legend
Area of Investigation
Community College Drive
Abbott Rd
Abbott Rd
Bills Dr
Erie College Drive
Bills Dr
20A
Marilyn
Google Earth
Image U.S. Geological Survey
N
1000 ft


New Bills Stadium
Historical Aerial Imagery
April 2002
Legend
Area of Investigation
Abbott Rd
Community College Drive
Abbott Rd
Bills Dr
Erie College Drive
Bills Dr
20A
Marilyn
Google Earth
Image © 2022 New York GIS
N
1000 ft


New Bills Stadium
Historical Aerial Imagery
October 2011
Legend
Area of Investigation
Community College Drive
Abbott Rd
Abbott Rd
Bills Dr
Erie College Drive
Bills Dr
20A
Marilyn
Google Earth
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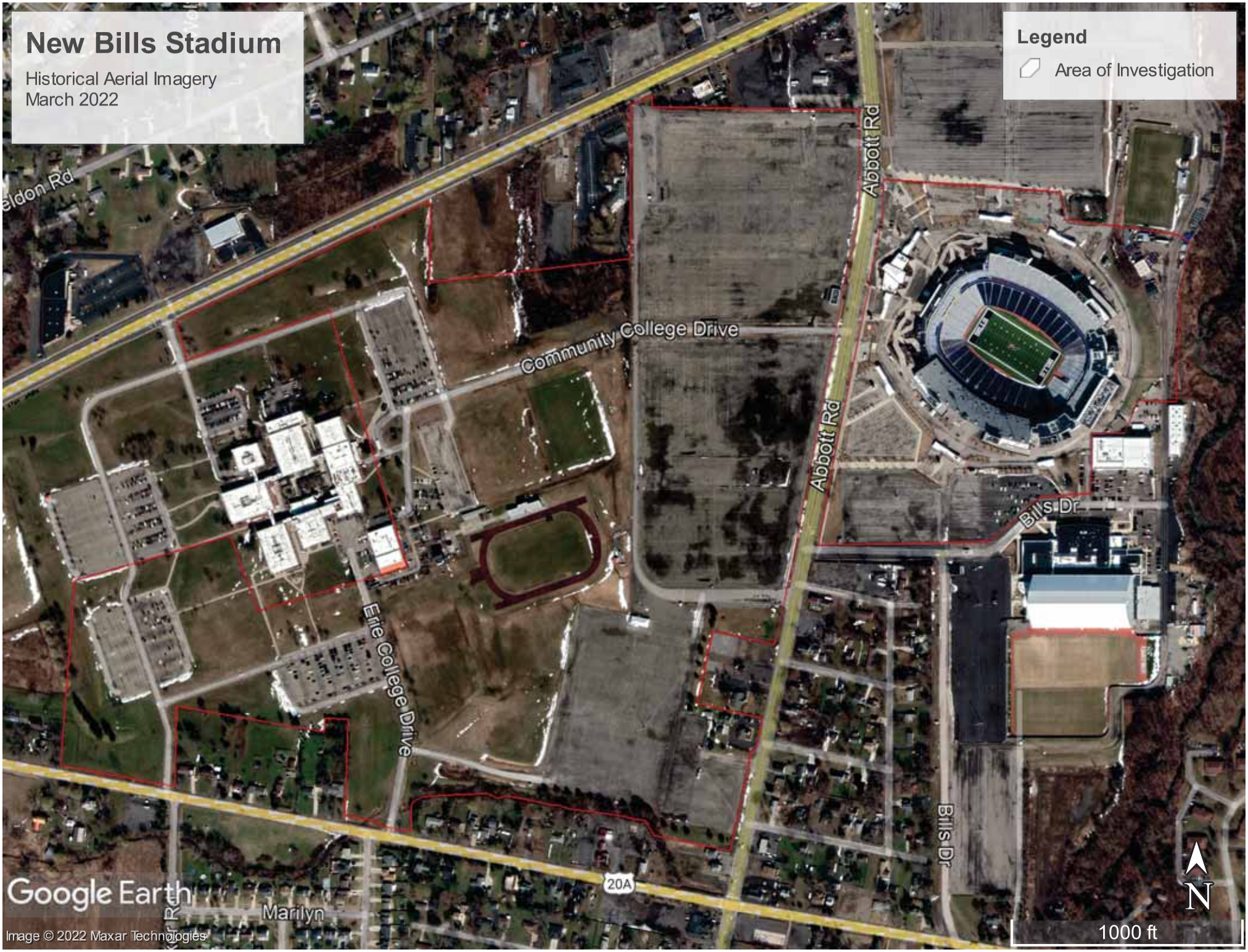
New Bills Stadium
Historical Aerial Imagery
March 2022
Legend
Area of Investigation
eldon Rd
Community College Drive
Abbott Rd
Abbott Rd
Bills Dr
Erie College Drive
Bills Dr
20A
Marilyn
Google Earth
Image © 2022 Maxar Technologies
N
1000 ft

Appendix B – Photo Report

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 1

Datapoint 1, Wetland 1, facing north. Emergent marsh meets forested wetland.

Photo 2

Datapoint 1, Wetland 1, facing east. Edge of emergent marsh and forested wetland.

Photo 3

Datapoint 1, Wetland 1, facing south. Emergent marsh dominated by cattail and purple loosestrife.

Photo 4

Datapoint 1, Wetland 1, facing west. Edge of emergent marsh and forested wetland.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 5

Datapoint 1, Wetland 1, soils. Note the abundant redox.

Photo 6

Datapoint 2, Upland, facing north. Upland forest edge.

Photo 7

Datapoint 2, Upland, facing east. Area is used for storage of equipment and gravel.

Photo 8

Datapoint 2, Upland, facing south. Looking across Community Campus Drive.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 9

Datapoint 2, Upland, facing west. Forest/lawn edge.

Photo 10

Datapoint 2, Upland, soils. Light colored, single shade with a dry and crumbly texture.

Photo 11

Waypoint 7, Wetland 1, facing northeast. Mix of FACW and FAC plants within the understory.

Photo 12

Waypoint 7, Wetland 1, facing southwest. Opening in trees is emergent marsh.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 13

Waypoint 16, Wetland 1, facing south into wetland from edge of forest.

Photo 14

Waypoint 16, Wetland 1, facing east. Edge of forested wetland at neighboring property's parking lot.

Photo 15

Waypoint 16, Wetland 1, facing west. Edge of forested wetland at neighboring property's parking lot.

Photo 16

Waypoint 22, Wetland 1, facing north. Mowed area was likely wetland prior to alterations.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 17

Waypoint 34, Drainage 1, facing northwest (downstream). Drainage is not regularly mowed in this area.

Photo 18

Waypoint 34, Drainage 1, facing southeast (upstream). Dense cattails are present surrounding the culvert pipe at Community Campus Drive.

Photo 19

Waypoint 40, Drainage 1, facing northwest (downstream). Drainage is regularly mowed here; banks are not as distinct.

Photo 20

Waypoint 40, Drainage 1, facing southeast. Mowing of drainage begins at end of parking lot.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 21

Waypoint 45, Drainage 1, facing northwest (downstream). Stormwater grate that collects water from Drainage 1.

Photo 22

Waypoint 61, Drainage 1, facing northwest (downstream). Dense cattails are present surrounding the culvert pipe at Community Campus Drive.

Photo 23

Waypoint 67, Drainage 2, facing northeast (upstream). Bend in Drainage near parking lot.

Photo 24

Waypoint 67, Drainage 2, facing west (downstream). Upland to the north slopes significantly into the Drainage. Culvert is within patch of shrubs within the middle distance.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 25

Waypoint 73, Drainage 2, facing north (upstream). Banks are not very distinct. FACW plants found along Drainage bed.

Photo 26

Waypoint 90, facing north. No clear drainage to the north from this point.

Photo 27

Waypoint 90, facing east. Parking lot next to Drainage 2.

Photo 28

Waypoint 90, Drainage 2, facing south. Beginning of Drainage is not very distinct, but does exist.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 29

Waypoint 90, facing west. Upland field next to Drainage 2.

Photo 30

Waypoint 120, Drainage 2, facing south. Drainage flows into this culvert pipe toward Drainage 3.

Photo 31

Waypoint 129, Drainage 3, facing east (upstream). Drainages begins at parking lot. Banks shallow and regularly mowed.

Photo 32

Waypoint 129, Drainage 3, facing west (downstream). Beginning of distinct banks and robust vegetation.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 33

Waypoint 134, Drainage 3, facing east (upstream). Herbaceous plants dominate the Drainage in this section.

Photo 34

Waypoint 134, Drainage 3, facing west (downstream). Drainage enters tall shrubs/short trees

Photo 35

Waypoint 135, Drainage 3, facing east (upstream). Drainage where it enters shrubs/trees.

Photo 36

Waypoint 135, Drainage 3, facing west (downstream). Drainage weaves its way through young forest.

Photo 37

Waypoint 145, Wetland 2, facing northeast (upstream). from culvert pipe. Narrow channel can be seen containing water among the cattails.

Photo 38

Waypoint 146, Wetland 2, facing southwest (downstream). Culvert pipe is outflow for Wetland 2 toward Stream 1.

Photo 39

Waypoint 148, Wetland 2, facing east. Note the mix of emergent and shrub wetlands.

Photo 40

Waypoint 148, Wetland 2, facing west. Silky dogwood is abundant within this wetland.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 41

Waypoint 149, Wetland 2, facing northwest. Portion of this wetland are thick shrubs while others are open emergent.

Photo 42

Waypoint 152, Drainage 3/Wetland 2, facing north. Culvert pipe where Drainage 2 enters Drainage 3/ Wetland 2.

Photo 43

Waypoint 152, Drainage 3/Wetland 2, facing west (downstream). Significant rocky substrate in Drainage 3 just downstream of the Drainage 2 inlet.

Photo 44

Waypoint 161, Drainage 4, facing south (downstream). Culvert in bottom brings water from upstream. Top culvert allows water to flow under Team Member Dr.

New Bills Stadium

Wetland Delineation - July 26, 2022

Photo 45

Waypoint 169, Drainage 4, facing north (upstream). Patch of cattails in middle distance occurs at culvert.

Photo 46

Waypoint 169, Drainage 4, facing south (downstream). Drainage flows through mowed area to Stream 1.

Photo 47

Waypoint 177, Stream 1, facing southwest (downstream). Culverts outlet Stream from under Erie College Drive.

Photo 48

Waypoint 177, Stream 1, facing east (upstream). Robust vegetation denotes Stream on east side of Erie College Drive.

New Bills Stadium

Wetland Delineation - July 12, 2022

Photo 49

Waypoint 183, Stream 1, facing northeast (upstream). Robust herbaceous vegetation dominates this portion of the Stream.

Photo 50

Waypoint 183, Stream 1, facing south (downstream). Stream flows under Big Tree Road bridge.

Photo 51

Waypoint 189, Stream 1, facing southeast (upstream). Stream travels through forest with thick understory of shrubs.

Photo 52

Waypoint 190, Stream 1, facing north. Outlet of Drainage 3 into Stream 1.

New Bills Stadium

Wetland Delineation - July 12, 2022

Photo 53

Waypoint 195, Stream 1, facing east (upstream).

Photo 54

Waypoint 195, Stream 1, facing west (downstream). Substrate is a mix of rock and muck.

Photo 55

Waypoint 200, Stream 1, facing east (upstream). Numerous small footbridges cross the Stream from neighboring residences to the south.

Photo 56

Waypoint 200, Stream 1, facing west (downstream). Gap in the trees allows for growth of herbaceous vegetation.

New Bills Stadium

Wetland Delineation - July 12, 2022

Photo 57

Waypoint 201, Stream 1, facing east (upstream).

Photo 58

Waypoint 212, Stream 2, facing south (upstream). Smoke Creek has a rocky substrate throughout.

Photo 59

Waypoint 212, Stream 2, facing north (downstream). Note the steep bank to the west.

Photo 60

Waypoint 212, Stream 2, facing west. A steep bank slopes from the current stadium complex to the Stream.

Photo 61

Waypoint 213, Stream 2, facing northeast (downstream). Small island within stream.

Photo 62

Waypoint 213, Stream 2, facing south (upstream).

Photo 63

Waypoint 213, Stream 2, facing west. The operations building can be seen at the top of the steep bank.

Photo 64

Waypoint 214, Stream 2, facing northeast (downstream). A level floodplain has developed between the Stream and the steep bank to the west.

Photo 65

Waypoint 214, Stream 2, facing southwest (upstream). A small island within Stream.

Photo 66

Waypoint 214, Stream 2, facing west. Level, upland floodplain.

Photo 67

Waypoint 221, Stream 2, facing northwest (downstream). Stream travels through a gap in the forest.

Photo 68

Waypoint 221, Stream 2, facing southeast (upstream). Wide, gravel bar along edge of Stream.

New Bills Stadium

Wetland Delineation - July 12, 2022

Photo 69

Waypoint 223, Stream 2, facing north (downstream). Flow here includes water from stormwater outflow.

Photo 70

Waypoint 223, Stream 2, facing south (upstream). Stream prior to stormwater outflow.

Photo 71

Waypoint 223, Stream 2, facing southwest. Looking upstream at stormwater drainage.

Photo 72

Waypoint 225, Stream 2, facing southwest. Stormwater outflow from existing stadium complex.

Photo 73

Waypoint 225, Stream 2, facing northeast. Stormwater drainage facing downstream toward Stream 2.

Photo 74

Waypoint 230, Stream 2, facing north (downstream).

Photo 75

Waypoint 233, Stream 2, facing north (downstream).

Photo 76

Waypoint 233, Stream 2, facing south (upstream).

Photo 77

Low spot with stormwater drain between Lot 3 and ECCC track/stadium. Drain has been known to back up, causing flooding and standing water in this area. No wetland indicators present under normal circumstances.

Appendix C – Data Sheets

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Bills Stadium City/County: Orchard Park/Erie Sampling Date: 7/26/22

Applicant/Owner: Erie County State: NY Sampling Point: DP1

Investigator(s): Katlyn Hojnacki Section, Township, Range:

Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): Concave Slope %: 0

Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.774408 Long: -78.793918 Datum: WGS 84

Soil Map Unit Name: Angola silt loam, 0 to 3 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No X

Are Vegetation ____, Soil ____, or Hydrology ____ 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**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: Wetland 1

Remarks: (Explain alternative procedures here or in a separate report.)
Area experiencing a moderate drought. Photos 1-5, 11-16.

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)
- 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 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)
- 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? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: DP1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	10	Yes	FAC
2. *Carya ovata*	15	Yes	FACU
3.			
4.			
5.			
6.			
7.			
	25	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1. *Frangula alnus*	5	Yes	FAC
2. *Fraxinus pennsylvanica*	5	Yes	FACW
3. *Cornus racemosa*	1	No	FAC
4.			
5.			
6.			
7.			
	11	=Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. *Typha angustifolia*	35	Yes	OBL
2. *Lythrum salicaria*	30	Yes	OBL
3. *Juncus effusus*	10	No	OBL
4. *Bidens frondosa*	5	No	FACW
5. *Carex scoparia*	15	No	FACW
6. *Glyceria striata*	5	No	OBL
7. *Euthamia graminifolia*	2	No	FAC
8.			
9.			
10.			
11.			
12.			
	102	=Total Cover	
Woody Vine Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
		=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: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	25	x 2 =	50
FAC species	18	x 3 =	54
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	138 (A)		244 (B)

Prevalence Index = B/A = 1.77

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - 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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 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 greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

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

SOIL

Sampling Point DP1

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
8-12	10YR 3/2	50	2.5YR 4/8	50	C	M	Loamy/Clayey	Prominent redox concentrations
12-18	10YR 6/1	30	10YR 5/8	70	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

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**)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Bills Stadium City/County: Orchard Park/Erie Sampling Date: 7/26/22

Applicant/Owner: Erie County State: NY Sampling Point: DP2

Investigator(s): Katlyn Hojnacki Section, Township, Range:

Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): Flat Slope %: 0

Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.774135 Long: -78.793643 Datum: WGS 84

Soil Map Unit Name: Angola silt loam, 0 to 3 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 procedures here or in a separate report.)
Area experiencing a moderate drought. Upland datapoint. Photos 6 - 10.

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 X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: DP2

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	2	No	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	2	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1. *Frangula alnus*	5	Yes	FAC
2. *Cornus racemosa*	5	Yes	FAC
3.			
4.			
5.			
6.			
7.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. *Daucus carota*	15	Yes	UPL
2. *Lotus corniculatus*	30	Yes	FACU
3. *Plantago lanceolata*	15	Yes	FACU
4. *Prunella vulgaris*	15	Yes	FAC
5. *Cirsium arvense*	5	No	FACU
6. *Solidago canadensis*	15	Yes	FACU
7. *Dipsacus laciniatus*	2	No	FACU
8.			
9.			
10.			
11.			
12.			
	97	=Total Cover	
Woody Vine Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
		=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: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 42.9% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	27	x 3 =	81
FACU species	67	x 4 =	268
UPL species	15	x 5 =	75
Column Totals:	109 (A)		424 (B)

Prevalence Index = B/A = 3.89

Hydrophytic Vegetation Indicators:

___ 1 - 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)

___ 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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 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 greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

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

SOIL

Sampling Point DP2

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 4/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ 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)
- ___ Marl (F10) (**LRR K, L**)

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**)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Appendix D – Qualifications

Statement of Qualifications

CC Environment & Planning • 585-219-4030 • www.ccenvironment.com
23 Jackson Street, Ste 201, Batavia, New York 14020

Resilience, Balance, Vitality

CC Environment & Planning was formed in 2009 to provide environmental expertise for communities, corporations, developers, and conservation organizations. With more than twenty years experience in natural resource conservation, Sheila Hess founded CC Environment & Planning to provide innovative and integrated services that facilitate a balanced approach to land use, conservation, and economic and community development. The success of CC Environment & Planning is based on a strong network among federal, state, and private entities including regulatory agencies, economic development organizations, municipal government, planners, agriculture, watershed groups and nonprofit organizations. The company has developed a strong environmental planning component with a recent focus on climate and resilience which complements the ecological foundation of the company's mission. With balance, integration, collaboration, and communication, CC Environment & Planning creates strategies that optimize land use, facilitate economic growth, and conserve our resources.

The mission of CC Environment & Planning is to balance natural resource conservation with economic vitality to stimulate sustainable development, preserve a healthy environment, and support a high quality of life.

List of Services

- Ecological assessment and inventory
- State and federal environmental review
- Science-based/community-based land use planning
- Municipal and watershed planning
- Strategic planning, vision and goal setting
- Green infrastructure assessment and planning
- Habitat protection and restoration
- Aquatic resource investigations/permitting
- Project development, partnerships, and funding
- Grant writing
- Graphic design—interpretive signs, education materials, outreach materials, websites
- Coordinate cultural resource investigations
- Project coordination and management
- Mitigation strategies (avoidance, minimization, compensation)

Feature Projects

- **Green Genesee Smart Genesee**
  Land use/energy planning—Genesee County, NY
- **Scenic Hudson**
  Environmental Impact Review—Hudson Valley, NY
- **Climate Resiliency Planning**
  New York Green —Genesee County, NY
- **NGO Strategic Planning**
  Finger Lakes PRISM, New York Green, ACORNS
- **Municipal Comprehensive Plans**
  Municipal planning— NY
- **Town of Ossian Agriculture Protection Plan**
  Land use planning—Livingston County, NY
- **SWMF Natural Resource Management Plan**
  Land management—Jefferson County, NY
- **Conesus Lake Watershed Toolkit**
  Planning, education—Livingston County, NY

Staff

Sheila Hess—*Principal Ecologist/CEO*
Paul Hess—*Wildlife Biologist/GIS Analyst*
Jennifer Cook—*Administrative Assistant/Graphic Designer*
Katlyn Hojnacki—*Senior Ecologist/Operations Manager*

Katlyn Hojnacki – Senior Ecologist/Operations Manager

CC Environment & Planning • 585-219-4030 • khojnacki@ccenvironment.com

EDUCATION

B.S. Wildlife Sciences, 2008
State University of NY-College of Environmental Science and Forestry

AREAS OF EXPERTISE

Habitat Management and Restoration

Invasive Species Management

Wildlife Surveys

Project Management

Environmental Assessments/Reviews

Land Use and Conservation Planning

Writing: Educational, Technical, and Planning Documents

GIS Data Management and Map Production

Public Education

AFFILIATIONS

The Wildlife Society

New York State Chapter of The Wildlife Society

Friends of Parker River National Wildlife Refuge

WNY Land Conservancy

SUMMARY OF EXPERIENCE

Katlyn Hojnacki has nearly 15 years of experience in Environmental and Biological Sciences. She has worked for and closely with state and federal conservation agencies including NYS Department of Environmental Conservation and U.S. Fish and Wildlife Service. Katlyn is skilled at managing multiple and diverse projects from field work to coordination, budgeting, and managing partnerships. Katlyn's approachable personality, communication skills, and broad technical background are assets in her development and administration of complex, multi-partner, and science-based conservation projects.

Katlyn employs a diverse skillset that includes field survey techniques, education and outreach, permitting, data analysis, GIS mapping, budgeting and management, report development, and land use planning. She has spent a significant amount of time providing public educational services, conducting and administering field surveys, using ArcMap for GIS mapping, and working with multiple stakeholders in developing numerous land use and conservation plans. This work has included regular communication with clients, colleagues, partners, volunteers, and members of the public (both informally and during formal public programs and presentations). Katlyn has excellent communication skills and employs a positive, clear, and concise manner with landowners, communities, companies, nonprofits, and agencies.

CERTIFICATIONS/TECHNICAL TRAINING

- Wetland Delineation and Evaluation
- Wildlife Surveys and Data Analysis
- Invasive Species Management
- Geographic Information Systems (GIS) and Global Positioning Systems (GPS)
- Wildland Firefighter Type II
- Motorboat Operator Certification
- Game of Logging Chainsaw Operation

Sheila Hess – Principal Ecologist/Lead Planner

CC Environment & Planning • 716-560-1768 • shess@ccenvironment.com

EDUCATION

M.S. Environment and Ecology, 1997
State University of NY-College of Environmental Science and Forestry

B.S. Environmental Biology, 1994
State University of NY-College at Brockport

AREAS OF EXPERTISE

- *Innovative Planner/Problem Solver*
- *Ecosystem Management*
- *Land Use Planning*
- *Writing: Educational, Technical, and Planning Documents*
- *Ecological Inventory and Assessment*
- *Climate Resiliency and BMPs*
- *Invasive Species Management*
- *Watershed Planning*
- *Complex Project Management*
- *Green Infrastructure Planning*
- *Permit Review, Mitigation and Compensation strategies*
- *Habitat Protection, Restoration and Management*

AFFILIATIONS

- *New York Green – Board*
- *The Wetland Trust - Board*
- *American Planning Association*
- *The Wildlife Society*
- *Society of Wetland Scientists*
- *NYS Wetlands Forum*
- *Friends of Iroquois NWR – Board*
- *WNY Land Conservancy*
- *Finger Lakes Land Trust*
- *Leadership Genesee - Board*
- *Association of State Wetland Managers*
- *Genesee Farm Bureau*
- *Ducks Unlimited, Inc.*
- *The Nature Conservancy*
- *ACORNS*
- *Finger Lakes PRISM*

SUMMARY OF EXPERIENCE

Sheila Hess formed CC Environment & Planning in 2009 and serves as Principal Ecologist and CEO. She works with communities, corporations, economic developers, agriculture, and conservation organizations to integrate natural resource conservation into land use planning, ecosystem management, and economic development strategies. Sheila leverages her 20 years of experience in ecology, natural resource conservation, planning, team leadership, and a broad network of peers, to create new opportunities for landscape level ecosystem restoration and protection. She facilitates collaborative and interdisciplinary problem-solving processes and focuses on solutions that serve as catalysts for sustainable change.

Sheila works at state, regional, and local levels to advance the integration of climate resilience into community and land-use planning. She participated extensively in the public review process that helped guide development of the Finger Lakes Regional Sustainability Plan, she served on the Sustainability Workgroup for the Finger Lakes Regional Economic Development Council and was successful in building a partnership that launched Green Genesee/Smart Genesee – one of the first Cleaner Greener Communities funded planning projects. Sheila is currently planning co-lead on a Countywide Climate Resiliency Plan in Genesee County and NYSERDA's New York State Climate Assessment Update.

Sheila is a founding member of both New York Green, Inc., and The Wetland Trust, two non-profit organizations emphasizing resiliency, sustainable communities, and the conservation of vulnerable natural resources, and serves on the board of several organizations.

CERTIFICATIONS/TECHNICAL TRAINING

- Green Infrastructure and Landscape Design
- Leadership Genesee 2013
- Watershed Assessment and Planning
- Wetland Classification, Assessment and Delineation
- Wetland/Stream Restoration and Mitigation
- Business Negotiation and Executive Leadership
- Geographic Information Systems (GIS) and Global Positioning Systems (GPS)
- Wildlife Trapping, Marking and Radio Telemetry

Appendix B

Threatened & Endangered Species Review Documentation

EAF Mapper Summary Report

Tuesday, July 26, 2022 6:41 AM

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	Yes
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas:West Erie Canal Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	837-226, 837-235
E.2.h.iv [Surface Water Features - Stream Classification]	C
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	Yes

E.2.h.v [Impaired Water Bodies - Name and Basis for Listing]	Name - Pollutants - Uses:Rush Creek and tribs – Pathogens;Nutrients – Recreation;Public Bathing;Aquatic Life, Name - Pollutants - Uses:South Branch Smoke Cr, Lower, and tribs – Nutrients;Silt/Sediment – Recreation;Aquatic Life
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:
Project Code: 2022-0067440
Project Name: Buffalo Bills Stadium

July 26, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

Project Summary

Project Code: 2022-0067440
Project Name: Buffalo Bills Stadium
Project Type: Commercial Development
Project Description: Construction of a new stadium and demolition of the old stadium to create parking lots.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.7722656,-78.7937016446744,14z

Counties: Erie County, New York

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: CC Environment & Planning
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City: Batavia
State: NY
Zip: 14020
Email khojnacki@ccenvironment.com
Phone: 5852194030

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:
Project code: 2022-0067440
Project Name: Buffalo Bills Stadium

July 26, 2022

Subject: Consistency letter for the 'Buffalo Bills Stadium' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Katlyn Hojnacki:

The U.S. Fish and Wildlife Service (Service) received on July 26, 2022 your effects determination for the 'Buffalo Bills Stadium' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take"[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

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[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Buffalo Bills Stadium

2. Description

The following description was provided for the project 'Buffalo Bills Stadium':

> Construction of a new stadium and demolition of the old stadium to create parking lots.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.7722656,-78.7937016446744,14z

Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule
This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   No

2. Will your activity purposefully **Take** northern long-eared bats?

   No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

   Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/media/nleb-roost-tree-and-hibernacula-state-specific-data-links-0.

   Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

   No

6. Will the action involve Tree Removal?

   Yes

7. Will the action only remove hazardous trees for the protection of human life or property?

   No

8. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

   No

9. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

   No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

3.0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

IPaC User Contact Information

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