PREPARED FOR:

NEW YORK STATE ELECTRIC & GAS CORP. (NYSEG)
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NEW GARDENVILLE SUBSTATION PROJECT

TOWN OF WEST SENECA, ERIE COUNTY, NEW YORK

WETLAND & WATERCOURSE DELINEATION REPORT UPDATE

UPDATE JANUARY 2020

PREPARED BY:

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FISHER ASSOCIATES PROJECT NO. 185057.00

EXECUTIVE SUMMARY

On behalf of New York State Electric & Gas Corp. (NYSEG), Fisher Associates' Wetland Scientist conducted a field delineation on December 18, 2018 to identify potential federal jurisdictional Waters of the United States (WOTUS) and potential state jurisdictional waters, including wetlands and watercourses within the Project Study Limits defined in support of the New Gardenville Substation Project (Project). An additional field delineation visit was also made on May 16, 2019 during the growing season to confirm the boundaries that were identified in the winter and to take additional data points. The Project Study Limits consisted of a 10.53-acre area, which encompasses potential construction and limits of disturbance required for the Project. The Project Study Limits are depicted on the attached Wetland Delineation mapping.

The Project Study Limits are located along Indian Church Road in the Town of West Seneca, Erie County, New York (see *Figure 1: Project Vicinity and Index Map*). They are located within the Buffalo – Eighteen Mile Watershed (HUC 04120103) and are drained by an Unnamed Tributary of the Buffalo River flowing west into the main stem of the Buffalo River. The majority of the Project Study Limits consist of disturbed areas within and surrounding an existing utility substation. Areas within the substation are comprised of dirt, gravel and asphalt grounds with existing utility structures and fencing. The land to the north of the substation is a manicured grass yard with a drainage way along the road. There is a small berm with a ditch between the existing substation and the asphalt access road. Additionally, the land south of the substation consists of a wetland and stream located within an existing utility transmission line and right-of-way (ROW).

The Project Study Limits were delineated based upon the methodology outlined in the *1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)* and the *1995 New York State Freshwater Wetlands Delineation Manual.* Using these methodologies, preliminary delineation mapping was produced and is included along with the attached investigation description and discussion. During the delineation, approximately 0.90-acres of palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine forested (PFO) wetlands were identified. In addition, 247-linear feet of a perennial Unnamed Tributary to the Buffalo River and one (1) potentially jurisdictional ditch were identified within the Project Study Limits.

The additional field delineation site visit on May 16, 2019 confirmed the wetland and watercourse boundaries that were identified during the previous site visit. Additional data points were collected to document the wetland and upland conditions associated with Wetland 004, and the upland areas south of Stream 001.

Based on conditions observed, the USACE will likely invoke jurisdiction over the above noted aquatic resources due to their apparent hydrologic connection to other jurisdictional waters. It is also anticipated that the NYSDEC will invoke jurisdiction over all four (4) of the delineated wetlands under Article 24: Freshwater Wetlands Program of the ECL since they are associated with NYSDEC mapped FWW BU-13 and its corresponding 100-foot regulated adjacent area. However, it is not anticipated that NYSDEC will invoke jurisdiction over Stream 001 (Unnamed Tributary of the Buffalo River) under Article 15: Protection of Waters Program of the ECL, as it is considered to be a Class D stream (lowest stream classification).

WETLAND & WATERCOURSE DELINEATION REPORT UPDATE
NEW GARDENVILLE SUBSTATION PROJECT

TABLE OF CONTENTS

WETLAND & WATERCOURSE DELINEATION REPORT UPDATE
NEW GARDENVILLE SUBSTATION PROJECT

TABLE OF CONTENTS CONTINUED

FIGURES

TABLES

APPENDICES

PROJECT INFORMATION SHEET

General

Project Name:	New Gardenville Substation Project
State:	New York
County:	Erie County
Town:	Town of West Seneca
Latitude:	42.853155° North
Longitude:	-78.766556° West
Project Study Area Size:	10.53-acres
HUC Code:	04120103 (Buffalo – Eighteen Mile)
Waterbodies (TNW):	Unnamed tributary to Buffalo River and associated palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine forested (PFO) wetlands.

Corresponding Information

USGS Quad Map:	Buffalo Southeast
USDA Soils Map:	Erie County

Owner/Applicant

Owner Name:	New York State Electric & Gas Corp. (NYSEG)
Address:	PO Box 5224 18 Link Drive Binghamton, NY 13902-5224
Client Contact:	Brian Bury: (607) 762-8835

Consultant

Name:	Fisher Associates
Address:	180 Charlotte Street Rochester, NY 14624
Contact:	Sean Milne: (585)334-1310 ext. 216

1.0 INTRODUCTION

On behalf of New York State Electric & Gas Corp. (NYSEG), Fisher Associates' Wetland Scientist conducted a field delineation on December 18, 2018 to identify potential federal jurisdictional Waters of the United States (WOTUS) and potential state jurisdictional waters, including wetlands and watercourses within the Project Study Limits defined in support of the New Gardenville Substation Project (Project). An additional field delineation visit was also made on May 16, 2019 during the growing season to confirm the boundaries that were identified in the winter and to take additional data points. The Project Study Limits consisted of a 10.53-acre area, which encompasses potential construction and limits of disturbance required for the Project. The Project Study Limits are depicted on the attached Wetland Delineation mapping.

2.0 SITE INFORMATION

2.1 Site Location

The Project Study Limits are located along Indian Church Road in the Town of West Seneca, Erie County, New York (see *Figure 1: Project Vicinity and Index Map*). They are located within the Buffalo – Eighteen Mile Watershed (HUC 04120103) and are drained by a branch of the Buffalo River flowing west into the main stem of the Buffalo River. The Project is located in the Ontario-Erie Plain and Finger Lakes Region of the Lake State Fruit, Truck Crop and Dairy Providence/Region.

2.2 Site Description

The Project Study Limits are bounded by Indian Church Road to the north, an unnamed asphalt access road to the east, a transportation/shipping yard, utility rights-of-way (ROW) to the south, and an existing utility substation to the west (see *Figure 2: Wetland Delineation Map, Sheets 1 through 2*). The majority of the Project Study Limits consist of disturbed areas within and surrounding an existing utility substation. Areas within the substation are comprised of dirt, gravel and asphalt grounds with existing utility structures and fencing. The land to the north of the substation is a manicured grass yard with a drainage way along the road. There is a small berm with a ditch between the existing substation and the asphalt access road. Additionally, the land south of the substation consists of a wetland and stream located within a right-of-way (ROW) for a utility transmission line.

3.0 METHODOLOGY

3.1 Preliminary Offsite Investigation/Data Review

A review of publicly available resources was performed prior to the onsite field investigation in order to determine if there is the potential for jurisdictional areas, and if present, the extent of these areas located within the Project Study Limits. These mapping resources are represented on *Figure 2: Wetland Delineation Map, Sheets 1 through 2* and generally include but are not limited to:

- New York State Freshwater Wetlands Mapping (NYSFW);
- New York State Protection of Waters Regulatory Program Streams Mapping (NYSS);
- U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) Database;
- U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soils

Database; and

- United States Geographical Survey (USGS) Mapping.

3.2 Wetland Field Investigations

Wetland boundaries were field delineated according to the routine onsite methodology described in the *1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual*, the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)* (2012 Regional Supplement), and *the 1995 New York State Freshwater Wetlands Delineation Manual*.

Wetlands were identified based on the presence of hydric soils; a vegetative community dominated by hydrophytes, and inundated or saturated conditions, and/or indicators of hydrologic patterns. Wetlands within the Project Study Limits were classified according to the United States Fish and Wildlife Service (USFWS) *Classification of Wetland and Deepwater Habitats of the United States*. Wetland classifications were based on vegetation type and dominance: palustrine emergent (PEM), palustrine scrub-shrub (PSS), palustrine forested (PFO), and palustrine open-water (POW). A project-specific identification number was given to the delineated wetland. Wetland delineation data relative to vegetation, hydrology, soils and general observations was documented on routine wetland data forms consistent with the guidance of the 2012 Regional Supplement.

The wetland boundaries were flagged in the field and the flagged locations were recorded with a sub-meter accuracy global positioning system (GPS) unit to further clarify their locations. Wetland field data points were established within close proximity to flagged wetland boundaries in order to document upland/ dryland and wetland conditions existing along wetland boundaries. Photographs were taken at the field data points to document conditions along the delineation boundary. Supporting wetland determination data forms are provided in *Appendix A.* Representative site photographs are provided in *Appendix D*.

During the additional delineation site visit on May 16, 2019, all data point locations that were previously identified were re-visited and additional data was collected for growing season conditions. Additional Wetland Determination Data Forms and photographs were collected at each of these locations (provided in *Appendix A* and *D* respectively).

3.3 Watercourse Field Investigations

Watercourses such as stream channels, tributaries, ditches and linear conveyance features were identified based on the recognition of field indicators of bed, bank, and an ordinary high water mark (OHWM) coupled with an evaluation of flow type (perennial, intermittent or ephemeral) and connectivity. A "tributary" is defined by the USACE as a water that contributes flow, either directly or through another water (including an impoundment) to a water that is characterized by the presence of the physical indicators of a bed and bank and an ordinary high water mark. Watercourse flow regimes of either perennial, intermittent or ephemeral were noted for each channel based on the U.S. Environmental Protect Agency's (EPA) stream definitions (U.S. EPA, 2013) as noted below.

- Perennial (year-round) – Those streams that typically have flowing water in them year-round. Most of the water comes from smaller upstream waters or groundwater while runoff from rainfall or other precipitation is supplemental.
- Intermittent (seasonal) – Those streams that flow during certain time of the year when smaller upstream waters are flowing and when groundwater provides enough water for stream flow.

Runoff from rainfall or other precipitation supplements the flow of a seasonal stream. During dry periods, seasonal streams may not have flowing surface water.

- Ephemeral (precipitation dependent) – Those streams which only flow after precipitation. Runoff from rainfall is the primary source of water for these streams.

If observed, Fisher Associates' environmental scientists delineated and flagged watercourse boundaries in the field and the flagged locations were recorded with a sub-meter accuracy GPS unit to further clarify their locations. Top of Bank widths as well as OHWM widths were recorded throughout the length of the watercourse. Mapping depicting the location of the delineated watercourses, including streams and ditches, identified within the Project Study Limits are provided as an appendix (see *Figure 2: Wetland and Watercourse Delineation Map*). According to guidance from the USACE, ditches are generally not jurisdictional or regulated under Sections 402 or 4040 of the Clean Water Act (CWA) unless the feature has the following:

- Defined bed and bank (has a channel present);
- An OHWM is present;
- Contains a direct or indirect connection to a traditional navigable water; and
- Contains at least one (1) of the five (5) following supplemental attributes:
    - Presence of relatively permanent flowing or standard water;
    - A natural stream that has been altered;
    - Is excavated within a jurisdictional WOTUS;
    - Connects two (2) or more jurisdictional WOTUS; or
    - Drains natural water bodies (including wetlands) into the tributary system of a traditional navigable water.

Observed watercourse characteristics were recorded on supporting data forms, and are provided in *Appendix B.* Representative site photographs are provided in *Appendix C.*

During the additional delineation site visit on May 16, 2019, all data point locations that were previously identified were re-visited and additional data was collected for growing season conditions. Additional data forms and photographs were collected at each of these locations (provided in *Appendix B, C,* and *D* respectively).

4.0 DELINEATION FINDINGS

4.1 Preliminary Offsite Investigation/Data Review Findings

4.1.1 NYS Freshwater Wetland Mapping

The NYSFW maps were developed by the New York State Department of Environmental Conservation (NYSDEC) pursuant to Article 24: Freshwater Wetlands (FWW) Program of the Environmental Conservation Law (ECL). These maps depict the approximate boundaries of freshwater wetlands regulated by the NYSDEC. In most instances, the State-mapped boundaries are based on aerial photographs and soil survey interpretation and, therefore, require site-specific field verification. Freshwater wetland mapping information identified for the Project Study Limits was obtained from online Geographic Information System (GIS) mapping resources made available by the NYSDEC (NYSDEC 2019). Based on reviewed mapping information, one (1) NYSDEC FWW is mapped within the Project

Study Limits. The mapped wetland is located in the southern portion of the Project, and classified as NYSDEC FWW BU-13, a Class I wetland system.

4.1.2 NYS Streams Mapping

The NYSS maps were developed by the NYSDEC pursuant to Article 15, Protection of Waters Program, of the ECL. These maps depict the approximate locations of streams mapped by NYSDEC and identify their respective state water quality classification and standard designations based on existing or expected best usage of each water segment. These stream layers are available through the NYSDEC Environmental Resource Mapper (ERM) and the NYS Clearinghouse. In most instances, the mapped stream locations are based on aerial photographs and topographic map interpretation and, therefore, require site-specific field verification. Stream mapping information identified for the Project Study Limits was obtained from online GIS mapping resources made available by the NYSDEC (NYSDEC 2020). Based on reviewed mapping information publically available through the ERM, there are no NYSDEC stream channels mapped within the Project Study Limits.

4.1.3 National Wetlands Inventory Mapping

NWI mapping information for the Project Study Limits was obtained from online GIS mapping resources made available by the USFWS (USFWS 2020). A review of this information was completed which indicated that one (1) mapped NWI wetland is mapped within the Project Study Limits. The NWI wetland is mapped as Cowardin Classification: riverine, intermittent streambed (R4SBC). However, it is understood that this mapping is provided as a reference and is not necessarily indicative of the presence or absence of wetlands in an area.

4.1.4 Soils Mapping

Soil types identified for the Project Study Limits were obtained from online GIS mapping resources made available by the NRCS (USDA-NRCS 2020). A review of this information was completed to evaluate the soil types within the Project Study Limits to determine the possible presence of hydric soils.

The mapped soils at each wetland location, including instances where there may be more than one soil component identified at a given wetland location, are described in *Table 1: Wetland Delineation Summary*. Areas of predominantly hydric soils were identified within the Project Study Limits. The mapped soils present within the Project Study Limits are depicted on *Figure 2: Wetland Delineation Map, Sheets 1 through 2.*

4.2 Wetland Field Investigation Findings

4.2.1 Wetland Area Summary

The onsite delineations verified the presence of wetlands and confirmed the presence of hydric soils depicted on the NRCS soils mapping. Four (4) wetland systems totaling 0.90-acres were identified within the Project Study Limits. This is comprised of 0.82-acres of palustrine emergent (PEM), 0.06-acres of palustrine scrub-shrub (PSS), and 0.02-acres of palustrine forested (PFO) wetlands. No changes to the wetland boundaries were made during the additional site visit in May 2019.

Wetland 001 (PEM) is a drainage way wetland located along the Indian Church Road in the northern portion of the Project Study Limits. Wetland 002 (PEM & PFO) is located at the toe of a berm in between

two access roads. Wetlands 003 and 004 are connected via Stream 001 and a culvert on the southern half of the Project Study Limits. Wetland 003 is a large PEM and PSS wetland complex that borders Stream 001 and is located within a utility ROW. Wetland 004 (PEM) is similar to Wetland 003, as it is located within a utility ROW and is located to the east of an asphalt road. All of the wetlands delineated are considered to be associated with NYSDEC FWW BU-13.

During the additional site visit in May 2019 additional data points, supporting wetland data forms, and photos were collected for Wetland 004. A summary of the wetlands identified within the Project Study Limits is provided in *Table 1: Wetland Delineation Summary*. The location and size of wetlands delineated onsite are shown on *Figure 2: Wetland Delineation Map, Sheets 1 through 2*.

4.2.2 Wetland Vegetation

The criterion for wetland vegetation is a dominance of hydrophytic species. A species is considered hydrophytic per USACE (1987 and 2012) if it is classified either as obligate (OBL), facultative wet (FACW), or facultative (FAC) in *The National Wetland Plant List: 2016 Wetland Ratings* (Lichvar, et.al, 2016). A dominance of hydrophytes requires that more than 50% of the vegetative species in an area are classified as hydrophytic.

Generally, the delineated wetlands consisted of PEM, PSS, and PFO wetlands south of Indian Church Road and Buffalo Road. The PEM wetlands found within the Project Study Limits were dominated by common reed (*Phragmites australis*), and narrow-leaf cattail (*Typha angustifolia*). The PSS portion of Wetland 003 was dominated by silky dogwood (*Cornus ammomum*) and honeysuckle (*Lonicera tatarian*), where the PFO portion of Wetland 002 was primarily comprised of eastern cottonwood (*Populus deltoids*). The wetland determination data forms which provide an expanded detail of the wetlands identified within the Project Study Limits can be found in *Appendix A*. Wetland vegetation community types observed at each wetland are summarized in *Table 1: Wetland Delineation Summary*.

4.2.3 Wetland Hydrology

The Project Study Limits were examined for field indicators of wetland hydrology. According to USACE (1987 and 2012), wetland hydrology consists of permanent or periodic inundation, or soil saturation to the surface during the growing season. If these indicators were present within the sample plots, the hydrology criterion was met.

Generally, wetlands identified within the Project Study Limits receive hydrologic input from groundwater and surface water runoff from adjacent roadways and impervious surfaces as well as nearby waterways. Wetlands in the southern portion of the Project Study Limits drain to Stream 001 which flows west to the Buffalo River. Whereas, Wetland 001 discharges to culverts under Indian Church Road to the north to the Buffalo River. Primary hydrologic indicators that were observed within the wetlands include Surface Water (A1), High Water Table (A2), Soil Saturation (A3), and Drainage Patterns (B10). Hydrologic indicators observed at each delineated wetland were recorded on the wetland determination data forms presented in *Appendix A. Table 1: Wetland Delineation Summary* provides the location (latitude/longitude) and total wetland area delineated within the Project Study Limits.

4.2.4 Wetland Soils

Soil physical characteristics were evaluated during the field delineations by excavating to a depth appropriate to evaluate potential hydric soil indicators below ground surface. Soil color was evaluated using *Munsell Soil Color Charts* (Munsell 2000). Soils that exhibited hydric soil indicators, such as low

chroma colors and/or evidence of reducing conditions met the hydric soil criterion per USACE (1987 and 2012).

Wetland soils observed during the excavations within the northern portion of the Project Study Limits generally consisted of black/grey 10YR 2/2 or 4/2 loamy mucky mineral soil, and clay textured mineral soils exhibiting a grey 10YR 4/2 matrix with brown 10YR 5/4 redox concentrations. These soils possessed characteristics of a Loamy Mucky Mineral (F1), Histosol (A1) and Depleted Matrix (F3).

Whereas, wetland soils observed during excavations within the southern portion of the Project Study Limits consisted or a silt loam and/or clay loam textured mineral black 10YR 3/2 soils with brownish orange 7.5YR 4/6 redox concentrations. These soil samples possessed characteristics of the Redox of a Dark Surface (F6) hydric soil indicator within their profiles. Characteristics observed at each data point are summarized in the wetland determination data forms included in *Appendix A.*

4.3 Watercourse Field Investigation Findings

4.3.1 Stream Summary

One (1) perennial stream (Stream 001) was delineated within the Project Study Limits, totaling 247-linear feet. Stream 001 is an Unnamed Tributary to the Buffalo River. The stream flows to the west beyond the Project Study Limits and discharges into the main branch/stem of the Buffalo River prior to it discharging into Lake Erie. At the time of the delineation, this portion of the stream contained approximately one foot of water, with a wetted perimeter/bed of approximately eight feet. The ordinary high water mark for the stream was observed at approximately eight feet wide, with a top of bank width of 10-feet. The stream channel becomes less defined outside of the Project Study Limits, as it flows into the PEM portion of Wetland 003. Based on the conditions observed the fact that Stream 001 is not current classified by the NYSDEC, the stream is thus considered to be a Class D stream. No changes to the stream boundary were made during the additional site visit in May 2019.

Observed stream characteristics from both site visits are summarized in the stream data forms included in *Appendix B* and representative site photographs, including overview photos of stream channel conditions, are provided in *Appendix D*. A summary of the streams identified within the Project Study Limits is provided in *Table 2: Stream Delineation Summary*. The location of the delineated stream onsite is shown on *Figure 2: Wetland Delineation Map, Sheets 1 through 2*.

4.3.2 Ditches Summary

One (1) intermittent ditch (Ditch 001), totaling 825-linear feet, was delineated within the Project Study Limits. During the time of the delineation field survey, Ditch 001 contained approximately two inches of water with a wetted perimeter of approximately one-foot. The May 2019 site visit confirmed the ditch boundary and the same channel characteristics. Ditch 001 is potentially jurisdictional under the USACE.

A summary of the jurisdictional ditch identified within the Project Study Limits is provided in *Table 3: Ditch Delineation Summary*. The location of ditch delineated onsite is shown on *Figure 2: Wetland Delineation Map, Sheets 1 through 2.*

4.2.4 Upland / Dryland Area Summary

During both of the field investigations of the Project Study Limits, approximately 9.63-acres of upland / dryland or non-jurisdictional areas were identified. The majority of the identified upland / dryland areas are characterized by maintained/ mowed land associated with the substation primarily comprised of perennial rye grass (*Lolium perenne*), and maintained (mowed or pruned) utility ROWs consisting of goldenrod (*Solidago rugosa*) and reed canary grass (*Phalaris arundinacea*). Upland/ dryland soils were observed to have a clay loam texture with a consistent 10YR 3/2 brown matrix throughout the top horizon of the soil profile. No indicators of wetland hydrology were observed within the upland/dryland areas.

During the additional site visit in May 2019 additional data points (Data Points 012 and 013), supporting upland / dryland data forms, and photos were collected for the upland / dryland areas south of Stream 001. The data for Data Point 012 indicates that the area is an upland / dryland area even though it is located within the NYSDEC 100-foot Adjacent Area for NYSDEC FWW BU-13. Additionally, Data Point 013 taken south of the gravel access road indicated that the area is upland / dryland and that NYSDEC FWW BU-13 does not extend into this portion of the site. The wetland determination data forms which provide an expanded detail of the uplands/drylands identified within the Project Study Limits can be found in *Appendix A*. The location and size of upland/dryland areas are depicted on *Figure 2: Wetland Delineation Map, Sheets 1 through 2*.

5.0 SUMMARY AND CONCLUSIONS

Fisher Associates conducted a wetland and watercourse delineation associated with the Project on December 18, 2018 and on May 16, 2019. During the delineations, four (4) palustrine wetland systems totaling 0.90-acres were observed. Additionally, one (1) stream reach (Stream 001), an Unnamed Tributary to Buffalo River, totaling 247-linear feet, was identified within the Project Study Limits. As well as one (1) potentially jurisdictional ditch.

Based on conditions observed, the USACE will likely invoke jurisdiction over the above noted aquatic resources due to their apparent hydrologic connection to other jurisdictional waters. It is also anticipated that the NYSDEC will invoke jurisdiction over all four (4) of the delineated wetlands under Article 24: Freshwater Wetlands Program of the ECL since they are associated with NYSDEC mapped FWW BU-13 and its corresponding 100-foot regulated adjacent area. However, it is not anticipated that NYSDEC will invoke jurisdiction over Stream 001 (Unnamed Tributary to the Buffalo River) under Article 15: Protection of Waters Program of the ECL, as it is considered to be a Class D stream (lowest stream classification).

6.0 REFERENCES

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FIGURES

FISHER ASSOCIATES

NEW YORK STATE ELECTRIC & GAS CORP. (NYSEG)
FIGURE 1: PROJECT VICINITY AND INDEX MAP
NEW GARDENVILLE SUBSTATION
REPLACEMENT PROJECT

- NYSDEC Stream
- Mapsheet
- NYSDEC Wetland
- NWI Wetland
- NHD Watershed Boundary

Project USGS Quad(s):

Buffalo SE

Project Watershed(s):

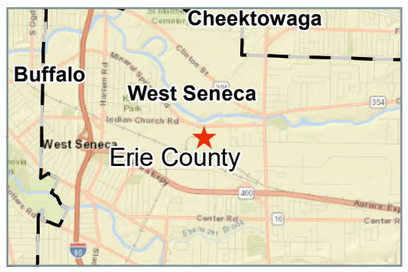
Buffalo - Eighteen Mile (HUC 04120103)

Map Revision Date: 1/24/2020 | Map Author: MFA

0 1,000 2,000 Feet

Project Study Limits:
10.53 Acres

Center of Project Study Limits:
42.853155 N, 78.766556 W
North American Datum 1983



Data Sources:

United States Geological Survey 24k Topo Quad Map - usgs.gov
Aerial Photography: ESRI World Imagery - arcgis.com
NY Roads: NYS GIS Program Office (3/2013) - nysgis.state.ny.us
NY Streams: NYSDEC (11/2013) - nysgis.state.ny.us
NY Wetlands: NYSDEC (2/9/2011) - cugir.mannlib.cornell.edu
Wetlands: National Wetland Inventory (2018) - fws.gov/wetlands/
Soils: NRCS Soil Survey (8/24/2015) - gdg.sc.egov.usda.gov
Watersheds: USGS NHD (3/9/2015) - nhd.usgs.gov
Contours: US Geological Survey (4/14/2008) - http://nationalmap.gov/elevation.html

BUFFALO-EIGHTEENMILE
(HUC 04120103)

1
2

Soil Key

Map Unit Symbol	Map Unit Name	Percent Hydric
Cb	Canadice silt loam, channery till substratum	90
Cc	Canandaigua silt loam	95
CoA	Churchville silt loam, 0 to 3 percent slopes	5
NfA	Niagara silt loam, 0 to 3 percent slopes	5
Te	Teel silt loam	5
Ud	Urban land	5
W	Water	0
Wd	Wayland soils complex, 0 to 3 percent slopes, frequently flooded	90

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

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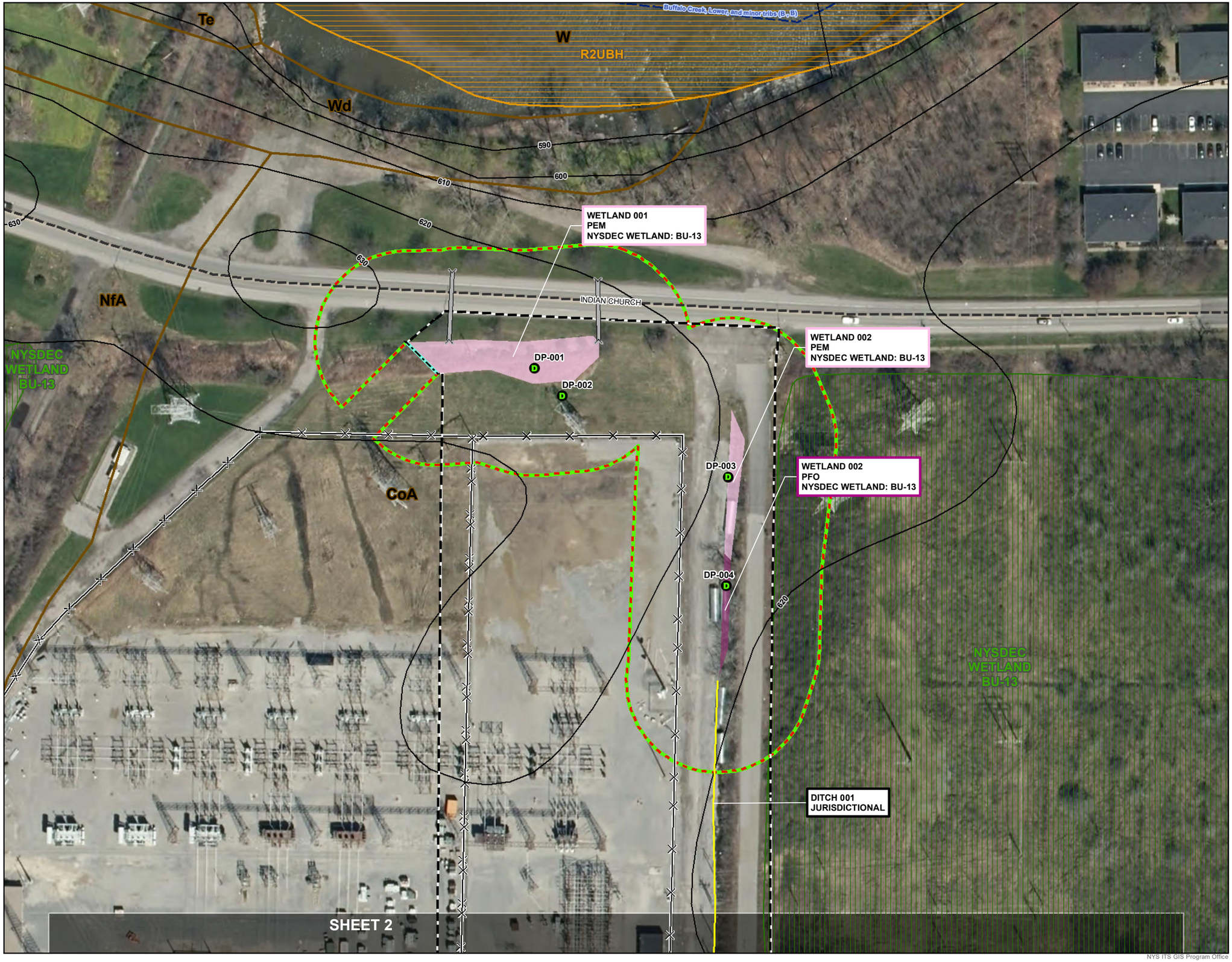
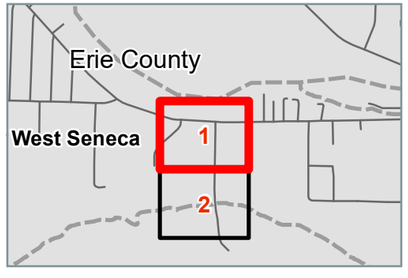
NEW YORK STATE ELECTRIC & GAS CORP. (NYSEG)
NEW GARDENVILLE SUBSTATION
REPLACEMENT PROJECT
FIGURE 2: WETLAND AND WATERCOURSE DELINEATION MAP



- Data Point
- NYSDEC Stream
- Contour (10ft)
- Road
- Delineated Jurisdictional Ditch
- Delineated Continuation Line
- Delineated Culvert
- Delineated Perennial Stream
- Delineated PEM Wetland
- Delineated PFO Wetland
- Delineated PSS Wetland
- Delineated 100' Wetland Adjacent Area
- NYSDEC Wetland
- NWI Wetland
- NRCS Soil Complex Boundary
- Fence
- Project Study Limits
- Matchline

Map Revision Date: 1/24/2020 | Aerial Date: 2017

0 50 100 Feet



NYS ITS GIS Program Office

SHEET 1

FISHER ASSOCIATES

NEW YORK STATE ELECTRIC & GAS CORP. (NYSEG)
NEW GARDENVILLE SUBSTATION
REPLACEMENT PROJECT
FIGURE 2: WETLAND AND WATERCOURSE
DELINEATION MAP

CoA
Cc
Cb
Ud
R4SBC
620
NYSDEC WETLAND BU-13

WETLAND 003
PSS
NYSDEC WETLAND: BU-13

WETLAND 003
PEM
NYSDEC WETLAND: BU-13

WETLAND 004
PEM
NYSDEC WETLAND: BU-13

DITCH 001
JURISDICTIONAL

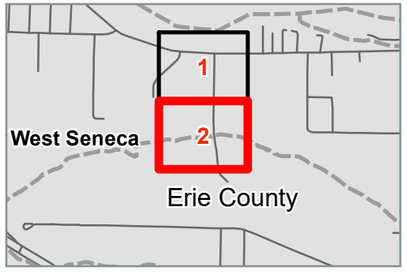
STREAM 001
PERENNIAL

DP-005
DP-006
DP-007
DP-008
DP-009
DP-010
DP-011
DP-012
DP-013

- Data Point
- NYSDEC Stream
- Contour (10ft)
- Road
- Delineated Jurisdictional Ditch
- Delineated Continuation Line
- Delineated Culvert
- Delineated Perennial Stream
- Delineated PEM Wetland
- Delineated PFO Wetland
- Delineated PSS Wetland
- Delineated 100' Wetland Adjacent Area
- NYSDEC Wetland
- NWI Wetland
- NRCS Soil Complex Boundary
- Fence
- Project Study Limits
- Matchline

Map Revision Date: 1/24/2020 | Aerial Date: 2017

0 50 100 Feet



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SHEET 2 of 2

TABLES

Table 1
Wetland Delineation Summary

Wetland ID	Figure 2 Map Sheet #	Associated Data Point #	Associated Photo #	Cowardin Classification	Coordinates		Wetland Area within Study Limits		Soils	
					Latitude	Longitude	Square Feet	Acres	Soil Symbol	Hydric Component Percentage
001	1	DP-001 & DP-002	01 thru 08	PEM	42.853374	-78.767328	7,490	0.17	CoA	5
002	1	DP-002, DP-003 & DP-004	05 thru 16	PEM	42.853000	-78.766430	1,852	0.04	CoA	5
				PFO			916	0.02		
003	2	DP-007, DP-008 & DP-009	29 thru 40	PEM	42.850536	-78.766921	1,241	0.03	CoA	5
							23,512	0.54	Cb	90
				PSS			2,405	0.06		
004	2	DP-010 & DP-011	41 thru 46	PEM	42.850348	-78.766160	1,721	0.04	Cb	90
						Totals:	**39,137**	**0.90**		

Notes:
A field delineation was performed by Fisher Associates on December 18, 2018 and a supplemental delineation was performed on May 16, 2019.
Data Point 002 (upland/ dryland) is for both Wetland 001 and 002 since it is in between both wetlands.

Table 2
Stream Delineation Summary

Stream ID	Figure 2 Map Sheet #	Associated Data Point #	Associated Photo Log #	Stream Name	Tributary of	Flow Regime	Flow Direction	NYSDEC Classification Designation*	NYSDEC Standard Designation	Latitude	Longitude	Stream Width (Top of Bank Average, Ft.)	Stream Reach Length (Within Study Limits, Linear Ft.)
001	006	DP-006	23 thru 28	Unnamed Tributary	Buffalo River (Main Stem)	Perennial	West	D	ND	42.850266	-78.766739	10	247

Notes:

A field delineation was performed by Fisher Associates on December 18, 2018 and a supplemental delineation was performed on May 16, 2019.

NYSDEC Classification Designations:

AA or A: waters used as a source of drinking water
B: waters with best usage for swimming and other contact recreation, but not for drinking water
C: waters supporting fisheries and suitable for non-contact activities
D: other waters, the lowest classification standard

NYSDEC Standard Designations:

ND: no assigned designation
T: may support a trout population
TS: may support trout spawning

Waters with classifications of A, B, and C may, but will not always have an associated Standard Designation relative to trout use.

Streams with a classification of AA, A, B, or with a classification of C with a standard of "T" or "TS" are referred to a "Protected Streams" and are subject to the stream protection provisions of the New York State Protection of Waters regulations.

*Streams that do not appear on the NYSDEC mapping are assigned to Class D, with the exception of any "continuous flowing natural stream" which is assigned the same classification as the water to which it is a tributary. Due to errors in the available electronic mapping, Fisher recommends coordination with NYSDEC to verify stream designations of any streams that may be impacted by the Project.

Table 3
Ditch Delineation Summary

Ditch ID	Figure 2 Map Sheet #	Associated Data Point #	Associated Photo Log #	Jurisdictional or Non-Jurisdictional*	Flow Regime	Latitude	Longitude	Ditch Width (Top of Bank Average, Ft.)	Ditch Reach Length (Within Project Study Limits, Linear Ft.)
001	1 & 2	DP-005	17 thru 22	Jurisdictional	Intermittent	42.851510	-78.766509	4	825

Notes:

A field delineation was performed by Fisher Associates on December 18, 2018 and a supplemental delineation was performed on May 16, 2019.
*Jurisdiction classifications provided represent the professional opinion of Fisher Associates. For approval of these classifications, a request for Jurisdictional Determination should be made to the US Army Corps of Engineers. Classification as a jurisdictional ditch herein is based on the presence of a defined bed and bank, an ordinary high water mark (OHWM), a direct or indirect connection to a traditional navigable water (TNW), and at least one of the following supplementing attributes:

a) Presence of relatively permanent flowing or standing water;
b) A natural stream that has been altered;
c) Excavated in a jurisdictional waters of the US (WOTUS);
d) Connects two or more jurisdictional WOTUS; or
e) Drains natural water bodies (including wetlands) into a tributary system of a TNW.

Ditches are not regulated by the New York State Department of Environmental Conservation unless they are determined to be altered natural tributaries possessing a state-regulated classification and/or standard designation.

APPENDIX A-1
WETLAND DETERMINATION DATA FORMS

(Data Forms From December 18, 2018 Site Visit)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 12/18/18

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-001

Investigator(s): Nicole Ditcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 5%

Subregion (LRR or MLRA): LRR L Lat: 42.853341 Long: -78.767242 Datum: NAD '83

Soil Map Unit Name: CoA-Churchville Silt loam, 0 to 3 percent slopes NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?**	**Yes X No**
Hydric Soil Present?	Yes X No	If yes, optional Wetland Site ID:	Wetland 001
Wetland Hydrology Present?	Yes X No		

Remarks: (Explain alternative procedures here or in a separate report.)

PEM data point for Wetland 001. Wetland is a drainage wetland near road. Natural drainage flows into it and culverts discharge to nearby Buffalo Creek.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X 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)
- N/A 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)
- X 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)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 2"
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: DP-001

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15-ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5-ft r)			
1. Phragmites australis	95	Y	FACW
2. Cornus alba	5	N	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30-ft r)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 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 X No ___

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

SOIL

Sampling Point: DP-001

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	85	10YR 5/4	15	C	M	C	
8-12	10YR 4/2	60	10YR 5/4	25	C	M	C	
			10YR 4/6	15	C	M		

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 12/18/18

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-002

Investigator(s): Nicole Datcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 1-2%

Subregion (LRR or MLRA): LRR L Lat: 42.853259 Long: -78.767128 Datum: NAD '83

Soil Map Unit Name: CsA- Churchville silt loam, 0 to 3 percent slopes NWI classification: Not mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

Upland/dryland data point for wetland 001. Located in maintained yard surrounding NYSEG New Gardenville substation.

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)
- N/A 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:

No wetland hydrology observed.

VEGETATION – Use scientific names of plants.

Sampling Point: DP-002

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15-ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 15-ft r)			
1. Lolium perenne	60	Y	FACU
2. Plantago lanceolata	20	Y	FACU
3. Trifolium repens	15	N	FACU
4. Cornus alba	5	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30-ft r)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 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: DP-002

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					L	
10-20	10YR 3/2	98	10YR 6/8	2	C	M	L	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

Heavily compacted soils. No wetland/hydric soils found.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 12/18/18

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-003

Investigator(s): Nicole Datcher Section, Township, Range: NA

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 10%

Subregion (LRR or MLRA): LRR L Lat: 42.853015 Long: -78.766450 Datum: NAD '83

Soil Map Unit Name: CoA-Churchville Silt loam, 0 to 3 percent slopes NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

PEM data point for wetland 002 Drainage wetland between 2 access roads. Not a ditch b/c no clear defined bed + bank.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (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)
- N/A 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)
- X 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)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 6"
Water Table Present?	Yes X	No ___	Depth (inches): 0"
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0"

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Located in drainageway between 2 access roads.

VEGETATION – Use scientific names of plants.

Sampling Point: DP-003

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15-ft r)			
1. Cornus alba	10	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Herb Stratum (Plot size: 5-ft r)			
1. Typha angustifolia	85	Y	OBL
2. Cornus alba	15	N	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30-ft r)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 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 X No ___

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

SOIL

Sampling Point: DP-003

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/2	100%					Muck	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- X Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes X No ___

Remarks:

Loamy muck down to 12 inches deep, due to constant standing water.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 12/18/18

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-004

Investigator(s): Nicole Butcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 15?

Subregion (LRR or MLRA): LRR L Lat: 42.852689 Long: -78.766457 Datum: NAD '83

Soil Map Unit Name: CoA - Churchville silt loam, 0 to 3 percent slopes NWI classification: Not mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland Site ID: Wetland 002

Remarks: (Explain alternative procedures here or in a separate report.)

PFO data point for Wetland 002. Drainageway wetland in between 2 access roads

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (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)
- N/A 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)
- X 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)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 4"
Water Table Present?	Yes X	No ____	Depth (inches): 0"
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0"

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: DP-004

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus deltoides	20	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft r)			
1. Typha angustifolia	60	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft r)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 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 X No ___

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

SOIL

Sampling Point: DP-004

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/2	100					Muck	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- X Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): -

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 12/18/18

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-007

Investigator(s): Nicole Datcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 1-2?

Subregion (LRR or MLRA): LRR L Lat: 42.8503608 Long: -78.7606924 Datum: NAD '83

Soil Map Unit Name: Cb-Canadice silt loam, Channery till substratum NWI classification: R4SBC

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?**	Yes _____ No X
Hydric Soil Present?	Yes _____ No X		
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

Upland data point for Wetland 003. Data point located between Wetland 003 and Stream 001 in a mapped NYSDEC area. Upland area is disturbed due to installation of utility structures and associated objects.

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)
- N/A 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:

No wetland hydrology observed. Area is slightly higher in elevation than surrounding wetland.

VEGETATION – Use scientific names of plants.

Sampling Point: DP-007

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15-ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5-ft r)			
1. Solidago rugosa	30	Y	FAC
2. Phalaris arundinacea	25	Y	FACW
3. Typha angustifolia	15	N	OBL
4. Cirsium vulgare	10	N	FACU
5. Ambrosia artemisiifolia	10	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: 30-ft r)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 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 X No ___

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

SOIL

Sampling Point: DP-007

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					C	
6-12	10YR 5/3	80	2.5Y 6/8	20	C	M	C	
12-20	10YR 5/3	55	7.5YR 5/8	40	C	M	C	
			2.5Y 6/8	5	C	M		

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soils observed. Soils are compacted and have been disturbed due to installation of nearby utility structures.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 12/18/18

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-005

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 10%

Subregion (LRR or MLRA): LRR L Lat: 42.850505 Long: -78.706773 Datum: NAD '83

Soil Map Unit Name: C6-Canadice silt loam, Channery till substratum NWI classification: Not mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID: Wetland 003

Remarks: (Explain alternative procedures here or in a separate report.)

PEM data point for Wetland 003. Wetland is w/in a mapped NYSDEC Fwtw.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (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)
- X Oxidized Rhizospheres on Living Roots (C3)
- N/A 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)
- X 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)
- X 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 X No ____ Depth (inches): 3"

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0"

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: DP-008

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15-ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5-ft r)			
1. Typha angustifolia	80	Y	OBL
2. Phragmites australis	10	N	FACW
3. Cornus alba	10	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30-ft r)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 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 X No ___

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

SOIL

Sampling Point: DP-008

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-13	10YR 2/2	95%	5YR 3/4	5%	C	M/PL	SiL	mixed w/ organics
13-15	10YR 4/1	100%					SL	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 12/18/18

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-009

Investigator(s): Nicole Dutzler Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 10%

Subregion (LRR or MLRA): LRR L Lat: 42.850613 Long: -78.766729 Datum: NAD'83

Soil Map Unit Name: Cb- Canadia Silt loam, Channery till Substratum NWI classification: Not mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

PSS data point for Wetland 003. Only a small portion is a PSS. Majority of wetland is a PEM. Wetland is a mapped NYSDEC wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X 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)
- N/A 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)
- X 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 X No ____

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

Remarks:

Ground covered in water stained leaves and all shrub stems have water marks on them.

VEGETATION – Use scientific names of plants. Sampling Point: DP-009

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'R)			
1. Cornus amomum	50	Y	FACW
2. Lonicera tatarica	30	Y	FACU
3.			
4.			
5.			
6.			
7.			
	80 = Total Cover		
Herb Stratum (Plot size: 5'R)			
1. Solidago Mexoa	15	Y	FAC
2. Solidago canadensis	15	Y	FACU
3. Typha angustifolia	10	Y	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40 = Total Cover		
Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 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 X No ___

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

SOIL

Sampling Point: DP-009

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR 3/2	98	10YR 6/8	2	C	M	CL	
11-13	10YR 3/2	90	10YR 6/8	10	C	M	CL	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): -

Hydric Soil Present? Yes X No ___

Remarks:

APPENDIX A-2
WETLAND DETERMINATION DATA FORMS

(Data Forms From May 16, 2019 Site Visit)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-001

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 3-5?

Subregion (LRR or MLRA): LRR L Lat: 42.853341 Long: -78.767242 Datum: NAD '83

Soil Map Unit Name: CoA - Churchville silt loam, 0 to 3 percent slopes NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?**	**Yes X No**
Hydric Soil Present?	Yes X No	If yes, optional Wetland Site ID:	Wetland 001
Wetland Hydrology Present?	Yes X No		

Remarks: (Explain alternative procedures here or in a separate report.)

PEM data point for Wetland 001. Wetland located in a non-mosc drainage along road and drains via culvert to Buffalo River.

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)
- N/A 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)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X 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: DP-001

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5'R)			
1. Phragmites australis	100	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X 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 X No ___

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

SOIL

Sampling Point: DP-001

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	85	10YR 5/4	15	C	M	C	
8-12	10YR 4/2	60	10YR 5/4	25	C	M	C	
			10YR 6/6	15	C	M		

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-002

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 1-3?

Subregion (LRR or MLRA): LRR L Lat: 42.853259 Long: -78.767128 Datum: NAD '83

Soil Map Unit Name: CoA - Churchville silt loam, 0 to 3 percent slopes NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

Upland data point for Wetland 001. Located near a slight wet spot due to erection of structure. Located in mowed yard around substation.

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)
- N/A 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:

No wetland hydrology observed.

VEGETATION – Use scientific names of plants.

Sampling Point: DP-002

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	Ø = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	Ø = Total Cover		
Herb Stratum (Plot size: 5'R)			
1. Taraxacum officinale	30	Y	FACU
2. Lolium perenne	35	Y	FACU
3. Lotus Corniculatus	10	N	FACU
4. Cirsium arvense	5	N	FACU
5. Plantago lanceolata	5	N	FACU
6. Trifolium repens	15	N	FACU
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
	Ø = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 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.)

Vegetation is disturbed because area is mowed, for area around Substation and underneath transmission line

SOIL

Sampling Point: DP-002

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/2	100%					L	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): –

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-003

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 3-5%

Subregion (LRR or MLRA): LRR L Lat: 42.853015 Long: -78.7606450 Datum: NAD'83

Soil Map Unit Name: CoA-Churchville silt loam, 0 to 3 percent slopes NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland Site ID: Wetland 002

Remarks: (Explain alternative procedures here or in a separate report.)

PEM data point for PEM/PFO Wetland 002. Located in an uncleared/maintained drainage ditch to Buffalo Creek.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (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)
- N/A 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)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ____ Depth (inches): 4"

Water Table Present? Yes X No ____ Depth (inches): 0"

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0"

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Located in a drainageway between 2 access roads.

VEGETATION – Use scientific names of plants.

Sampling Point: DP-003

Tree Stratum (Plot size: 5'x5')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 5'x5')			
1. Cornus alba	30	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	30 = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Typha angustifolia	70	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: 5'x5')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X 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 X No ____

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

Vegetation plot sizes adjusted to fit w/in confines of wetland boundary.

SOIL

Sampling Point: DP-003

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/2	100					Muck	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- X Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

May also meet a Histosol (A1) or Black Histic (A3) indicator but could not get more than 12-inches out due to deep standing water and high water table.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-004

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 3-5?

Subregion (LRR or MLRA): LRR L Lat: 42.852689 Long: -78.746457 Datum: NAD '83

Soil Map Unit Name: CoA-Churchville silt loam, 0 to 3 percent slopes NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID: Wetland 002

Remarks: (Explain alternative procedures here or in a separate report.)

PFO data point for PEM/PFO wetland 002. Located in a jurisdictional drainageway that is not maintained between 2 access roads that flows to Buffalo River.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- ___ 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)
- N/A 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)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ____ Depth (inches): 2"

Water Table Present? Yes X No ____ Depth (inches): 0"

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0"

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: DP-004

Tree Stratum (Plot size: 5'x5')	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus deltoides	90	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	90 = Total Cover		

Sapling/Shrub Stratum (Plot size: 5'x5')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5'x5')			
1. Typha angustifolia	30	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30 = Total Cover		

Woody Vine Stratum (Plot size: 5'x5')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 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 X No ___

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

Vegetation plot size adjusted to fit w/in wetland boundary.

SOIL

Sampling Point: DP-004

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/2	100%					Muck	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- X Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

May also meet a Histosol (A1) or black histic (A3) indicator, but unable to get more than 12-inches down due to standing water and high water table.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-007

Investigator(s): Nicole J Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): Convex Slope (%): 3-5?

Subregion (LRR or MLRA): LRR L Lat: 42.850368 Long: -78.7606924 Datum: NAD'83

Soil Map Unit Name: Cb - Canadice silt loam, Channery till substratum NWI classification: R4SBC

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

Upland data point for wetland 003. Located in built up area for structures + utilities for transmission line.

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)
- N/A 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:

No wetland hydrology observed.

VEGETATION – Use scientific names of plants.

Sampling Point: DP-007

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5'R)			
1. Equistum palustre	30	Y	FACW
2. Cirsium arvense	10	N	FACU
3. Taraxacum officinale	10	N	FACU
4. Lolium perene	25	Y	FACU
5. Berberis thunbergii	5	N	FACU
6. Typha angustifolia	10	N	OBL
7.			
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50? (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 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.)

Vegetation is disturbed because it is located in ROW of transmission line and structures.

SOIL

Sampling Point: DP-007

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					C	
6-12	10YR 5/3	80	2.5Y 6/8	20	C	M	C	
12-20	10YR 5/3	55	7.5YR 5/6	40	C	M	C	
			2.5Y 6/8	5	C	M		

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): -

Hydric Soil Present? Yes ____ No X

Remarks:

Soils disturbed due to location in transmission line and structure Row and area built up.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-008

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1-3?

Subregion (LRR or MLRA): LRR L Lat: 42.850505 Long: -78.766773 Datum: NAD'83

Soil Map Unit Name: Cb - Canadice silt loam, Channery till substratum NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID: Wetland 003

Remarks: (Explain alternative procedures here or in a separate report.)

PEM data point for PEM/PSS wetland 003. Wetland is w/in a mapped NYSDEC FWW.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (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)
- N/A 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)
- X 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 X	No ___	Depth (inches): 0"
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0"

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: DP-008

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5'R)			
1. Typha angustifolia	90	Y	OBL
2. Cornus alba	10	N	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [X] 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 [X] No [ ]

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

SOIL

Sampling Point: DP-008

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-13	10YR 2/2	100					Mucl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- [X] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Mucky Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Dark Surface (S7) **(LRR R, MLRA 149B)**
- [ ] Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- [ ] Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- [X] Loamy Mucky Mineral (F1) **(LRR K, L)**
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- [ ] Coast Prairie Redox (A16) **(LRR K, L, R)**
- [ ] 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- [ ] Dark Surface (S7) **(LRR K, L, M)**
- [ ] 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 (TF12)
- [ ] Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes [X] No [ ]

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-009

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5%

Subregion (LRR or MLRA): LRR L Lat: 42.850613 Long: -78.706729 Datum: NAD'83

Soil Map Unit Name: Ch-Canadice silt loam, Channery Hill Substratum NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?**	**Yes X No**
Hydric Soil Present?	Yes X No	If yes, optional Wetland Site ID:	Wetland 003
Wetland Hydrology Present?	Yes X No		

Remarks: (Explain alternative procedures here or in a separate report.)

PSS data point for PEM/PSS Wetland 003.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X 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)
- N/A 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)
- X 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 X	No ____	Depth (inches): 0''

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Shrub stems have water marks. Soil is saturated, but no water table was observed.

VEGETATION – Use scientific names of plants. Sampling Point: DP-ava

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'R)			
1. Cornus amomum	60	Y	FACW
2. Cornus alba	40	Y	FACW
3.			
4.			
5.			
6.			
7.			
	100 = Total Cover		
Herb Stratum (Plot size: 5'R)			
1. Cornus alba	5	N	FACW
2. Impatiens Capensis	20	Y	FACW
3. Glyceria melicaria	25	Y	OBL
4. Carex flava	15	N	OBL
5. Equistum arvense	10	N	FAC
6. Rhamnus Cathartica	5	N	FAC
7.			
8.			
9.			
10.			
11.			
12.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: 5'R)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 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 X No ___

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

SOIL

Sampling Point: DP-009

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	98	7.5YR 4/6	2	C	M	CL	
10-16	10YR 3/2	90	7.5YR 4/6	10	C	M	CL	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-016

Investigator(s): Nicole Duthie Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1-5?

Subregion (LRR or MLRA): LRR L Lat: 42.850393 Long: -78.766146 Datum: NAD '83

Soil Map Unit Name: Cb-Canadice silt loam, channery till substratum NWI classification: R4SBC

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID: Wetland 004

Remarks: (Explain alternative procedures here or in a separate report.)

PEM data point for Wetland 004. Wetland continues beyond project study limits to the east becoming a monoculture phragmites stand. Wetland drains to Stream 001. Located w/in a NYSDEC mapped wetland (BU-13).

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (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)
- X Oxidized Rhizospheres on Living Roots (C3)
- N/A 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)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 2"
Water Table Present?	Yes X	No ____	Depth (inches): 0"
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0"

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: DP-016

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'R)			
1. Salix interior	10	Y	FACW
2. Salix discolor	20	Y	FACW
3. Cornus alba	5	N	FACW
4.			
5.			
6.			
7.			
	35 = Total Cover		
Herb Stratum (Plot size: 5'R)			
1. Typha latifolia	2	N	OBL
2. Phalaris arundinacea	5	N	FACW
3. Salix discolor	15	Y	FACW
4. Carex flava	10	Y	OBL
5. Salix interior	5	N	FACW
6. Juncus effusus	20	Y	OBL
7.			
8.			
9.			
10.			
11.			
12.			
	57 = Total Cover		
Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [X] 1 - Rapid Test for Hydrophytic Vegetation
- [X] 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 X No ____

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

SOIL

Sampling Point: DP-010

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	98	7.5YR 3/4	2	C	PL	SiL	
4-12	10YR 2/1	85	7.5YR 3/4	15	C	PL	SiL	mixed w/ gravel

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-011

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1-3?

Subregion (LRR or MLRA): LRR L Lat: 42.850459 Long: -78.766213 Datum: NAD'83

Soil Map Unit Name: Cb-Canadice silt loam, Channery till substation NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Upland data point for EM Wetland 004. Located in existing maintained ROW for transmission line.

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)
- N/A 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:

No wetland hydrology observed.

VEGETATION – Use scientific names of plants.

Sampling Point: DP-011

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5'R)			
1. Euthamia graminifolia	30	Y	FAC
2. Ranunculus acris	35	Y	FAC
3. Lolium perenne	15	N	FACU
4. Lonicera tatarica	10	N	FACU
5. Dipsacus laciniatus	10	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 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 X No ___

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

Vegetation is disturbed because it is located within an active ROW. Vegetation meets dominance test, however dominant vegetation is all facultative.

SOIL

Sampling Point: DP-011

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100?					SiL	Mixed w/ thick gravel
4+								Gravel Refusal

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes ____ No X

Remarks:

Soils are disturbed due to location near a Row w/ a built up area around a transmission structure. Multiple soil pits attempted, but unable to get below 4-inches due to thick gravel mixed in the soil profile. Soils presumed to be non-hydric since no wetland hydrology or hydrophytic vegetation was observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Goodenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-012

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1-3?

Subregion (LRR or MLRA): LRR L Lat: 42.850459 Long: -78.706213 Datum: NAD '83

Soil Map Unit Name: CoA-Churchville Silt loam, 0 to 3 percent slopes NWI classification: Not Mapped.

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Upland data point located on south side of Stream A1. Area appears to once have been cleared but it has been allowed to re-generate, and go back to natural state. Located w/in 100'-adjacent area of NYSDEC BU-13.

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)
- N/A 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:

No wetland hydrology.

VEGETATION – Use scientific names of plants.

Sampling Point: DP-012

Tree Stratum (Plot size: 30' R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' R)			
1. Cornus amomum	45	Y	FACW
2. Rubus idaeus	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
	60 = Total Cover		
Herb Stratum (Plot size: 5' R)			
1. Arctium minus	30	Y	FACU
2. Cornus amomum	20	Y	FACW
3. Rhamnus Cathartica	5	N	FAC
4. Lolium perenne	10	N	FACU
5. Impatiens Capensis	15	N	FACW
6. Cornus racemosa	5	N	FAC
7. Ranunculus acris	5	N	FAC
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: 30' R)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 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: DP-012

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	100					SiL	
9-20	10YR 4/4	70	10YR 3/2	20	D	M	SiL	
			10YR 5/6	10	C	M		

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): —

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soils observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: New Gardenville Substation City/County: Erie County Sampling Date: 5/16/19

Applicant/Owner: New York State Electric and Gas Corp. (NYSEG) State: NY Sampling Point: DP-013

Investigator(s): Nicole Dutcher Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1-3?

Subregion (LRR or MLRA): LRR L Lat: 42.849819 Long: -78.766958 Datum: NAD'83

Soil Map Unit Name: CoA-Churchville Silt loam, 0 to 3 percent slopes NWI classification: Not Mapped

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

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

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Upland data point, located south of a gravel access road. Area has been used for staging and dumping.

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)
- N/A 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:

No wetland hydrology observed.

VEGETATION – Use scientific names of plants.

Sampling Point: DP-013

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus deltoides	15	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	15 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'R)			
1. Lonicera tatarica	40	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	40 = Total Cover		
Herb Stratum (Plot size: 5'R)			
1. Ranunculus acris	5	N	FAC
2. Lonicera tatarica	15	N	FACU
3. Lolium perenne	35	Y	FACU
4. Rhamnus cathartica	20	Y	FAC
5. Lotus corniculatus	10	N	FACU
6. Ambrosia artemisiifolia	15	N	FACU
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 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: DP-013

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100%					SiL	mixed w/ gravel

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): –

Hydric Soil Present? Yes ____ No X

Remarks:

Soils are disturbed due to area being used for staging and dump piles off of an access road. Multiple soil pits attempted but unable to get below 6-inches due to thick gravel in the soil profile. Presumed not hydric due to no wetland hydrology or vegetation.

APPENDIX B-1
STREAM DATA FORMS

(Data Forms From December 18, 2018 Site Visit)

FISHER ASSOCIATES

Stream Data Form

Stream Field ID: Stream 001
Data Point ID: DP-006 Date: 12/18/18
Project Name: New Gardenville Substation Project
Evaluator(s): Nicole Dutcher
County: Erie County State: NY
Stream Name: Buffalo River
State Classified: Yes [X] No [ ] Not Applicable [ ]
If Yes, Classification: Class C
Lat: 42.850293 Long: -78.706927

Hydrologic Characteristics

Flow Regime: Perennial [X] Intermittent [ ] Ephemeral [ ]
Surface Water: Present [X] Absent [ ]
Perceptible Flow: Present [X] Absent [ ]
Water Depth at Thalweg: 1'
Wetted Perimeter Width: 8'
Flow/Gradient Direction: West

Geomorphologic Characteristics

Primary Substrate Class: Silt

	Width (ft.)	
	at DP	Max
OHWM	8'	8'
Top of Bank	10'	15'

Bank Slope [Reported as % or Horizontal:Vertical(H:V)]:
Left: 1:2
Right: 1:1

Bank Stability Summary

Right: Mostly stable - highly vegetated w/ little evidence of bank erosion

Left: Somewhat stable - steep banks in some spots w/ bank slides

FISHER ASSOCIATES

Stream Data Form

Data Point ID: DP-006

Habitat Characteristics

Aquatic Vegetation Present: Yes [ ] No [X]
If Yes, Describe:

Aquatic Organisms Observed: Yes [ ] No [X]
If Yes, Describe:

Terrestrial Organisms Observed: Yes [ ] No [X]
If Yes, Describe:

Riparian Characteristics

Riparian Vegetation Description (0' to 150' from TOB):

Left: 0-150' - Upland disturbed areas w/ gravel access road

Right: 0-150' - mix of upland near utility structures w/ PEM wetland

Associated Wetland Present: Yes [X] No [ ]
If Yes, ID: Wetland 003 + 004

Associated Artificial Drain Present: Yes [X] No [ ]
If Yes, ID: AD-004

Jurisdictional Connectivity/Supplemental Comments:

Wetland 003 and Wetland 004 drain to Stream

DEC Stream #: 837-135

APPENDIX B-2
STREAM DATA FORMS

(Data Forms From May 16, 2019 Site Visit)

FISHER ASSOCIATES

Stream Data Form

Stream Field ID: Stream 001
Data Point ID: DP-006 Date: 5/16/19 Project #: 185057
Project Name: New Gardenville Substation
Evaluator(s): Nicole Dutcher
County: Erie County State: New York
Stream Name: Buffalo River (Branch)
State Classified: Yes [X] No [ ] Not Applicable [ ]
If Yes, Classification: Class C
Lat: 42.850293 Long: -78.7606927

Hydrologic Characteristics

Flow Regime: Perennial [X] Intermittent [ ] Ephemeral [ ]
Surface Water: Present [X] Absent [ ]
Perceptible Flow: Present [ ] Absent [X]
Water Depth at Thalweg: 10"
Wetted Perimeter Width: 6'
Flow/Gradient Direction: West

Geomorphologic Characteristics

Primary Substrate Class: Silt

	Width (ft.)		
	at DP	Min	Max
OHWM	6'	4'	8'
Top of Bank	8'	6'	10'

Bank Slope [Reported as % or Horizontal:Vertical(H:V)]:
Left: 1:3
Right: 1:2

Bank Stability Summary

Left: Mostly Stable w/ low flow and banks stabilized by vegetation.

Right: Same as above ↑

FISHER ASSOCIATES

Stream Data Form

Data Point ID: DP-006

Habitat Characteristics

Aquatic Vegetation Present: Yes [X] No [ ]
If Yes, Describe: Algae

Aquatic Organisms Observed: Yes [X] No [ ]
If Yes, Describe: Frogs

Terrestrial Organisms Observed: Yes [ ] No [X]
If Yes, Describe:

Riparian Characteristics

Riparian Vegetation Description (0' to 150' from TOB):

Left: 0-20' - grass
20'-40' - Gravel access road
40'+ - Disturbed laydown + ROW uplands areas

Right: 0-30' - Uplands ROW for transmission line
30'+ - Wetland RSM

Associated Wetland Present: Yes [X] No [ ]
If Yes, ID: Wetland 003 Wetland 004

Associated Artificial Drain Present: Yes [X] No [ ]
If Yes, ID: AD-004

Jurisdictional Connectivity/Supplemental Comments:

Branch of Buffalo River receives discharge from Wetlands 003 + 004

APPENDIX C-1
DITCH DATA FORMS

(Data Forms From December 18, 2018 Site Visit)

FISHER ASSOCIATES

Ditch Data Form

Ditch Field ID: **Ditch** 001
Data Point ID: DP-005 Date: 12/18/18
Project Name: New Gardenville Substation
Evaluator(s): Nicole Dutcher
County: Erie County State: NY
Jurisdictional: Yes [X] No [ ]
Lat: 42.850755 Long: -78.7606995

Jurisdictional Determination Criteria		
Yes	**No**	**Jurisdictional Attribute**
X		1) Defined Bed and Bank/Channel Present
X		2) Ordinary High Water Mark Present
X		3) Direct or Indirect Connection to a Traditional Navigable Water
		4) Supplementing Attributes (Must Satisfy At Least 1 of 5 Below)
X		a) Presence of Relatively Permanent Flowing or Standing Water
	X	b) A Natural Stream That Has Been Altered
	X	c) Excavated in a Jurisdictional WOTUS
X		d) Connects Two or More Jurisdictional WOTUS
X		e) Drains Natural Water Bodies (including wetlands) into the tributary system of a TNW

Hydrologic Characteristics

Surface Water: Present [X] Absent [ ]
Perceptible Flow: Present [X] Absent [ ]
Water Depth at Thalweg: 2"
Wetted Perimeter Width: 1'
Flow/Gradient Direction: North

Geomorphologic Characteristics

Primary Substrate Class: Silt

	Width (ft.)	
	at DP	Max
OHWM	1'	1'
Top of Bank	2'	4'

Bank Slope [Reported as % or Horizontal:Vertical(H:V)]:
Left: 1:1
Right: 1:1

FISHER ASSOCIATES

Ditch Data Form

Data Point ID: DP- 005

Bank Stability Summary

Left Bank: Stable- no erosion, highly controlled and maintained ditch

Right Bank: Same as above ↑

Habitat Characteristics

Aquatic Vegetation Present: Yes [ ] No [X]
If Yes, Describe:

Aquatic Organisms Observed: Yes [ ] No [X]
If Yes, Describe:

Terrestrial Organisms Observed: Yes [ ] No [X]
If Yes, Describe:

Riparian Characteristics

Riparian Vegetation Description (0' to 150' from TOB):

Left: 0-150' - PEM wetland 003

Right: 0-150' - NYSEG Utility Substation (gravel bottom)

Associated Wetland Present: Yes [X] No [ ]
If Yes, ID: WL-003

Associated Artificial Drain(s) Present: Yes [X] No [ ]
If Yes, ID: AD-003

Supplemental Notes & Comments:

Flows North into Wetland-002 through steel culvert (AD-003)
WL-003 drains into ditch

Up E
dwn W
RTL S

Intermittent

APPENDIX C-2
DITCH DATA FORMS

(Data Forms From May 16, 2019 Site Visit)

FISHER ASSOCIATES

Ditch Data Form

Ditch Field ID: Ditch 001
Data Point ID: DP-005 Date: 5/16/19
Project Name: New Gardenville Substation Project #: 185057
Evaluator(s): Nicole Dutcher
County: Erie County State: New York
Jurisdictional: Yes [X] No [ ]
Lat: 42.850755 Long: -78.766995

Jurisdictional Determination Criteria		
Yes	**No**	**Jurisdictional Attribute**
X		1) Meets the USACE Definition of a Tributary "a water that contributes flow, either directly or through another water (including an impoundment) to a water that is characterized by the presence of the physical indicators of a bed and bank, and an ordinary high water mark"
		2) Supplementing Attributes (Must Satisfy At Least 1 of 5 Below)
	X	a) Has Perennial Flow;
	X	b) Has Intermittent Flow and is a Relocated Tributary;
	X	c) Has Intermittent Flow and is Excavated in a Tributary;
X		d) Has Intermittent Flow and Drains Natural Water Bodies (including wetlands);
	X	e) Has Ephemeral Flow and is Excavated in or Relocated within a Tributary.

Hydrologic Characteristics

Flow Regime: Perennial [ ] Intermittent [X] Ephemeral [ ]
Surface Water: Present [X] Absent [ ]
Perceptible Flow: Present [X] Absent [ ]
Water Depth at Thalweg: 2 inches
Wetted Perimeter Width: 1 feet
Flow/Gradient Direction: West

Geomorphologic Characteristics

Primary Substrate Class: Silt

	Width (feet)		
	at DP	Min	Max
OHWM	1	1	1
Top of Bank	2	1.5	3

Bank Slope [Reported as % or Horizontal:Vertical(H:V)]:
Left: 1:1
Right: 1:1

FISHER ASSOCIATES

Ditch Data Form

Data Point ID: DP- 005

Bank Stability Summary

Left Bank: Stable - Low flow through Channel w/ shallow gradient banks. Gravel holds bank channels.

Right Bank: Same as above ↑

Habitat Characteristics

Aquatic Vegetation Present: Yes [X] No [ ]
If Yes, Describe: NL Cattail

Aquatic Organisms Observed: Yes [ ] No [X]
If Yes, Describe:

Terrestrial Organisms Observed: Yes [ ] No [X]
If Yes, Describe:

Riparian Characteristics

Riparian Vegetation Description (0' to 150' from TOB):

Left: 0-150' - Wetland 003 (PEM - phragmites + NL cattail)

Right: 0-150' - gravel substation

Associated Wetland Present: Yes [X] No [ ]
If Yes, ID: Wetlands 002 + 003

Associated Artificial Drain(s) Present: Yes [X] No [ ]
If Yes, ID: AD-003

Supplemental Notes & Comments:

Ditch generally flows around substation alternately to the west. Wetland 003 and 002 discharge N stream.

APPENDIX D
REPRESENTATIVE SITE PHOTOGRAPHS

(Combined For December 2018 and May 2019 Site Visits)

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 01

Facing North

Description:

Data Point 001
PEM Data Point for
PEM Wetland 001.

When:
December 18, 2018

Photo No. 02

Facing North

Description:

Data Point 001
Overview of PEM
Wetland 001.

When:
May 16, 2019

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	**Site Location:**	**Project No.**
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 03

Facing East

Description:

Data Point 001
Overview of PEM
Wetland 001.

When:
December 18, 2018

Photo No. 04

Facing East

Description:

Data Point 001
Overview of PEM
Wetland 001.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 05 Facing East **Description:** Data Point 002 Upland/ dryland Data Point adjacent to Wetland 001. **When:** December 18, 2018	

Photo No. 06 Facing East **Description:** Data Point 002 Upland/ dryland Data Point adjacent to Wetland 001. **When:** May 16, 2019	

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 07

Facing East

Description:

Data Point 002
Upland/ dryland Data Point adjacent to Wetland 001.

When:
December 18, 2018

Photo No. 08

Facing East

Description:

Data Point 002
Upland/ dryland Data Point adjacent to Wetland 001.

When:
May 16, 2019

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	**Site Location:**	**Project No.**
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 0**9**

Facing East

Description:

Data Point 003
PEM Data Point for
Wetland 002.

When:
December 18, 2018

Photo No. **10**

Facing East

Description:

Data Point 003
PEM Data Point for
Wetland 002.

When:
May 16, 2019

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 11

Facing North

Description:

Data Point 003
Overview of PEM
Wetland 002.

When:
December 18, 2018

Photo No. 12

Facing North

Description:

Data Point 003
Overview of PEM
Wetland 002.

When:
May 16, 2019

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	**Site Location:**	**Project No.**
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 13	
Facing North	
Description: Data Point 004 PFO Data Point for Wetland 002.	
When: December 18, 2018	

Photo No. 14	
Facing North	
Description: Data Point 004 PFO Data Point for Wetland 002.	
When: May 16, 2019	

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	**Site Location:**	**Project No.**
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 15

Facing South

Description:

Data Point 004
Overview of PFO
Wetland 002.

When:
December 18, 2018

Photo No. 16

Facing South

Description:

Data Point 004
Overview of PFO
Wetland 002.

When:
May 16, 2019

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 17

Facing East / Upstream

Description:

Data Point 005
Ditch Data Point for Intermittent Ditch 001.

When:
December 18, 2018

Photo No. 18

Facing East / Upstream

Description:

Data Point 005
Ditch Data Point for Intermittent Ditch 001.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 19 Facing West / Downstream **Description:** Data Point 005 Ditch Data Point for Intermittent Ditch 001. **When:** December 18, 2018	

Photo No. 20 Facing West / Downstream **Description:** Data Point 005 Ditch Data Point for Intermittent Ditch 001. **When:** May 16, 2019	

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 21

Facing South /
Right Bank to Left Bank

Description:

Data Point 005
Ditch Data Point for
Intermittent Ditch 001.

When:
December 18, 2018

Photo No. 22

Facing South /
Right Bank to Left Bank

Description:

Data Point 005
Ditch Data Point for
Intermittent Ditch 001.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 23

Facing East / Upstream

Description:

Data Point 006
Stream Data Point for Stream 001.

When:
December 18, 2018

Photo No. 24

Facing East / Upstream

Description:

Data Point 006
Stream Data Point for Stream 001.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 25

Facing West / Downstream

Description:

Data Point 006
Stream Data Point for Stream 001.

When:
December 18, 2018

Photo No. 26

Facing West / Downstream

Description:

Data Point 006
Stream Data Point for Stream 001.

When:
May 16, 2019

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 27

Facing South /
Right Bank to Left Bank

Description:

Data Point 006
Stream Data Point for
Stream 001.

When:
December 18, 2018

Photo No. 28

Facing South /
Right Bank to Left Bank

Description:

Data Point 006
Stream Data Point for
Stream 001.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 29 Facing West **Description:** Data Point 007 Upland/ dryland Data Point adjacent to Wetland 003. **When:** December 18, 2018	

Photo No. 30 Facing West **Description:** Data Point 007 Upland/ dryland Data Point adjacent to Wetland 003. **When:** May 16, 2019	

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 31

Facing East

Description:

Data Point 007
Overview of uplands/ drylands adjacent to Wetland 003. Area is built-up from installation of utility structures within a utility ROW.

When:
December 18, 2018

Photo No. 32

Facing East

Description:

Data Point 007
Overview of uplands/ drylands adjacent to Wetland 003. Area is built-up from installation of utility structures within a utility ROW.

When:
May 16, 2019

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 33 Facing West **Description:** Data Point 008 PEM Data Point for Wetland 003. **When:** December 18, 2018	

Photo No. 34 Facing West **Description:** Data Point 008 PEM Data Point for Wetland 003. **When:** May 16, 2019	

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	**Site Location:**	**Project No.**
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 35

Facing North

Description:

Data Point 008
Overview of PEM portion of Wetland 003.

When:
December 18, 2018

Photo No. 36

Facing North

Description:

Data Point 008
Overview of PEM portion of Wetland 003.

When:
May 16, 2019

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 37

Facing North

Description:

Data Point 009
PSS Data Point for
Wetland 003.

When:
December 18, 2018

Photo No. 38

Facing North

Description:

Data Point 009
PSS Data Point for
Wetland 003.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 39

Facing South

Description:

Data Point 009
Overview of PSS portion of Wetland 003.

When:
December 18, 2018

Photo No. 40

Facing South

Description:

Data Point 009
Overview of PSS portion of Wetland 003.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 41	
Facing East	
Description: Overview of PEM Wetland 004. Wetland 004 is primarily located outside of the Project Study Limits within a utility ROW to the east.	
When: December 18, 2018	

Photo No. 42	
Facing East	
Description: Overview of PEM Wetland 004. Wetland 004 is primarily located outside of the Project Study Limits within a utility ROW to the east.	
When: May 16, 2019	

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	**Site Location:**	**Project No.**
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 43

Facing South

Description:

Data Point 010
PEM Data Point for
Wetland 004.

When:
May 16, 2019

Photo No. 44

Facing Northwest

Description:

Data Point 010
Overview of PEM
Wetland 004.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 45

Facing North

Description:

Data Point 011
Upland/ drylands Data Point adjacent to Wetland 004.

When:
May 16, 2019

Photo No. 46

Facing West

Description:

Data Point 011
Overview of uplands/ drylands adjacent to Wetland 004. Located adjacent to an asphalt road and within a maintained ROW.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 47

Facing South

Description:

Data Point 012 Upland/ dryland Data Point located on the south side of Stream 001. Area is raised up in comparison to Wetland 003, with a mix of vegetation by no hydric soils or wetland hydrology.

When:
May 16, 2019

Photo No. 48

Facing East

Description:

Data Point 012 Upland/ dryland Data Point located on the south side of Stream 001. Area is raised up in comparison to Wetland 003, with a mix of vegetation by no hydric soils or wetland hydrology.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 49

Facing West

Description:

Data Point 012 Overview of upland/ dryland areas located on the south side of Stream 001. Area is raised up in comparison to Wetland 003, with a mix of vegetation by no hydric soils or wetland hydrology.

When:
May 16, 2019

Photo No. 50

Facing East

Description:

Data Point 013 Upland/ dryland Data Point south of Stream 001 and access road. Area is located outside of the NYSDEC 100-foot adjacent area.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 51

Facing North

Description:

Data Point 013
Overview of upland/ dryland areas south of Stream 001 and south of a gravel access road. Area is located in uplands outside of NYSDEC 100-foot for Wetland BU-13 adjacent area.

When:
May 16, 2019

Photo No. 52

Facing South

Description:

Data Point 013
Overview of upland/ dryland areas south of Stream 001 and south of a gravel access road. Area is located in uplands outside of NYSDEC 100-foot for Wetland BU-13 adjacent area.

When:
May 16, 2019

FISHER ASSOCIATES

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 53

Facing South

Description:

Overview of inside the fenced substation area. Substation is comprised of uplands/drylands and gravel/asphalt/dirt utility pads.

When:
December 18, 2018

Photo No. 54

Facing South

Description:

Overview of inside the fenced substation area. Substation is comprised of uplands/drylands and gravel/asphalt/dirt utility pads.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00

Photo No. 55

Facing South

Description:

Overview of inside the fenced substation area. Substation is comprised of uplands/drylands and gravel/asphalt/dirt utility pads.

When:
December 18, 2018

Photo No. 56

Facing South

Description:

Overview of inside the fenced substation area. Substation is comprised of uplands/drylands and gravel/asphalt/dirt utility pads.

When:
May 16, 2019

REPRESENTATIVE SITE PHOTOGRAPHS

Project Name:	Site Location:	Project No.
New York State Electric and Gas Corp. (NYSEG) New Gardenville Substation Project Wetland & Watercourse Delineation Report Update- January 2020	Town of West Seneca, Erie County, NY	185057.00