

Wetland and Waterbodies Delineation Report

for

480 DODGE ROAD

Town of Amherst

Erie County, New York

for

The Green Organization



May 4, 2023

EDI Project Code: **W7D23**

**REPORT SUMMARIZING
THE RESULTS OF
A WETLAND DELINEATION SURVEY OF**

480 DODGE ROAD

Prepared for Submission to:

U.S. ARMY CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207

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REPORT DATE: May 4, 2023

EDI PROJECT CODE: W7D23

PROJECT INFORMATION

Project Name.....480 Dodge Road
Street Address.....480 Dodge Road
SBL Number.....41.06-1-8.1
Town.....Amherst
County.....Erie
State.....New York
Latitude/Longitude (NAD83).....43.02468°N, -78.77421°W
Investigation Area.....5.2± Acres
USGS 7.5 Minute Topographical Map.....Tonawanda East Quadrangle
Waterway.....NA
Hydrologic Unit Code.....04120104
Date of Delineation.....May 1, 2023
Consultant.....Earth Dimensions, Inc.
1091 Jamison Road
Elma, New York 14059
Point of Contact.....Scott Livingstone
(716)655-1717
slivingstone@earthdimensions.com
Engineer.....NA
Property Owner.....Arbordale Nursery, Inc.
Authority.....Section 404
Permit/Letter Being Requested.....Jurisdictional Determination

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EXECUTIVE SUMMARY

The Green Organization has proposed the development of a 5.2± acre parcel located along the north side of Dodge Road in the Town of Amherst, County of Erie, and State of New York. The Green Organization has retained Earth Dimensions, Inc. (EDI) to complete a wetland delineation report that would allow the U.S. Army Corps of Engineers (USACE) and New York State Department of Environmental Conservation (NYSDEC) to determine their jurisdictional authority over the investigation area, pursuant to Section 404 of the Clean Water Act and Articles 15 (Protection of Waters) and 24 (Freshwater Wetlands) of the New York State Environmental Conservation Law. The proposed project does not qualify for Bipartisan Infrastructure Law (BIL) funding.

A preliminary review of available information pertaining to vegetation, soils, and hydrology in the project area was implemented prior to conducting a field investigation at the site. Sources of information included the United States Geological Survey (USGS), Natural Resources Conservation Service (NRCS), National Wetland Inventory (NWI), and NYSDEC Freshwater Wetland maps. The NRCS map indicates the potential for wetlands under federal jurisdiction.

EDI applied methodology specified by the Corps of Engineers Wetlands Delineation Manual (January 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Version 2.0 (January 2012) to perform a delineation of Federal jurisdictional wetlands within the site. EDI identified one ditch that drains an upland portion of the site. EDI identified no wetlands or ponds within the investigation area.

TABLE 2: STREAM & DRAINAGE SUMMARY

Stream Identification #	Geographic Center (WGS84)		Waterway	DEC Class	Linear Feet On-site	Highwater Width (Ft)	Flow Regime	Substrate	Classification (Cowardin)	Jurisdictional Determination
	Latitude	Longitude								
Upland Ditch 1	43.02433	-78.77416	NA	NA	110 feet	2 to 3	Ephemeral	Grass	NA	Non-Jurisdictional

SECTION I: INTRODUCTION

The Green Organization has proposed the development of a 5.2± acre parcel on the north side of Dodge Road in the Town of Amherst, County of Erie, and State of New York. The parcel is part of an existing retail nursery center. The project has been given the name 480 Dodge Road and is located on USGS 7.5 minute quadrangle map indexed as Tonawanda East (Figure 1). The field work was completed on May 1, 2023 using a handheld Trimble TDC650GPS to locate wetland and drainage boundaries.

The Green Organization has retained Earth Dimensions, Inc. (EDI) to complete a wetland delineation study at this site. The investigation was designed to facilitate a determination of the extent of USACE and NYSDEC jurisdiction over the project area pursuant to Section 404 of the Clean Water Act and Articles 15 (Protection of Waters) and 24 (Freshwater Wetlands) of the New York State Environmental Conservation Law.

EDI has performed a wetland delineation study at the site under guidelines specified by the *Corps of Engineers Wetlands Delineation Manual*, dated January 1987 (referred to hereafter as the Corps Manual) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region version 2.0* (January 2012) (referred to hereafter as the Northcentral and Northeast Regional Supplement). The purpose of this report is to present EDI's methods, results, conclusions and recommendations with respect to the 480 Dodge Road project site.

SECTION II: SITE DESCRIPTION

The 480 Dodge Road project area is comprised of a 5.2± acre irregular shaped investigation area on the north side of Dodge Road which is outlined on Figure 1 and depicted on the Wetland Delineation Map included in Appendix A (Figure 6).

The natural topography of the 480 Dodge Road site is flat to gently sloping. The undeveloped upland within the investigation area consisted of successional old fill pad and successional old field communities. The majority of the site is an active nursery with multiple buildings including a retail store, several greenhouses and a large house. The vegetative communities of the investigation area are described according to *Ecological Communities of New York State* (Edinger et al. 2014).

SECTION III: PRELIMINARY DATA REVIEW

A. SUMMARY OF FINDINGS

Several sources of information may be reviewed to facilitate the completion of a wetland delineation study. In some cases, it is even possible to make a preliminary office wetland determination based upon available vegetation, soils, and hydrologic information for a project area. EDI completed a preliminary review of several data sources at the onset of this study. The results of the review are summarized as follows:

1. USGS 7.5 MINUTE TOPOGRAPHICAL MAP

Figure 1 depicts the 480 Dodge Road project site on the Tonawanda East quadrangle map. The figure depicts the flat to gently sloping topography of the site.

2. USFWS NATIONAL WETLANDS INVENTORY MAP

The National Wetlands Inventory (NWI) map obtained from the USFWS Wetland Mapper <http://www.fws.gov/wetlands/Data/Mapper.html> displays no stream or wetland types within the investigation area.

3. NATURAL RESOURCES CONSERVATION SERVICE SOILS MAP

Figure 3 presents the project area outlined on a copy of the Erie County Soil Survey map from the National Cooperative Soil Survey. As shown on that figure, the site has the following soil types:

Soil Conservation Service Legend

Map Unit Symbol	Map Unit Name	Hydric Rating
Cv	Cosad loamy fine sand	10
Lb	Lakemont mucky silt loam	100
Od	Odessa silt loam, 0 to 3% slopes	5

Cosad Series: The Cosad series consists of very deep, somewhat poorly drained soils formed in sandy deposits that overlie clayey lacustrine sediments. They are nearly level soils on lake plains. Slope ranges from 0 to 8 percent. Mean annual temperature is 48°F and mean annual precipitation is 40 inches.

Lakemont Series: The Lakemont series consists of deep, poorly drained and very poorly drained soils of lake plains. They are nearly level soils formed in very slowly permeable reddish colored clayey lacustrine sediments. Slope ranges from 0 to 3 percent. Permeability is moderately slow in the surface and very slow in the subsoil sand substratum. Mean annual temperature is about 48 degrees F. and mean annual precipitation is about 34 inches.

Odessa Series: The Odessa series consists of very deep, somewhat poorly drained soils formed in red, clayey lacustrine deposits. These soils are in moderately low areas on lake plains and valley terraces. Slope ranges from 0 to 20 percent. Mean annual temperature is 8 degrees C (46 degrees F), and mean annual precipitation is 995 mm (39 in).

The U.S. Department of Agriculture's National Technical Committee for Hydric Soils Criteria has developed a list of soils that often display hydric soil characteristics. Hydric soil typically forms in places of the landscape where surface water periodically collects for some time and/or where groundwater discharges sufficient to create waterlogged or anaerobic soils. Such anaerobic soils can support the growth and survival of hydrophytic vegetation that is tolerant of such conditions. The Hydric Rating indicates the proportion of map units that meets the criteria for hydric soils. Soil units are designated as "hydric," "predominantly hydric," "partially hydric," "predominantly nonhydric," or "nonhydric" depending on the hydric rating of its respective components. "Hydric" means that all components listed for a given map unit are rated as being hydric. "Predominantly hydric" means components that comprise 66 to 99 percent of the map unit are rated as hydric. "Partially hydric" means components that comprise 33 to 66 percent of the map unit are rated as hydric. "Predominantly nonhydric" means components that comprise up to 33 percent of the map unit are rated as hydric. "Nonhydric" means that none of the components are rated as hydric. Wetland hydrologic conditions, hydric soils, and hydrophytic vegetation are the three criteria of a wetland.

4. NYSDEC FRESHWATER WETLANDS MAP

The NYSDEC Freshwater Wetlands map obtained from the online NYSDEC Environmental Resource Mapper displays no state jurisdictional Freshwater Wetland within and/or adjacent to the investigation area.

B. RESULTS OF AGENCY INFORMATION REVIEW

The preliminary data review revealed that the Corps may have jurisdiction over wetlands at the project location. The evidence consisted of hydric soils and soils with possible inclusions depicted within the project area as shown on the NRCS map (Figure 3). Therefore, it was considered necessary to perform a field investigation at the site in order to determine the presence of federal and state protected wetlands. The methods specified in the Corps of Engineers Wetlands Delineation Manual (January 1987) and Northcentral and Northeast Regional Supplement Version 2.0 (January 2012) were employed during the field investigation. Procedures, results, and conclusions of the wetland delineation study are presented in the remainder of this report.

SECTION IV: FIELD INVESTIGATION PROCEDURES

WETLANDS:

Step 1

EDI applied methodology specified by the 1987 Corps of Engineers Wetlands Delineation Manual and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region to perform a delineation of Federal jurisdictional wetlands within the site. EDI used the Level 2 Routine Determination method (on-site inspection necessary) since insufficient information was available for making a determination for the entire project area. This methodology is consistent with Part IV, Section D of the Corps Manual.

Step 2

EDI's initial evaluation of the project area revealed that no atypical situations existed. If an atypical situation had existed, EDI would have used methodology outlined in Part IV, Section F of the Corps manual and/or Section 5 of the Northcentral and Northeast Supplement.

Step 3

EDI made the determination that normal environmental conditions were present, as the area was not lacking hydrophytic vegetation or hydrologic indicators due to annual, seasonal or long-term fluctuations in precipitation, surface water, or groundwater levels. The Northcentral and Northeast Supplement defines the growing season as beginning when one of the following indicators of biological activity are evident in a given year: (1) above-ground growth and development of vascular plants and/or (2) soil temperature measured at 12" below ground surface reaches 41°F. The end of the growing season is defined as the point at which deciduous species lose their leaves or the last herbaceous plants cease flowering and their leaves become dry or brown, whichever comes latest.

Step 4

In order to accurately identify the limits of various vegetative communities and extent of wetlands on-site, a routine determination method was used. As depicted in Appendix A and included in Appendix B, four (4) data points were used to characterize the site.

Step 5

The plant community inhabiting each observation point was characterized in accordance with methods specified in the Northcentral and Northeast Regional Supplement. Dominant plant species were identified within four vegetative strata (i.e. herb, sapling/shrub, tree and liana (woody vines) at each sampling point. The Northcentral and Northeast Regional Supplement defines the vegetative strata in the following manner:

Herb – A non-woody individual of a macrophytic species. Seedlings of woody plants (including vines) that are less than 3.28 feet in height are considered to be herbs.

Sapling/Shrub – A layer of vegetation composed of woody plants < 3.0 inches in diameter at breast height but greater than 3.28 feet in height, exclusive of woody vines.

Tree – A woody plant > 3.0 inches in diameter at breast height, regardless of height (exclusive of woody vines)

Liana – A layer of vegetation in forested plant communities that consist of woody vines greater than 3.28 feet in height.

As outlined in the manual, the quadrant sizes used for the vegetative strata were (i) a 3.28-foot radius for herbs; (ii) a ten-foot radius for saplings/shrubs and woody vines; and (iii) a 30-foot radius for trees. Dominant plant species were estimated using aerial coverage methods. Dominant species are defined in the Corps Manual as the most abundant plant species that when ranked in descending order of abundance and cumulatively totaled immediately exceed 50 percent of the total dominance measure for the stratum, plus any additional species comprising 20 percent or more of the total dominance measure.

The wetland indicator status (OBL, FACW, FAC, FACU, or UPL) listed for each identified species by the U.S. Fish and Wildlife Service in the National List of Plant Species that Occur in Wetlands: Northeast (Region 1) was recorded. The U.S. Fish and Wildlife wetland indicator status listings are defined as follows:

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

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

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

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

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

The plant community data was summarized on the data forms provided in the Northcentral and Northeast Regional Supplement included in this report as Appendix B.

Step 6

Plant data from each observation point were tested against the hydrophytic vegetation criterion specified in the Corps Manual and Northcentral and Northeast Regional Supplement. The Northcentral and Northeast Regional Supplement identifies a four-tiered approach for making a determination of whether or not the hydrophytic vegetation criteria is met for a sample plot. Indicator 1 (Rapid Test for Hydrophytic Vegetation) was first applied to determine if all dominant species across all strata are rated OBL and/or FACW. If Indicator 1 did not meet the hydrophytic vegetation criteria, Indicator 2 was then applied (dominance test); if greater than 50% of all plant species across all strata were rated OBL, FACW, or FAC, the hydrophytic vegetation criteria was considered met. In rare cases, when Indicators 1 and 2 did not meet the hydrophytic vegetation criteria but soils and hydrology criteria were met, Indicators 3 (Prevalence Index) and 4 (Morphological Adaptations) were used to make a final determination. All observation points that met the hydrophytic vegetation criterion were considered potential wetlands. Soils were then characterized.

Step 7

The Corps Manual specifies that soils need not be characterized (and are assumed hydric soils) at sampling points meeting the hydrophytic vegetation criterion if: (i) all dominant plant species have an indicator status of OBL, or (ii) all dominant species have an indicator status of OBL and/or FACW, and the wetland boundary is abrupt (at least one dominant OBL species must be present). All observation points sampled during this field investigation were examined directly for soil and hydrologic characteristics.

Step 8

At observation points requiring a soil evaluation, soil borings were performed by an EDI Soil Scientist using methods specified in the Northcentral and Northeast Regional Supplement. Soil pits were dug using a tile spade. Testpits were generally dug to a depth of 20 inches below ground surface. Soils were examined for any of the hydric soil indicators, as outlined in the Field Indicators of Hydric Soils in the United States. A determination was made as to whether or not the hydric soil criterion was met. Soils data was recorded on the data forms included in Appendix B of this report.

Step 9

EDI's Soil Scientist examined hydrologic indicators using methods specified by the Northcentral and Northeast Regional Supplement at each observation point. The wetland hydrology criterion was met if: (i) one or more primary field indicators was materially present, (ii) available hydrologic records provided necessary evidence, or (iii) two or more secondary indicators were present. Results were recorded on data forms taken from the Corps Manual and are included in this report as Appendix B.

Step 10

A wetland determination was made for every observation point. If a sample plot met the hydrophytic vegetation, hydric soil, and wetland hydrology criteria, the area was considered to be wetland.

Step 11

Based on the results of the transected data, wetland boundaries would have been established for any identified wetland using survey ribbon labeled "wetland delineation" and numbered consecutively along each wetland boundary. As outlined in the Corps Manual, the placement of flags would have been based on the limits of areas where all three parameters were met. However, no wetland areas were identified.

STREAMS & DRAINAGES:

The federally regulated Ordinary High Water (OHW) mark of streams within the Project area were delineated utilizing the definitional criteria as presented in Title 33, Code of Federal Regulations, Part 328, and the USACE Regulatory Guidance Letter 05-05 – Guidance on Ordinary

High Water Mark Identification. Each stream is categorized in regard to its flow regime as perennial, intermittent, or ephemeral, as defined by the USACE. The Ordinary High Water (OHW) mark for each stream is surveyed using the handheld Garmin GPSmap 62s. Each stream is assigned a letter designation, and survey points are numbered consecutively. Substrate characteristics and water depth are noted. Streams classified as AA, A, B, C, C(t), C(ts) and D in the State of New York are regulated by NYSDEC under Article 15 Use and Protection of Waters. Streams are given classifications which designate the level of protection afforded to each waterbody. Class AA and A are assigned to sources of drinking water. Class B streams are best suited for swimming and other contact recreation, but not drinking water. Class C streams identify waters that support fishing and non-contact activities. A classification with (t) designated a stream with the potential to support trout populations. A classification of (ts) identifies waters that may support trout spawning. Class D waters are the lowest classification and are often highly imperiled.

SECTION V: RESULTS AND CONCLUSIONS

Earth Dimensions, Inc. (EDI) has completed a wetland delineation study at the 480 Dodge Road site located in the Town of Amherst, County of Erie, and State of New York. A field investigation was conducted by a Soil Scientist and a Wetland Ecologist from EDI. The wetland delineation study identified no wetlands, streams or ponds within the 480 Dodge Road site.

Figure 5 depicts the vegetative communities as they existed at the time of the investigation. The uplands within the investigation area were comprised of successional old fill pad and successional old field communities. The vegetative communities of the investigation area are described according to Ecological Communities of New York State (Edinger et al. 2014).

The successional old fill pad community was dominated by the following species: eastern cottonwood (*Populus deltoides*), Norway maple (*Acer plantanoides*), black willow (*Salix nigra*), dame's rocket (*Hesperis matronalis*), northern bedstraw (*Galium boreale*), fig leaf buttercup (*Ranunculus ficaria*), common burdock (*Arctium minus*), wild onion (*Allium canadensis*), garlic mustard (*Alliaria petiolata*), teasel (*Dipsacus fullonum*), grey dogwood (*Cornus racemosa*), spotted knapweed (*Centaurea stoebe*), Kentucky bluegrass (*Poa pratensis*), daisy fleabane (*Erigeron philadelphicus*), Queen Anne's lace (*Daucus carota*), bird's foot trefoil (*Lotus corniculatus*), common dandelion (*Taraxacum officinale*), Canada goldenrod (*Solidago canadensis*), black walnut (*Juglans nigra*), common mugwort (*Artemisia vulgaris*), evening primrose (*Oenothera biennis*), chokecherry (*Prunus virginiana*) and catnip (*Nepetia cataria*).

The successional old field community was dominated by the following species: flat topped goldenrod (*Euthamia graminifolia*), teasel (*Dipsacus fullonum*), meadow hawkweed (*Hieracium caespitosum*), orchard grass (*Dactylis glomerata*), grey dogwood (*Cornus racemosa*), Canada thistle (*Cirsium arvense*), garden vetch (*Vicia sativa*), Queen Anne's lace (*Daucus carota*), calico aster (*Symphyotrichum lateriflorum*), common dandelion (*Taraxacum officinale*) and spotted knapweed (*Centaurea stoebe*).

An upland ditch was identified and flows south along the existing driveway to drain a stockpile area in the center of the site. This ephemeral channel is not identified by NYSDEC standards. The substrate consists of vegetation and silt. Within the project area, the ditch is approximately 2 to 3 feet wide with an average water depth of 0-4 inches. EDI utilizes office and field observations to determine stream classifications. The ditch was identified as an ephemeral channel due to it being a manmade feature and not identified on the USGS Topography Map (Figure 1).

A map which depicts the site boundaries and the location of all observation points established during the field survey is included as Figure 6 in Appendix A of this report. Data forms are included as Appendix B. Appendix C includes representative photographs of the project area. Appendix D notes the references used during the preparation of this report and during the field investigation. Appendix E provides the names, addresses and phone numbers of the survey personnel involved in the wetland delineation study.

SECTION VI: RECOMMENDATIONS

One (1) man-made ditch was identified, and no wetland areas or ponds were identified during the course of a field investigation based upon the three-parameter technique (vegetation, soils, and hydrology) outlined in the Corps Manual and Northcentral and Northeast Regional Supplement. It is EDI's professional opinion that the ditch should not be regulated by USACE under Section 404. EDI recommends the following:

- (1) Based on the lack of any identified wetlands or streams, it is EDI's professional opinion that the project may proceed without the need for a Section 404 Permit.

480 DODGE ROAD

APPENDIX A - FIGURES



FIGURE 1: USGS 7.5 MINUTE TOPOGRAPHICAL MAP

Tonawanda East Quadrangle / U.S. Geological Survey

480 Dodge Road

Town of Amherst, Erie County, New York



FIGURE 2: NATIONAL WETLANDS INVENTORY MAP

<http://www.fws.gov/wetlands/data/mapper.HTML> (Visited 05/02/23)

480 Dodge Road

Town of Amherst, Erie County, New York



FIGURE 3: NRCS SOIL SURVEY MAP


<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx> (Visited 05/02/23)

480 Dodge Road

Town of Amherst, Erie County, New York







MAP LEGEND

Area of Interest (AOI)







 Area of Interest (AOI)

Soils







Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points






-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features


 Streams and Canals

 8-Digit Hydrologic Units

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Erie County, New York
Survey Area Data: Version 22, Sep 10, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 4, 2020—Jul 10, 2020

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

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Cv	Cosad loamy fine sand	10	4.9	86.7%
Lb	Lakemont mucky silt loam	100	0.4	6.3%
Od	Odessa silt loam, 0 to 3 percent slopes	5	0.4	6.9%
Totals for Area of Interest			5.6	100.0%

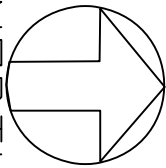


FIGURE 4: NYSDEC ENVIRONMENTAL RESOURCE MAPPER

<https://gisservices.dec.ny.gov/gis/erm/> (Visited 05/02/23)

480 Dodge Road

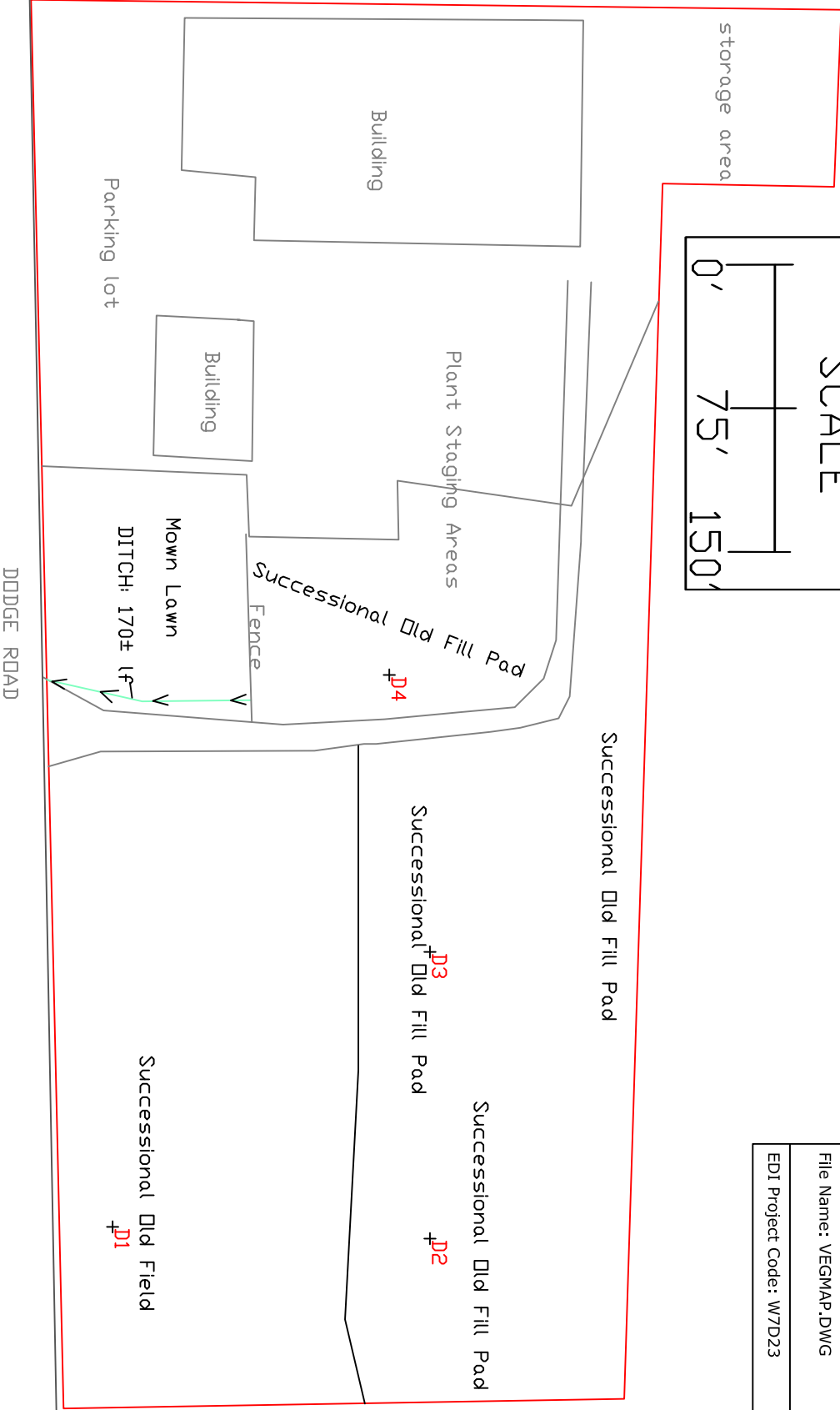
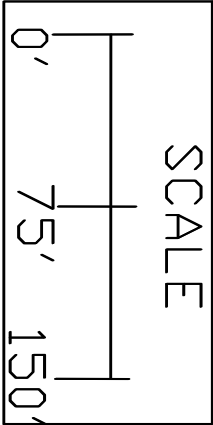
Town of Amherst, Erie County, New York



NORTH

Figure 5: General Vegetation Map
480 Dodge Road-SBI #41.06-1-8.1
Town of Amherst Erie County, New York

Scale: As shown
Map Date: May 2, 2023 JMC/EDI
Revised:
Base Map Provided By: TRIMBLE CONNECT
File Name: VEGMAP.DWG
EDI Project Code: W7D23



LEGEND



Investigation Area



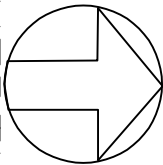
Drainage Feature



Data point location

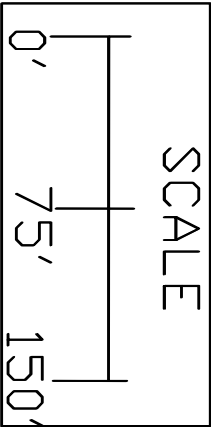


Earth DIMENSIONS, INC.
Regional Submissions • Regional Mitigation

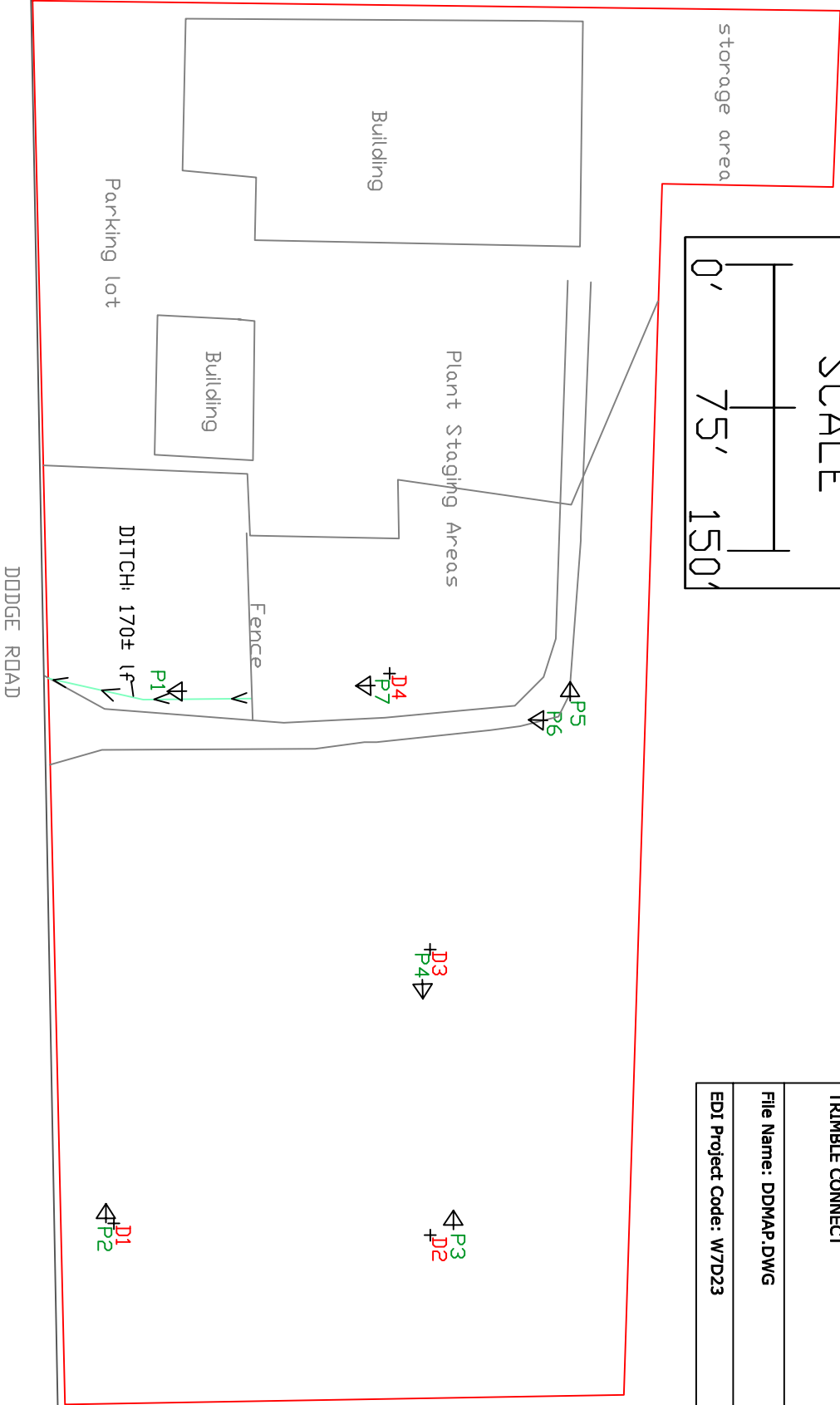


NORTH

Figure 6: Wetland Delineation Map
480 Dodge Road-SBI #41.06-1-8.1
Town of Amherst
Erie County, New York

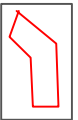


Scale: As shown
Map Date: May 2, 2023 JMC/EDL
Revised:
Base Map Provided By: TRIMBLE CONNECT
File Name: DDMAP.DWG
EDL Project Code: W7D23



FARROW DIMENSIONS, INC.
Wetland Delineation • Wetland Mapping

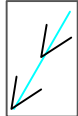
LEGEND



Investigation Area

D1

Data point location



Drainage Feature



Photo Location



FIGURE 7: DRAINAGE MAP

<https://streamstats.usgs.gov/ss/> (Visited 05/02/23)

480 Dodge Road

Town of Amherst, Erie County, New York



https://gis.erie.gov/Html5Viewer133/index.html?viewer=ErieCountyNY.HTML5_2_11_0

480 Dodge Road

Town of Amherst, Erie County, New York

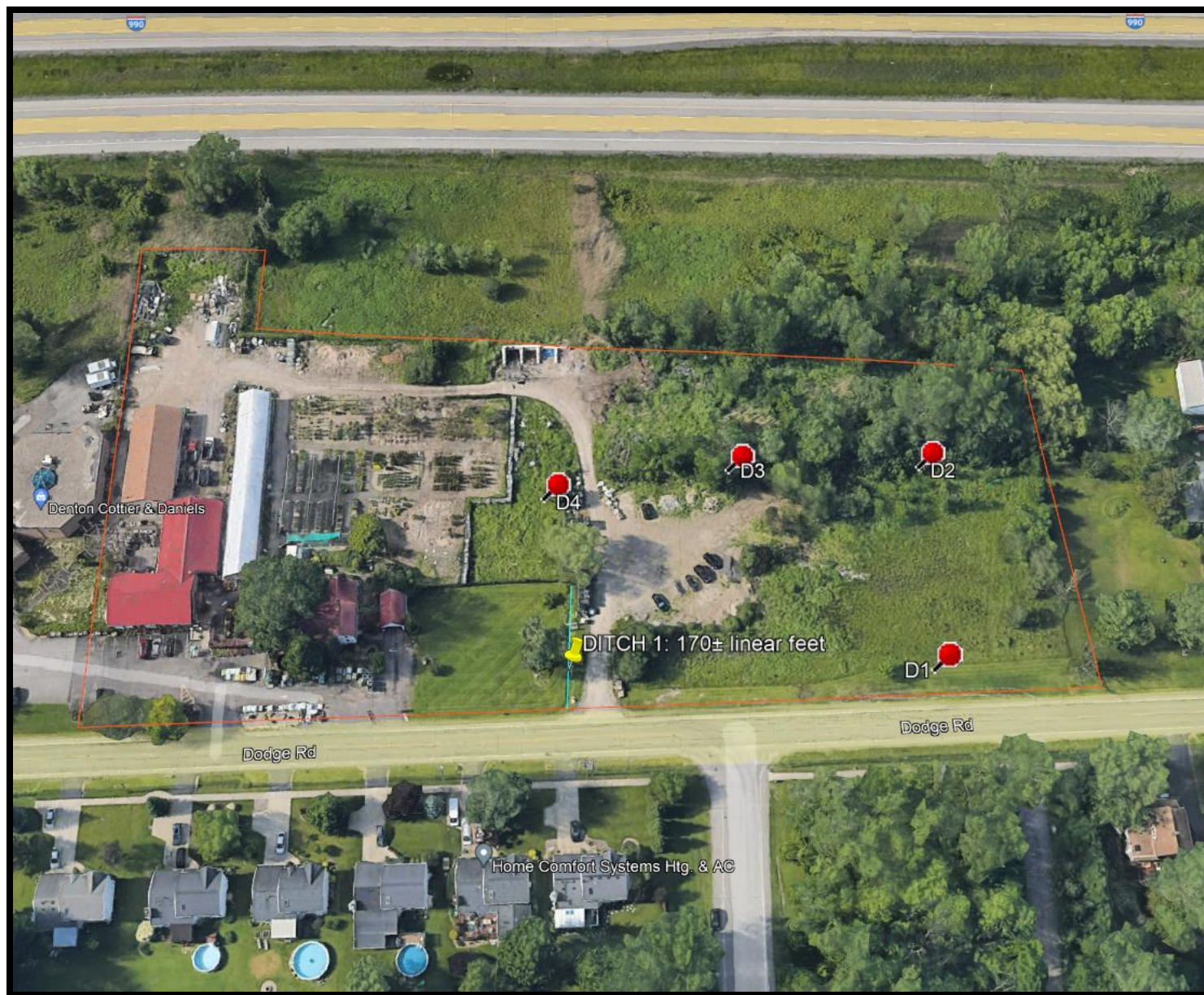


FIGURE 9: AERIAL PHOTO WITH WETLANDS

<https://earth.google.com/web/> (Visited 05/02/23)

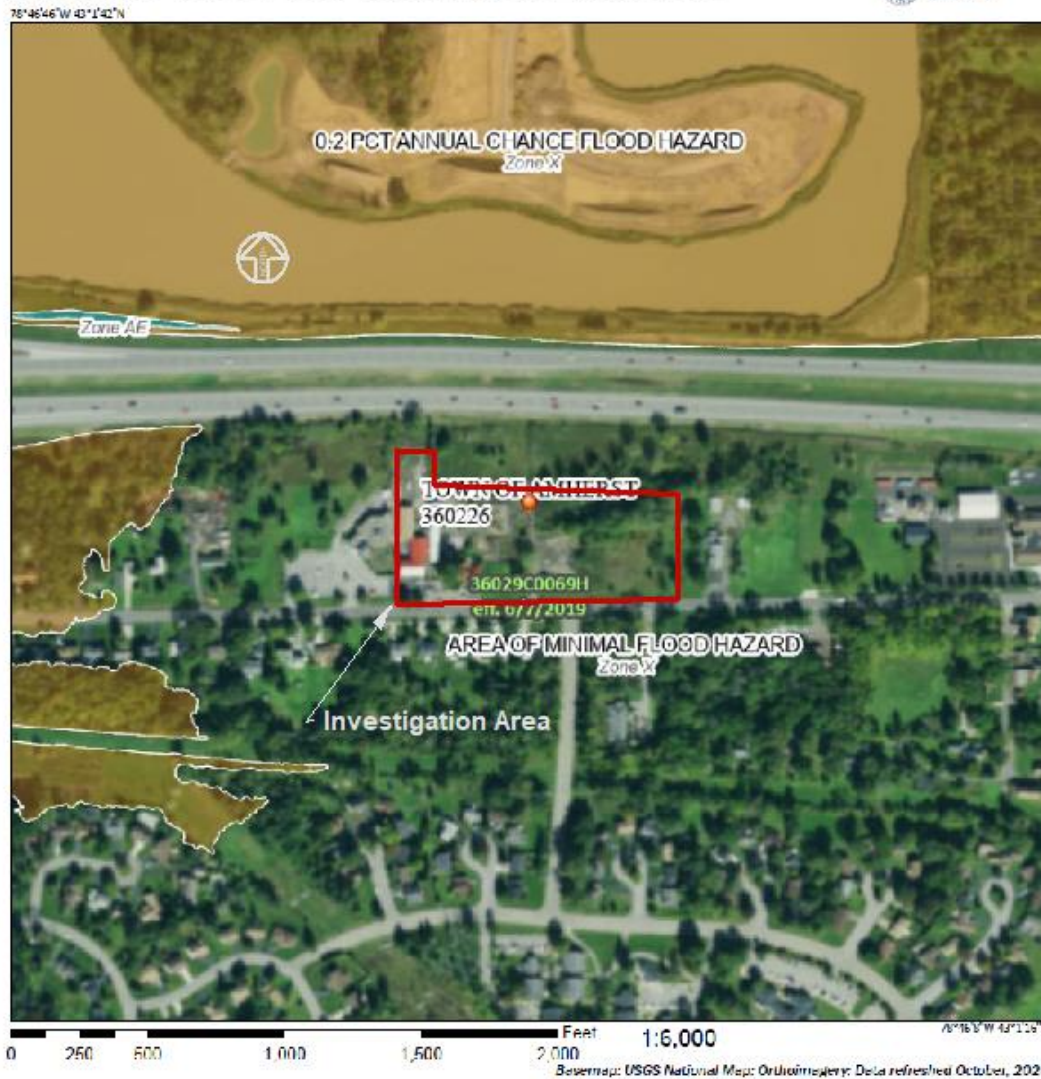
480 Dodge Road

Town of Amherst, Erie County, New York



FIGURE 10: SOIL MAP WITH WETLANDS
<https://earth.google.com/web/> (Visited 05/02/23)
480 Dodge Road
Town of Amherst, Erie County, New York

National Flood Hazard Layer FIRMette



Legend

SEE FIRM REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, X, AE, AH, AO, AR, AV, VE, VE-1
	With BFE or Depth Zone AE, AO, AR, AV, VE, VE-1
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% Annual Chance Flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee. See Notes, Zone X
	Area with Flood Risk due to Levee Zone B
OTHER AREAS	WATERWAY Areas of Minimal Flood Hazard, Zone X
	Effective LUNMs
	Areas of Undetermined Flood Hazard Zone B
CULMINAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Headwall
UTILITY FEATURES	20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
	27.2 Coastal Inundation
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary
	General Transport Boundary
MAP PANELS	Profile Baseline
	Hydrographic Feature
	Digital Data Available
	No Digital Data Available
	Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards.

The flood hazard information is derived directly from the authoritative NHHL web services provided by FEMA. This map was exported on 5/2/2020 at 10:53 AM and does not reflect changes or amendments subsequent to this date and time. The NHHL and effective information may change or become superseded by more data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and undetermined zones cannot be used for regulatory purposes.

FIGURE 11: FEMA FLOODPLAIN MAP

<https://hazards-fema.maps.arcgis.com/apps/webappviewer/> (Visited 05/02/23)

480 Dodge Road

Town of Amherst, Erie County, New York

480 DODGE ROAD

APPENDIX B – DATA SHEETS

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: 480 Dodge Road Town/County: Amherst/Erie County Sampling Date: May 1, 2023
 Applicant/Owner: The Green Organization State: New York Sampling Point: D1
 Investigator(s): Scott Livingstone & Jody Celeste Section, Township, Range: 414.06-1-8.1
 Landform (hillslope, terrace, etc.): FILL PAD Local relief (concave, convex, none): NONE Slope (%): 1
 Subregion (LRR or MLRA) LRRL Lat: 43.02428 Long: 78.77313 Datum: NAD83
 Soil Map Unit Name: COSAD LOAMY FINE SAND NW I classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	If yes, optional Wetland Site ID:	<u>N/A</u>
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		
Remarks: (Explain alternative procedures here or in a separate report.) <u>UPLAND FIELD / FILL PAD</u>			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)	
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)	
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)	
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)	
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)	
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)	
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)	
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)	
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)	
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)	
		<u> </u> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes <u> </u> No <u>X</u> Depth (inches): <u>N/A</u>	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Water Table Present?	Yes <u> </u> No <u>X</u> Depth (inches): <u>N/A</u>		
Saturation Present? (includes capillary fringe)	Yes <u> </u> No <u>X</u> Depth (inches): <u>N/A</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION : Use scientific names of plants.

Sampling Point: D1

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Acer platanoides</i>	5	Y	UPL
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
5 = Total Cover			

Sapling/Shrub Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. NA	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
0 = Total Cover			

Herb Stratum (Plot size: 5')	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Euthamia graminifolia</i>	5	N	FAC
2. <i>Dipsacus fullonum</i>	5	N	NI
3. <i>Thymus officinale</i>	15	Y	FACW
4. <i>Cirsium arvense</i>	5	N	FACU
5. <i>Vicia sativa</i>	10	Y	FACW
6. <i>Daucus carota</i>	10	Y	FACW
7. <i>Symphoricarpos lateriflorum</i>	10	Y	FAC
8. <i>Hieracium caespitosum</i>	5	N	NI
9. <i>DACTYLIS GLORIOSA</i>	10	Y	FACW
10. <i>Corvus laciniatus</i>	10	Y	FAC
11. <i>Centauria stoebe</i>	10	Y	NI
12. _____	_____	_____	_____
95 = Total Cover			

Woody Vine Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. NA	_____	_____	_____
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: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>25</u>	x 3 = <u>75</u>
FACU species <u>50</u>	x 4 = <u>200</u>
UPL species <u>5</u>	x 5 = <u>25</u>
Column Totals: <u>80</u> (A)	<u>300</u> (B)
Prevalence Index = B/A = <u>3.75</u>	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is < 3.0 NO
- ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators 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 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.

Community Type: SUCCESIONAL OLD FIELD (MOWN)

Hydrophytic Vegetation Present?

Yes ☐ No ☒

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

Photo # 2Direction of Photo WEST

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: 480 Dodge Road Town/County: Amherst/Erie County Sampling Date: May 1, 2023
 Applicant/Owner: The Green Organization State: New York Sampling Point: D2
 Investigator(s): Scott Livingstone & Jody Celeste Section, Township, Range: 414.06-1-8.1
 Landform (hillslope, terrace, etc.): Fill Pile Local relief (concave, convex, none): CONVEX Slope (%): 15
 Subregion (LRR or MLRA) LRRL Lat: 43.62474 Long: 78.77311 Datum: NAD83
 Soil Map Unit Name: ODESSA SILT LOAM, 0-3% slopes NW I classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area	
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	within a Wetland?	Yes <u> </u> No <u>X</u>
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	If yes, optional Wetland Site ID:	<u>N/A</u>
Remarks: (Explain alternative procedures here or in a separate report.)			
<u>• UPLAND FILL PILE WITH TREES</u> <u>• OLD TOPSOIL STOCKPILE</u>			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <u> </u> No <u>X</u>	Depth (inches): <u>N/A</u>	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
Water Table Present? Yes <u> </u> No <u>X</u>	Depth (inches): <u>N/A</u>	
Saturation Present? (includes capillary fringe) Yes <u> </u> No <u>X</u>	Depth (inches): <u>N/A</u>	

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

Remarks:

VEGETATION : Use scientific names of plants.

Sampling Point: D2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>JUGLANS nigra</i>	10	Y	FACW
2. <i>Populus deltoides</i>	20	Y	FAC
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
<u>30</u> = Total Cover			

Sapling/Shrub Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. NA	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
<u>0</u> = Total Cover			

Herb Stratum (Plot size: 5')	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Hesperis matronalis</i>	20	Y	FACW
2. <i>Galium boreale</i>	10	N	FAC
3. <i>Ranunculus ficaria</i>	45	Y	FACW
4. <i>Arctium minus</i>	10	N	FACW
5. <i>Allium canadensis</i>	10	N	FACW
6. <i>Alliaria petiolata</i>	5	N	FACW
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
<u>100</u> = Total Cover			

Woody Vine Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. NA	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
<u>0</u> = Total Cover			

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

Photo # 3Direction of Photo WEST

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 <u>0</u>	x 1 = <u>0</u>
FACW species <u>45</u>	x 2 = <u>90</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>55</u>	x 4 = <u>220</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>130</u> (A)	<u>400</u> (B)
Prevalence Index = B/A = <u>3.06</u>	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is < 3.0¹
- ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators 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 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.

Community Type: SUCCESIONAL OLD FILL PAD

Hydrophytic Vegetation Present? Yes X No _____

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- ___ 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)

- ___ 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 (TF2)
 ___ 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: NONE.

Depth (inches): N/A

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: 480 Dodge Road Town/County: Amherst/Erie County Sampling Date: May 1, 2023
 Applicant/Owner: The Green Organization State: New York Sampling Point: D3
 Investigator(s): Scott Livingstone & Jody Celeste Section, Township, Range: 414.06-1-8.1
 Landform (hillslope, terrace, etc.): FILL PAD Local relief (concave, convex, none): CONVEX Slope (%): 5
 Subregion (LRR or MLRA) LRRL Lat: 43.02474 Long: 78.77367 Datum: NAD83
 Soil Map Unit Name: CO SAD LOAMY FINE SAND NW I classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes X No
 Hydric Soil Present? Yes No X
 Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? Yes No X
 If yes, optional Wetland Site ID: N/A

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

• UPLAND SUCCESSIONAL FIELD / FILL PAD
• OLD FILL PAD ASSOCIATED WITH NURSERY OPERATION

HYDROLOGY**Wetland Hydrology Indicators:**

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

 Surface Water (A1) Water-Stained Leaves (B9)
 High Water Table (A2) Aquatic Fauna (B13)
 Saturation (A3) Marl Deposits (B15)
 Water Marks (B1) Hydrogen Sulfide Odor (C1)
 Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)
 Drift Deposits (B3) Presence of Reduced Iron (C4)
 Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)
 Iron Deposits (B5) Thin Muck Surface (C7)
 Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)
 Sparsely Vegetated Concave Surface (B8)

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

Wetland Hydrology Present? Yes No X

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

Remarks:

VEGETATION : Use scientific names of plants.

Sampling Point: D3

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

0 = Total Cover

Sapling/Shrub Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. NA			
2.			
3.			
4.			
5.			
6.			
7.			

0 = Total Cover

Herb Stratum (Plot size: 5')	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Hesperis matronalis</i>	10	N	FACU
2. <i>Alliaria petiolata</i>	20	Y	FACW
3. <i>Ranunculus ficaria</i>	30	Y	FACW
4. <i>Artemisia vulgaris</i>	10	N	UPL
5. <i>Solidago canadensis</i>	10	N	FACW
6. <i>Rumex virginiana</i>	5	N	FACW
7. <i>Nepeta cataria</i>	5	N	FACU
8. <i>Lotus corniculatus</i>	5	N	
9. <i>Daucus carota</i>	2	N	
10. <i>Alium canadense</i>	3	N	
11.			
12.			

100 = Total Cover

Woody Vine Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. NA			
2.			
3.			
4.			

0 = Total Cover

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

Photo # 4Direction of Photo EAST

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 <u>0</u>	x 1 = <u>0</u>
FACW species <u>30</u>	x 2 = <u>60</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>60</u>	x 4 = <u>240</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>100</u> (A)	<u>350</u> (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is < 3.0 NO
- ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation¹ (Explain)

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 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.Community Type: SUCCESSIONAL OLD FILL PAD

Hydrophytic Vegetation Present?

Yes X No

D3

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L, M) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Restrictive Layer (if observed):

Type: NONE
Depth (inches): N/A

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: 480 Dodge Road Town/County: Amherst/Erie County Sampling Date: May 1, 2023
 Applicant/Owner: The Green Organization State: New York Sampling Point: D4
 Investigator(s): Scott Livingstone & Jody Celeste Section, Township, Range: 414.06-1-8.1
 Landform (hillslope, terrace, etc.): FILL PAD Local relief (concave, convex, none): CONVEX Slope (%): 3
 Subregion (LRR or MLRA) LRRL Lat: 43.02468 Long: 78.77421 Datum: NAD83
 Soil Map Unit Name: COSAD LOAMY FINE SAND NW I classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes No X
 Hydric Soil Present? Yes No X
 Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? Yes No X
 If yes, optional Wetland Site ID: N/A

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

• SUCCESSIONAL FIELD / FILL PAD

HYDROLOGY**Wetland Hydrology Indicators:**

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

 Surface Water (A1) Water-Stained Leaves (B9)
 High Water Table (A2) Aquatic Fauna (B13)
 Saturation (A3) Marl Deposits (B15)
 Water Marks (B1) Hydrogen Sulfide Odor (C1)
 Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)
 Drift Deposits (B3) Presence of Reduced Iron (C4)
 Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)
 Iron Deposits (B5) Thin Muck Surface (C7)
 Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)
 Sparsely Vegetated Concave Surface (B8)

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

Wetland Hydrology Present? Yes No X

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

Remarks:

D4

VEGETATION : Use scientific names of plants.

Sampling Point: _____

Tree Stratum (Plot size: 30')

Absolute % Cover Dominant Species? Indicator Status

1.	<i>SALIX nigra</i>	5	Y	FACW
2.	<i>Acer platanoides</i>	5	Y	UPL
3.				
4.				
5.				
6.				
7.				

10 = Total Cover

Sapling/Shrub Stratum (Plot size: 15')

1.	NA			
2.				
3.				
4.				
5.				
6.				
7.				

0 = Total Cover

Herb Stratum (Plot size: 5')

1.	<i>Artemisia vulgaris</i>	30	Y	FACW
2.	<i>Dipsacus fullonum</i>	15	Y	FACW
3.	<i>Alliaria petiolata</i>	15	Y	FACW
4.	<i>Oenothera biennis</i>	5	N	FACW
5.	<i>Cornus racemosa</i>	5	N	FAC
6.	<i>Chrysanthemum leucanthemum</i>	5	N	FACW
7.	<i>Galium boreale</i>	5	N	
8.	<i>Thymus officinale</i>	10	N	
9.	<i>Poa pratensis</i>	5	N	
10.	<i>Erigeron philadelphicus</i>	5	N	FAC
11.				
12.				

100 = Total Cover

Woody Vine Stratum (Plot size: 30')

1.	NA			
2.				
3.				
4.				

0 = Total Cover

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

Photo # 7

Direction of Photo SOUTH

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 5	x 2 = 10
FAC species 10	x 3 = 30
FACU species 90	x 4 = 360
UPL species 5	x 5 = 25
Column Totals: 110 (A)	425 (B)

Prevalence Index = B/A = 3.86

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is < 3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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FILL PAD

Community Type: _____

Hydrophytic Vegetation Present?

Yes _____ No X

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APPENDIX C - SITE PHOTOGRAPHS



Photo 1 (05/01/23): Facing south towards Dodge Road. Depicts Ditch 1.



Photo 2 (05/01/23): Facing west from data point D1; depicts a successional old field community of data point D1.



Photo 3 (05/01/23): Facing west from data point D2; depicts a successional old fill pad community of data point D2.



Photo 4 (05/01/23): Facing east from data point D3; depicts a successional old fill pad community of data point D3.



Photo 5 (05/01/23): Facing west from along the existing roadway into the nursery.



Photo 6 (05/01/23): Facing south from along the existing roadway into the nursery.



Photo 7 (05/01/23): Facing south from data point D4; depicts a successional old fill pad community of data point D4.

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APPENDIX D - REFERENCES

INFORMATIONAL REFERENCES USED BY EARTH DIMENSIONS INC.

- Andrus, R.E. 1980. Sphagnaceae (Peat Moss Family) of New York State. Contributions to a Flora of New York State III, R.S. Mitchell (Ed.), Bulletin No. 442, New York State Museum, Albany, New York. 89 pp.
- Benyus, J.M. 1989. The Field Guide to Wildlife Habitats of the Eastern United States. Fireside, Simon & Shuster, Inc., New York. 335 pp.
- Britton, N.L., and H.A. Brown. 1970. An Illustrated Flora of the Northern United States and Canada, Volumes 1, 2, and 3. Dover Publications, Inc., New York. 2052 pp.
- Brockman, C.F., R. Merrilees, and H.S. Zim. 1968. Trees of North America: A Field Guide to the Major Native and Introduced Species North of Mexico. Western Publishing, Inc. New York, New York. 280 pp.
- Brown, L. 1979. Grasses: An Identification Guide. Peterson Nature Library. Houghton Mifflin Co., Boston. 240 pp.
- Cobb, B. 1963. A Field Guide to the Ferns and Related Families. Houghton Mifflin Co., Boston. 281 pp.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. Laroe. 1979. Classification of Wetlands and Deep Water Habitats of the United States. U.S. Fish and Wildlife Service, Washington, D.C. FWS/OBS-79-31. 103 pp.
- Eggers, S.D., and D.M. Reed. 1997. Wetland Plants and Plant Communities of Minnesota and Wisconsin. Second Edition. U.S. Army Corps of Engineers, St. Paul District, Minnesota. 263 pp.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, Mass. 100 pp. plus appendices.
- Hotchkiss, N. 1970. Common Marsh Plants of the United States and Canada. U.S. Department of the Interior, Bureau of Sport Fisheries and Wildlife, Washington, D.C., Resource Publication 93.
- Hurley, L.M. 1990. Field Guide to the Submerged Aquatic Vegetation of Chesapeake Bay. U.S. Fish and Wildlife Service, Chesapeake Bay Estuary Program, Annapolis, Maryland. 51 pp.
- Knobel, E. 1977. Field Guide to the Grasses, Sedges, and Rushes of the United States. Dover publications, Inc., New York. 83 pp.
- Little, E.L. 1980. The Audubon Society Field Guide to North American Trees (Eastern Region). Alfred A. Knopf, New York. 714 pp.
- Magee, D.W. 1981. Freshwater Wetlands. University of Massachusetts Press, Amherst. 245 pp.

- Mitchell, R.S., and G.C. Tucker. 1997. Revised Checklist of New York State Plants. Contributions to a Flora of New York State IV, R.S. Mitchell (Ed.). Bulletin No. 490, New York State Museum, Albany, New York. 400 pp.
- Munsell Color Chart. (Munsell Color 1975).
- National Wetland Inventory Maps. U.S. Department of the Interior, Fish and Wildlife Service, National Wetland Inventory, St. Petersburg, Florida. <http://wetlandsfws.er.usgs.gov>
- Niering, W.C., and N.C. Olmstead. 1979. The Audubon Society Field Guide to North American Wildflowers (Eastern Region). Alfred A. Knopf, New York. 887 pp.
- New York State Code of Rules and Regulations (NYCRR). 1989. Protected Native Plants. NYCRR Part 193.3, June, 1989. New York State Department of Environmental Conservation.
- New York Natural Heritage Program. 2002. New York Rare Plant Status List, February, 1989. S.M. Young, (Ed.), New York State Department of Environmental Conservation and The Nature Conservancy publication. 26 pp.
- New York State Department of Environmental Conservation Freshwater Wetlands Maps, NYSDEC Environmental Resource Mapper, <http://www.dec.ny.gov/imsmaps/ERM/viewer.htm>
- Newcomb, L. 1977. Newcomb's Wildflower Guide. Little, Brown and Co., Boston. 490 pp.
- Ogden, E.C. 1981. Field Guide to Northeastern Ferns. Contributions to a Flora of New York State III, R.S. Mitchell (Ed.), Bulletin No. 444, New York State Museum, Albany, New York. 122 pp.
- Peattie, D.C. 1991. A Natural History of Trees of Eastern and North America. Houghton Mifflin Co., Boston. 606 pp.
- Peterson, R.T., and M. McKenny. 1968. A Field Guide to Wildflowers of Northeastern and Northcentral North America. Houghton Mifflin Co., Boston. 420 pp.
- Petrides, G.A. 1972. A Field Guide to Trees and Shrubs. Houghton Mifflin Co., Boston. 428 pp.
- Prescott, G.W. 1969. How to Know the Aquatic Plants. Second Edition. William C. Brown Co., Dubuque, Iowa. 171 pp.
- Raynal, D.J., and D. J. Leopold. 1999. Landowner's Guide to State-Protected Plants of Forests in New York State. New York Center for Forestry Research and Development, SUNY-ESF, Syracuse, New York. 92pp.
- Reed, Porter B. Jr. 1988. National List of Plant Species that Occur in Wetlands: Northeast (Region 1). U.S. Fish and Wildlife Service, Washington, D.C. Biol. Rept. 88 (26.1). 112 pp.
- Reschke, C. 2002. Ecological Communities of New York State. New York Natural Heritage Program. NYSDEC, Latham, N.Y. (2nd Ed.) 136 pp.

- Soil Conservation Service. 1975. Soil Taxonomy: A Basic System of Soil Classification for Making and Interpreting Soil Surveys. U.S.D.A., Soil Conservation Service, U.S. Handbook 436.
- Soil Conservation Service. 1988. New York Hydric Soils and Soils with Hydric Inclusions, revised July, 1988, Soil Conservation Service, Syracuse, New York, Technical Guide, Section II. 23 pp.
- Simonds, R.L., and H.H. Tweedie. 1978. Wildflowers of the Great Lakes Region. Chicago Review Press, Chicago. 96 pp.
- Symonds, G.W.D. 1958. The Tree Identification Book. Quill, New York. 272 pp.
- Symonds, G.W.D. 1963. The Shrub Identification Book. William Morrow & Co., New York. 379 pp.
- Tiner, R. W. Jr. 1988. A Field Guide to Nontidal Wetland Identification. Maryland Department of Natural Resources and U.S. Fish and Wildlife Service Cooperative Publication. Maryland Department of Natural Resources, Annapolis, Maryland. 283 pp. + 198 color plates.
- United States Department and Agriculture & the Natural Resources Conservation Service (USDA, NRCS). Soil Conservation Service Soil Survey of Erie County, New York. U.S.D.A., Soil Conservation Service. 1986 <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- USDA, NRCS. 2009. The PLANTS Database (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- United States Geological Survey maps, Denver, Colorado. Tonawanda East Quadrangle.
- U.S. Army Corps of Engineers. 2009. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-09-19. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Fish and Wildlife Service, A Wetlands and Deepwater Habitats Classification. May 3, 2002, <http://www.nwi.fws.gov/>. June 16, 2002.
- Zander, R.H., and G.J. Pierce. 1979. Flora of the Niagara Frontier Region. Bulletin of the Buffalo Society of Natural Sciences, Vol. 16 (Suppl. 2), Buffalo, New York. 110 pp

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APPENDIX E – PROJECT CONTACT DETAILS

PROJECT CONTACT DETAILS

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