



**CONESTOGA-ROVERS
& ASSOCIATES**

410 Eagleview Boulevard, Suite 110
Exton, Pennsylvania 19341
Telephone: (610) 321-1800 Fax: (610) 321-2763
www.CRAworld.com

August 19, 2014

Reference No. 085121

New York State Department of Environmental Conservation
Regional Permit Administrator
270 Michigan Avenue
Buffalo, NY 14203-2915

US Army Corps of Engineers
Buffalo District
ATTN: Regulatory Branch
1776 Niagara Street
Buffalo, NY 14207-3199

Dear Sir or Madame:

Re: Joint Permit Application and Jurisdictional Determination for
Former Nash Road Landfill
NYSDEC Site #932054
Town of Wheatfield, Niagara County, New York

Glenn Springs Holdings, Inc. (Applicant) is requesting a Joint Permit and Jurisdictional Determination for the remediation of a portion of the former Nash Road Landfill (Site) located in the Town of Wheatfield, Niagara County, New York. The proposed remediation activities (project) will require authorization under an Army Corps of Engineers Nationwide Permit (NWP-38) and a New York State Department of Environmental Conservation (NYSDEC) 401 Water Quality Certification. Enclosed please find the required number of copies of the Joint Permit Application for the above reference application.

The Site is comprised of the former Nash Road Landfill which was operated by the Niagara Sanitation Company between 1964 and 1968 for disposal of industrial waste. The Site is a rectangular-shaped property (historically disturbed) encompassing approximately 20 acres and is wooded with trees, primarily eastern cottonwood, and heavy brush and contains areas of seasonally-influenced ponded water. Current access to the Site is not provided by any immediately identifiable means; however, historic access to the Site for disposal activities occurred along a haul road that was constructed from Nash Road, west of the Site. The Site is bordered to the north by the Holy Infant Shrine, to the east by a cemetery and a property that contains a motel and livery service, to the south by utility right-of-ways (overhead electric and underground natural gas and brine pipelines) and residences, and to the west by undeveloped land and Nash Road.

Equal
Employment Opportunity
Employer

REGISTERED COMPANY FOR
ISO 9001
ENGINEERING DESIGN



**CONESTOGA-ROVERS
& ASSOCIATES**

August 19, 2014

Reference No. 085121

- 2 -

The Site is currently undergoing site remediation under the guidance of the NYSDEC (Site #932054). The NYSDEC has reviewed and approved the Interim Remedial Action Work Plan, prepared by CRA (Attachment E). The project consists of the removal of impacted soil waste from the Site and restoration of the disturbed portions of the Site to comparable pre-excavation conditions. The work activities include access road construction, installation of fencing and sheet piles, sampling, excavation, dewatering and disposal activities. The impacted soil waste will be disposed of at an approved facility. The remediation activities will temporary impact approximately 0.95 acres (41,670 SF) for the access road and 3.25 acres (141,550 SF) of wetlands for the work area. The impacted areas will be restored by removing stone access roads and sheet piles, backfilling with fill/soil meeting NYSDEC DER-10 requirements, and seeding with an appropriate seed mixture.

If you have any questions or require additional information, please feel free to contact me at (610) 321-1800 Ext. 15 or candes@croworld.com.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES, INC.

Christopher S. Andes
Wetlands Scientist

CSA/smk/1
Encl.

cc: Mr. Clinton Babcock, Glenn Springs Holdings, Inc.
Mr. Dennis Hoyt, CRA

ATTACHMENT A

JOINT PERMIT APPLICATION FORM



JOINT APPLICATION FORM

For Permits/Determinations to undertake activities affecting streams, waterways, waterbodies, wetlands, coastal areas and sources of water supply.



New York
State

You must separately apply for and obtain separate Permits/Determinations from each involved agency prior to proceeding with work. Please read all instructions.

US Army Corps of
Engineers (USACE)

APPLICATIONS TO 1. NYS Department of Environmental Conservation Check all permits that apply: ☐ Stream Disturbance ☐ Excavation and Fill in Navigable Waters ☐ Docks, Moorings or Platforms ☐ Dams and Impoundment Structures ☒ 401 Water Quality Certification ☐ Freshwater Wetlands ☐ Tidal Wetlands ☐ Coastal Erosion Management ☐ Wild, Scenic and Recreational Rivers ☐ Water Supply ☐ Long Island Well ☐ Aquatic Vegetation Control ☐ Aquatic Insect Control ☐ Fish Control ☐ Incidental Take of Endangered/Threatened Species ☒ I am sending this application to this agency.	2. US Army Corps of Engineers Check all permits that apply: ☐ Section 404 Clean Water Act ☐ Section 10 Rivers and Harbors Act ☒ Nationwide Permit(s) - Identify Number(s): <u>NWP-38</u>	3. NYS Office of General Services Check all permits that apply: ☐ State Owned Lands Under Water ☐ Utility Easement (pipelines, conduits, cables, etc.) ☐ Docks, Moorings or Platforms ☐ I am sending this application to this agency.	4. NYS Department of State Check if this applies: ☐ Coastal Consistency Concurrence ☐ I am sending this application to this agency.
Preconstruction Notification - ☒ Y / ☐ N ☒ I am sending this application to this agency.			

5. Name of Applicant (use full name) Glenn Springs Holdings, Inc., Attn: Mr. Clinton J. Babcock Mailing Address: 5005 LBJ Freeway, Suite 1350 Post Office City: Dallas State: Texas Zip Code: 75244-6119 Telephone (daytime): 972-687-7506 Email: Clint_Babcock@oxy.com	Applicant must be: ☐ Owner ☒ Operator ☒ Lessee (check all that apply) Taxpayer ID (If applicant is NOT an individual):	6. Name of Facility or Property Owner (if different than Applicant) Town of Wheatfield Mailing Address: 2800 Church Road Post Office City: Wheatfield State: NY Zip Code: 14120 Telephone (daytime): 716-964-6440 <i>6680</i> Email: <i>Supervisor@Wheatfield.ny.us</i>
---	---	---

7. Contact/Agent Name Dennis Hoyt Company Name: Conestoga-Rovers & Associates Mailing Address: 2055 Niagara Falls Blvd Post Office City: Niagara Falls State: NY Zip Code: 14304 Telephone (daytime): 716-297-6150 Email: dhoyt@craworld.com	8. Project / Facility Name Nash Road Landfill Property Tax Map Section / Block / Lot Number Project Location - Provide directions and distances to roads, bridges and bodies of waters: Niagara Falls Blvd (US Route 62) North; left on to Nash Road, Site is approximately .6 miles on the left. <table border="1"> <tr> <td>Street Address, if applicable Nash Road</td> <td>Post Office City Wheatfield</td> <td>State NY</td> <td>Zip Code 14120</td> </tr> <tr> <td>Town / Village / City Wheatfield</td> <td colspan="3">County Niagara</td> </tr> <tr> <td colspan="2">Name of USGS Quadrangle Map E TONAWANDA AND W TONAWANDA</td> <td colspan="2">Stream/Water Body Name Sawyer Creek</td> </tr> <tr> <td colspan="4">Location Coordinates: Enter NYTMs in kilometers, OR Latitude/Longitude</td> </tr> <tr> <td>NYTM-E</td> <td>NYTM-N</td> <td>Latitude 43° 04' 08"</td> <td>Longitude 78° 51' 27"</td> </tr> </table>	Street Address, if applicable Nash Road	Post Office City Wheatfield	State NY	Zip Code 14120	Town / Village / City Wheatfield	County Niagara			Name of USGS Quadrangle Map E TONAWANDA AND W TONAWANDA		Stream/Water Body Name Sawyer Creek		Location Coordinates: Enter NYTMs in kilometers, OR Latitude/Longitude				NYTM-E	NYTM-N	Latitude 43° 04' 08"	Longitude 78° 51' 27"
Street Address, if applicable Nash Road	Post Office City Wheatfield	State NY	Zip Code 14120																		
Town / Village / City Wheatfield	County Niagara																				
Name of USGS Quadrangle Map E TONAWANDA AND W TONAWANDA		Stream/Water Body Name Sawyer Creek																			
Location Coordinates: Enter NYTMs in kilometers, OR Latitude/Longitude																					
NYTM-E	NYTM-N	Latitude 43° 04' 08"	Longitude 78° 51' 27"																		

For Agency Use Only	DEC Application Number:	USACE Number:
----------------------------	-------------------------	---------------

JOINT APPLICATION FORM - PAGE 2 OF 2
Submit this completed page as part of your Application.

9. **Project Description and Purpose:** Provide a complete narrative description of the proposed work and its purpose. Attach additional page(s) if necessary. Include: description of current site conditions and how the site will be modified by the proposed project; structures and fill materials to be installed; type and quantity of materials to be used (i.e., square ft of coverage and cubic yds of fill material and/or structures below ordinary/mean high water) area of excavation or dredging, volumes of material to be removed and location of dredged material disposal or use; work methods and type of equipment to be used; pollution control methods and mitigation activities proposed to compensate for resource impacts; and where applicable, the phasing of activities. **ATTACH PLANS ON SEPARATE PAGES.**

See attached Compliance Statement

Proposed Use: ☒ Private ☐ Public ☐ Commercial	Proposed Start Date: 9-15-14	Estimated Completion Date: 12-15-14
Has Work Begun on Project? ☐ Yes ☒ No If Yes, explain.		
Will Project Occupy Federal, State or Municipal Land? ☐ Yes ☒ No If Yes, please specify.		

10. List Previous Permit / Application Numbers (if any) and Dates:
Not Applicable

11. Will this project require additional Federal, State, or Local Permits including zoning changes? ☒ Yes ☐ No If yes, please list:
See attached Compliance Statement

12. **Signatures.** If applicant is not the owner, both must sign the application.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Signature of Applicant <i>Clint Babcock</i>	Clint Babcock Printed Name	Project Manager Title	8-15-14 Date
Signature of Owner <i>Robert B. Cliffe</i>	Robert B. Cliffe Printed Name	Supervisor Title	8-15-14 Date
Signature of Agent <i>Sharon McEvoy</i>	Sharon McEvoy Printed Name	on behalf of Dennis Hoyt Engineer Title	8/15/14 Date

For Agency Use Only

DETERMINATION OF NO PERMIT REQUIRED

Agency Project Number _____

(Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative: Name (printed) _____ Title _____
Signature _____ Date _____

ATTACHMENT B

JURISDICTIONAL DETERMINATION REQUEST



Request for a Jurisdictional Determination

This form can be used by individual property owners proposing to perform work on their own property or those attempting to sell/buy property for non-commercial uses and wish to determine if areas on the property contain wetlands or waterways subject to regulatory requirements of the U.S. Army Corps of Engineers (USACE). Please supply the following information and supporting documents described below. This form can be filled out online and then printed. It **must be signed by the property owner** to be considered a formal request. Submitting this request authorizes the USACE to field inspect the property site, if necessary, to help in the determination process. The printed form and supporting documents should be mailed to:

Regulatory Branch
U.S. Army Corps of Engineers, Buffalo District
1776 Niagara Street
Buffalo, New York 14207-3199

Please contact us at 716-879-4330 if you need any assistance with filling out this form.

Location and Information about Property to be subject to a Jurisdictional Determination

Property Address/Location: Nash Road

Town/City: Wheatfield State: NY Zip: 14120

County: Niagara Township name: Wheatfield

Lat/Long in Decimal Degrees: 43.068889 °N 78.8575 °W

Size of Property in Acres: 20 acres (Include a survey of the property) *** see note below

Prior or related USACE project number: N/A

Is the property subject to a conservation easement or deed restriction? (☐ Yes or ☒ No)

If yes, please explain and submit details of the project area.

Was the property a site for mitigation pursuant to a project previously permitted by USACE?

(☐ Yes or ☒ No) If yes, please explain and submit details of the project area.

Is the property neighboring/adjacent to/bordering a project previously permitted by the USACE?

(☐ Yes or ☒ No) If yes, please explain and submit the name of the project, the permittee's name and/or address, and Corps permit number, if available:

Property Owner Contact Information:

Property Owner Name: Town of Wheatfield
Mailing Address: 2800 Church Road
City: Wheatfield State: NY Zip: 14120
Daytime Telephone: 716-964-6440 ⁶⁶⁸⁰ Fax: _____
E-Mail Address: Supervisor@wheatfield.ny.us

If the person requesting the Jurisdictional Determination is **not** the Property Owner, please also supply the Requestor's contact information here:

Requestor Name: Glenn Springs Holdings, Inc., Attn: Mr. Clinton J. Babcock
Interest in Property, e.g. purchaser Site Remediation
Mailing Address: 5005 LBJ Freeway, Suite 1350
City: Dallas State: TX Zip: 75244-6119
Daytime Telephone: 972-687-7506 Fax: 972-687-7524
E-Mail Address: Clint_Babcock@oxy.com

***Note: If the area of proposed work activity on the parcel is less than the total area/acreage of the parcel, distinguish this on the survey map and stake the area out on the site. This will facilitate the Corps field visit by focusing our investigation of the site.

Additionally, if you have any of the following information, please include it with your request: past wetland delineation, relevant maps, drain tile survey, topographic survey, site photographs.

If you are considering doing work on the property, please identify on the site map, survey, or a separate drawing: the footprint, location, and type of potential work. It will assist us in the determination process and reduce unnecessary delays of processing subsequent permits, if required.

PLEASE NOTE: Given heavy workloads, especially during the Spring and Summer months, it may take several months before the Corps is able to inspect your property. Property owners always have the option of securing the services of a consultant to delineate wetlands or waterways and then submit the report for verification by the Corps.

I hereby certify that the information contained in the Request for a Jurisdictional Determination is accurate and complete:

Signature of Property Owner:

Date:



8-15-17

ATTACHMENT C

FIGURES



SOURCE: NEW YORK STATE CLEARINGHOUSE, 2011 IMAGE DATASET

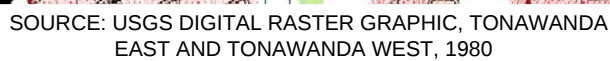
figure 1

SITE LOCATION MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



LEGEND

- SITE PROPERTY LINE
- WETLAND STUDY AREA



SITE TOPOGRAPHY MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



- SITE PROPERTY LINE
 WETLAND STUDY AREA



SOURCE: NEW YORK STATE CLEARINGHOUSE, 2011 IMAGE DATASET



LEGEND

-  SITE PROPERTY LINE
-  WETLAND STUDY AREA

figure 3

AERIAL PHOTOGRAPH OF SITE
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York

ATTACHMENT D

COMPLIANCE STATEMENT

1.0 Introduction

A Nationwide Permit 38 (Clean-up of Hazardous Waste and Toxic Waste) (NWP-38) is required for Glenn Springs Holdings, Inc. (Applicant) to address the presence of soils impacted by industrial waste located in the northeast portion of the former Nash Road Landfill (Site). The Site is currently undergoing site remediation (Project) under the guidance of the New York State Department of Environmental Conservation (NYSDEC) (Site #932054). The Interim Remedial Measure Work Plan (Plan) (Dated August 2014), has been prepared by Conestoga-Rovers & Associates, Inc. (CRA) and was approved by the NYSDEC. The Plan is included in Attachment E.

2.0 Site Description and History

The Site is located in the Town of Wheatfield in Niagara County, New York. It is situated immediately north of the City of North Tonawanda city limits and east of Nash Road. A Site Location Plan is provided as Figure 1. The Site is also depicted on the 7.5-minute USGS topographic quadrangle map (Tonawanda West and Tonawanda East, NY) (Figure 2) and on a recent aerial photograph (Figure 3). These figures are provided in Attachment C.

The Site is a rectangular-shaped property encompassing approximately 20 acres. The Site is wooded with trees and heavy brush and contains areas of seasonally-influenced ponded water. Current access to the Site is not provided by any immediately identifiable means; however, historic access to the Site for disposal activities occurred along a haul road that was constructed from Nash Road, located west of the Site. The Study Area for the wetland investigation/delineation is comprised of approximately 7.0 acres in the eastern portion of the Site. The Site is bordered to the north by the Holy Infant Shrine, to the east by a cemetery and a property that contains a motel and livery service, to the south by utility right-of-ways (overhead electric and underground natural gas and brine pipelines) and residences, and to the west by undeveloped land and Nash Road. The Work Area includes all areas that could be potentially impacted by the remedial activities and the access route.

The wetlands within the Project Site were delineated by CRA on April 23, and 24, 2014 (Attachment E). CRA delineated one large wetland complex within the Study Area. The majority of the Project Site is comprised of wooded, scrub-shrub wetlands and emergent wetlands. Small upland areas were delineated within the former haul road alignment within the western portion of the Study Area. The wetlands within the Study Area are part of a larger forested/emergent wetland complex along Nash Road and the adjacent overhead electric lines. The wetlands within the Project Site have been historically disturbed by the construction of a landfill and haul road during the 1960's, the installation of groundwater monitoring wells by the NYSDEC, ATV trails and the installation of underground pipelines. The northeastern portion of the Project Site contains drainage ditches associated with the wetlands along the northern and

eastern property lines. These drainage ditches appear to flow off-site via an 18-inch PVC culvert pipe associated with a pond (off-site). The pond appears to be hydrologically connected to Sawyer Creek via a series of ditches and culvert pipes. The wetlands in the western portion of the Project Site receive their hydrology from a series of road side swales and ditches located west of Nash Road.

The Nash Road Landfill was operated by the Niagara Sanitation Company between 1964 and 1968 for disposal of municipal and industrial wastes. NYSDEC records show that the Site was used for the disposal of industrial and municipal wastes by the Niagara Falls Air Force Base, Bell Aerospace, Carborundum Corporation, Frontier Chemical, Graphite Specialties, Continental Can, and Grief Brothers, as well as local municipalities. Historical records also indicate that the New York State Department of Transportation (NYSDOT) utilized the Site for the disposal of approximately 1,600 cubic yards of material excavated during a sewer relocation project along Frontier Avenue in Niagara Falls, New York, as part of the LaSalle Expressway construction in 1968. The historical records indicate that the 1,600 cubic yards of excavated materials disposed at the Site potentially contained as much as 1,000 cubic yards of industrial wastes associated with the Love Canal Landfill. According to the available documents, the excavated materials were placed into a trench at the northeast end of the Site that was excavated into underlying clay and then covered with soil as well as other municipal and industrial wastes. Waste disposal activities at the Site ended in 1968.

3.0 Project Purpose and Description

The purpose of the requested NWP-38 is to remove the industrial wastes suspected of being associated with road construction activities completed by the NYSDOT during the construction of the LaSalle Expressway along the former Love Canal landfill. The investigations performed at the Site indicate that the current environmental impacts are limited to the general area where the industrial wastes were originally placed. As such, the proposed remediation will prevent potential impacts to human health and the environment from occurring in the future.

The Plan will be implemented to remove the impacted soil wastes from the Site and restore the disturbed portion of the Site to comparable pre-excavation conditions. The Plan outlines the work activities and their location (access roads, fencing, sampling, sheet pile, excavation, dewatering and disposal activities). The remediation activities will temporarily impact approximately 0.95 acres (41,670 SF) for the access road and 3.25 acres (141,550 SF) of wetlands within the Project Site. Alternative alignments for the access road were evaluated using the adjacent utility easements (overhead electric line and natural gas and brine pipelines), but access to the easements were not granted due to concerns of impacts by the access road on the lines. The Plan also details the restoration of the impacted area which will be to remove the stone access road, remove sheet piles, backfill with fill/soil meeting NYSDEC DER-10

requirements for fill use, and topsoil and seed with an appropriate seed mixture. The remediation activities associated with the Project are depicted on the Wetland Permitting Plans (Attachment I).

4.0 Activities Authorized By Nationwide Permit 38 (Clean-up of Hazardous and Toxic Waste) Within the State Of New York (General and Regional Permit Conditions. (Expiration March 18, 2017)

Specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. Court ordered remedial action plans or related settlements are also authorized by this NWP. This NWP does not authorize the establishment of new disposal sites or the expansion of existing sites used for the disposal of hazardous or toxic waste.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Sections 10 and 404)

This application serves as the pre-construction notification to the District Engineer for the remediation of the Site.

Note: Activities undertaken entirely on a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site by authority of CERCLA as approved or required by EPA, are not required to obtain permits under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

The activities are not taking place on a CERCLA site, thus a permit under Section 404 of the Clean Water Act is required.

- **Buffalo District Only Permit-specific Regional Conditions:** None
- **Section 401 Water Quality Certification:**

The New York State Department of Environmental Conservation (NYSDEC) has denied Section 401 Water Quality Certification in New York State for this Nationwide Permit. Any party conducting the activities authorized by this NWP must apply for and obtain an individual Section 401 Water Quality Certification from the New York State Department of Environmental Conservation.

This Application also serves as the compliance document for the NYSDEC Individual Section 401 Water Quality Certification.

- **New York State Department of State Coastal Zone Management Consistency Determination:**

Pursuant to 15 CFR Part 930.41, the New York State Department of State (NYSDOS) concurs with the USACE consistency determination for this NWP with which all general and all Buffalo and New York District regional conditions are complied.

The Site is not located in a New York State Department of State Coastal Zone Management Area.

C. Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

The Project is not located within a Section 10 or Navigable Water. The Project will not impact Navigation.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

The Project will not impact the movements of aquatic life.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

There are no anticipated impacts to spawning areas by the Project. Strict Erosion and Sedimentation measures will be implemented on the Project Site.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

There are no anticipated impacts to migratory bird breeding areas by the proposed Project.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

The Project will not impact shellfish beds, since it is not related to a shellfish harvesting activity.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

The Project will use suitable fill and other construction materials that will be free from toxic pollutants in toxic amounts under Section 307 of the Clean Water Act. The fill and other soil material will meet the NYSDEC DER-10 requirements for fill use.

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

The Project will not take place in the proximity of a public water supply intake.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of

water, and/or restricting its flow must be minimized to the maximum extent practicable.

The Project will not create an impoundment of water.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

The Project will maintain to the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters.

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

The FEMA Map Panel Number 36063C0353E, effective on 09/17/2010 does not map any floodplains within the Project Area, thus the Project will not impact the 100-year floodplain.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

Access roads and the operations area will be constructed on Site in the locations shown on the Plan. Current access to the Project Site is not provided by any immediately identifiable means; however, historic access to the Site for disposal activities occurred along a haul road that was constructed from Nash Road, located west of the Project Site. The temporary fills are required during excavation activities to allow for vehicle access into the Project Site and to the support and material loading areas. The access road is intended to provide a stable base for heavy machinery operation and will be constructed of compacted #2 size run of crusher stone and/or crushed recycled asphalt to reduce the potential for dust generation. The access roads will be underlain by a geotextile fabric to limit soil disturbance and allow for their removal. Once the activities are completed the access road within the wetlands will be removed and the areas will be stabilized with an approved seed mixture.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

Erosion and Sediment Controls will be implemented as part of the Project in accordance with the New York State Standards and Specifications for Erosion and Sediment Control. There will also be dust and odor control Best Management Practices implemented as part of the proposed project. The sediment and erosion control methods employed will be inspected and maintained daily and repaired as needed.

The project will be subject to the NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction GP-0-10-001 (Construction General Permit). A Construction Stormwater Pollution Prevention Plan (Construction SWPPP) will be prepared by CRA as part of the coverage of the Construction General Permit. The Construction SWPPP will include the stormwater management practices to be followed during field activities, including Erosion and Sediment Control practices.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

The temporary fills for the Project (access road and the remediation activities) will be removed and the areas will be returned to pre-construction grades, as feasible. The area will be stabilized using an appropriate seed mixture.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

The activities authorized for this Project under the NWP-38 will be properly maintained in accordance with the NWP conditions and the Plan.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

The activities authorized for this Project under the NWP-38 are a single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

The Project will not impact the National Wild and Scenic River System (officially designate or Study River). No National Wild and Scenic Rivers are found within Niagara County (<http://www.rivers.gov/new-york.php>).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

The Project will not impact tribal rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

CRA reviewed the U.S. Fish and Wildlife Service's Information, Planning and Consultation system (IPaC) for potential threatened and endangered species in the vicinity of the Project Site. The IPaC review identified the northern long-eared bat (*Myotis septentrionalis*), a proposed endangered species, within the vicinity of the Site. While the northern long-eared bat was identified within the vicinity of the Site, the IPaC review did not identify any critical habitat for the northern long-eared bat within the Site boundaries. The Project is not anticipated to impact the population of northern long-eared bat or the habitat of migratory birds due to the existing conditions, historically disturbed nature of the Site, and surrounding land-uses. CRA also reviewed the NYSDEC Environmental Resource Mapper for threatened and endangered species within the Site. This program did not identify

any threatened and endangered species within the Site. Letters were submitted to the U.S. Fish and Wildlife Service's and NYSDEC's Natural Heritage Programs to identify potential conflicts with threatened or endangered species within the Project Area (Attachment G).

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.

There are no anticipated impacts to migratory birds or eagles (Bald or Golden) by the proposed Project. The proposed project will not require a "take" permit required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. A letter was submitted to the U.S. Fish and Wildlife Service to identify potential conflicts under the Bird Treaty Act or the Bald and Golden Eagle Protection Act within the Project Area (Attachment G).

20. Historic Properties. In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

The Project Site is not listed on the National or State Register of Historic Places. The Project Site is currently undeveloped (absence of buildings and structures) and was historically used as a landfill during the 1960's. The industrial wastes within the soils on the Site are located approximately 10 to 12 feet below the existing ground surface. The majority of the Site has been historically excavated and disturbed (underground pipelines, landfill activities and monitoring well installation). A letter was submitted to the New York State Office of Parks and Recreation and Historic Preservation (NYPRHP), Historical Preservation Field Services Bureau to identify potential conflicts with historical sites within the Project Area (Attachment G).

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate

the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

The Project is located within a Site that has been historically excavated and filled due to its previous use as a landfill. If during the excavation activities any previously unknown historic, cultural or archeological remains and/or artifacts are discovered, the construction will cease and the district engineer will be immediately notified. The majority of the soil within the Project Site was historically excavated to approximately 10 to 12 below the ground surface and removed to allow for the placement of industrial waste in the 1960's. The historical excavations (landfill creation, installation of groundwater monitoring wells and underground pipelines) and soil removal limit the potential for archeological resources within the Project Site.

A letter was submitted to the New York State Office of Parks and Recreation and Historic Preservation (NYPRHP), Historical Preservation Field Services Bureau to identify potential conflicts with historical or archeological sites within the Project Area (Attachment G).

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

The Project is not located within a designated critical resource water, thus not applicable.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal.

There is no mitigation required as part of the Project. As described in the Plan, the Project will be implemented to remove the impacted soil wastes from the Site and restore the disturbed portion of the Site to comparable pre-excavation conditions. The Plan outlines the work activities and their location (access roads, fencing, sampling, sheet pile, excavation, dewatering and disposal activities). The remediation activities will temporarily impact approximately 0.95 acres (41,670 SF)

for the access road and 3.25 acres (141,550 SF) of wetlands within the Project Site. The Plan also details the restoration of the impacted area which will be to remove the stone access road, remove sheet piles, backfill with fill/soil meeting NYSDEC DER-10 requirements for fill use, and topsoil and seed with an appropriate seed mixture.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

This Application also serves as the compliance document for the NYSDEC Individual Section 401 Water Quality Certification. The Project will not degrade the water quality within the Project Site or Sawyer Creek. The Project will improve water quality by removing impacted soil wastes from the Project Site and disposing of it in an approved disposal facility.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

The Project Site is not located within a Coastal Management Area, thus is not applicable.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

The Project will comply with the regional and case-by-case conditions for the NWP and section 401 Water Quality Certification.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is

ACOE NWP-38 and NYSDEC Individual Section 401 Water Quality Certification
Compliance Document
Former Nash Road Landfill
Interim Remedial Action Work Plan
Town of Wheatfield, Niagara County, New York

constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

All proposed Project activities can be completed under NWP-38. Therefore, the use of multiple NWPs will not be required.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer.

If a transfer of the NWP-38 is required, the Applicant will transfer the permit in accordance with Item #29.

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter.

Once the activities are completed under the NWP, the Applicant will notify the USACE via a letter in accordance with Item #30.

31. Pre-Construction Notification.

This Application also serves as the pre-construction notification.

ATTACHMENT E

INTERIM REMEDIAL ACTION WORKPLAN

ATTACHMENT F

WETLAND DELINEATION REPORT



410 Eagleview Blvd, Suite 110
Exton, Pennsylvania 19341
Telephone: (610) 321-1800 Fax: (610) 321-2763
<http://www.craworld.com>

August 19, 2014

Reference No. 085121

Mr. Clinton J. Babcock
Glenn Springs Holdings, Inc.
5005 LBJ Freeway, Suite. 1350
Dallas, Texas 75244-6119

Dear Mr. Babcock:

Re: Wetland Delineation Report
Interim Remedial Measures Work Plan
Glenn Springs Holdings, Inc.
Nash Road Landfill Project
Town of Wheatfield, Niagara County, New York

Conestoga-Rovers & Associates, Inc. (CRA) was retained by Glenn Springs Holdings, Inc. to conduct a wetland delineation as part of the Interim Remedial Measures Work Plan for the former Nash Road Landfill (Site). The Site is located on the eastern side of Nash Road in the Town of Wheatfield, Niagara County, New York. CRA's Study Area for the wetland delineation consisted of the proposed area of excavation, sheet pile exclusion zone, support zone and access road located in the northeastern portion of the Site. The location of the Site and Study Area are depicted on Figure 1. The access road generally parallels the southern property line in a westerly direction towards Nash Road. The results of the wetland delineation conducted on April 23 and 24, 2014 are discussed in the following paragraphs.

1.0 Introduction

This report discusses the methodology and results of CRA's wetland delineation. This report also includes copies of the 7.5-minute USGS topographic quadrangle map (Tonawanda West and Tonawanda East, NY) (Figure 2), a recent aerial photograph (Figure 3), the Natural Resource Conservation Service (NRCS) Soil Survey for Niagara County (Figure 4), the United States Fish and Wildlife Service National Wetland Inventory (NWI) Map (Figure 5), survey plans showing the Study Area boundaries, wetland areas and existing features (Figures 6A and 6B), and the New York State Department of Environmental Conservation (NYSDEC) Environmental Resource Map (Figure 7), each depicting the location of the Study Area. Completed data forms documenting the establishment of the wetland boundaries within the Study Area are provided in Appendix A. Appendix B contains color photographs documenting the existing conditions observed within the Study Area during the field investigation on April 23 and 24, 2014.



**CONESTOGA-ROVERS
& ASSOCIATES**

August 19, 2014

Reference No. 085121

- 2 -

2.0 Methodology

Prior to CRA's field inspection of the Study Area, CRA reviewed available secondary sources of information including: the USGS topographic map, the Niagara County Soil Survey, recent aerial photographs and other available resource mapping. These secondary sources of information are often useful in identifying areas that may contain wetlands.

CRA's wetland delineation was conducted in accordance with the methods of the Corps 1987 Wetland Delineation Manual and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0). According to this methodology, wetlands are identified by the presence of three parameters: hydrophytic vegetation, hydric soil and positive indicators of wetland hydrology. Typically all three parameters must be present for an area to be considered jurisdictional wetlands. However, in areas where one or more of the wetland areas have been significantly disturbed (e.g. mowed lawn areas, farmed areas, etc.) the remaining parameters and best professional judgment are used to delineate the extent of jurisdictional wetlands.

3.0 Site Description and Review of Secondary Data

The Study Area is comprised of the former Nash Road Landfill which was operated by the Niagara Sanitation Company between 1964 and 1968 for disposal of municipal and industrial wastes. The Site is a rectangular-shaped property (historically disturbed) encompassing approximately 20 acres and is wooded with trees and heavy brush with areas of seasonally-influenced surface and groundwater. The Study Area for the wetland delineation is approximately 7 acres in size. Current access to the Study Area is not provided by any immediately identifiable means; however, historic access to the Site for disposal activities occurred along a haul road that was constructed from Nash Road, west of the Site. The Study Area is currently undergoing site remediation under the guidance of the New York State Department of Environmental Conservation (NYSDEC) (Site #932054).

As shown on USGS Quadrangle Map for Tonawanda (East and West), New York (Figure 2), the Study Area is bordered to the north by the Holy Infant Shrine, to the east by a cemetery and a property that contains a motel and livery service, to the south by utility rights-of-ways (overhead electric and underground natural gas and brine pipelines) and residences, and to the west by undeveloped land and Nash Road. The topography within the Study Area is relatively flat. The USGS map does not identify any wetlands within the Study Area but it does map an open water feature in the northeastern portion of the Study Area.

August 19, 2014

Reference No. 085121

- 3 -

A recent aerial photograph (Figure 3) shows the existing conditions within the Study Area. As shown on Figure 3, the Study Area is primarily woodlands with a series of dirt trails. There are two small open water features within the Study Area (along Nash Road and in the northeastern corner). The western portion of the Study Area contains a roadside swale that runs parallel to Nash Road and is fed by a culvert underneath Nash Road. The culvert pipe receives drainage from a roadside swale and a drainage ditch located west of Nash Road. The northeastern portion of the Study Area contains drainage ditches along the northern and eastern property lines. These drainage ditches appear to flow off-site via an 18-inch PVC pipe to a man-made pond on an adjacent property. The pond appears to be hydrologically connected to Sawyer Creek via a ditch and a culvert pipe underneath Niagara Falls Boulevard. Sawyer Creek flows in a southeasterly direction before discharging to the main stem of Tonawanda Creek, which ultimately discharges to the Niagara River.

As shown in the Natural Resource Conservation Service (NRCS) Niagara County Soil Survey (Figure 4), the following soil series are mapped within the Study Area:

- Ca: Canandaigua silt loam; very poorly drained; predominately hydric
- RaA: Raynham silt loam, 0 to 2 percent slopes; poorly drained, partially hydric.

The mapped soils within the Study Area are rated as predominantly hydric (Canandaigua) to partially hydric (Raynham) according to the NRCS Niagara County Soil Survey. The Raynham soil series is mapped within the majority of the Study Area. The Canandaigua soil series bisects the central portion of the Study Area (access road).

The National Wetlands Inventory (NWI) Map (Figure 5) identifies two wetland complexes, freshwater forested and shrub wetlands (PFO1Bds and PSS1Ad), and two open water features (PUBHx and PUBFx) within the Study Area. The NWI Map also identifies two wetland complexes immediately adjacent to the Study Area comprised of freshwater forested (PFO1B) and emergent (PEM1Bd) wetlands. The NYSDEC Resource Mapper (Figure 7) does not identify any New York State regulated wetlands, wetland check zones (buffers) or waters within the Study Area.

4.0 Results of Site Investigation

The majority of the Study Area is comprised of wooded, scrub-shrub wetlands and emergent wetlands. CRA delineated one large wetland complex within the Study Area. Small upland

August 19, 2014

Reference No. 085121

- 4 -

areas were delineated within the former haul road alignment within the western portion of the Study Area. The wetland area within the Study Area is part of a larger forested/emergent wetland complex along Nash Road and the adjacent overhead electric lines. The wetlands within the Study Area have been historically disturbed by the construction of a landfill and haul road during the 1960's, the installation of groundwater monitoring wells by the NYSDEC, ATV trails and the construction of underground pipelines. The northeastern portion of the Study Area contains drainage ditches associated with the wetlands along the northern and eastern property lines. These drainage ditches appear to flow off-site via an 18-inch PVC culvert pipe associated with a pond (off-site). The pond appears to be hydrologically connected to Sawyer Creek via a series of ditches and culvert pipes. The wetlands in the western portion of the Study Area receive their hydrology from a series of road side swales and ditches located west of Nash Road.

The wetland and upland areas are discussed in more detail in the following sections.

4.1 Wetland Areas

The wetlands with the Study Area total approximately 6.0 acres. Flags WA-101 to WA-130, WB-101 to WB-115, WC-101 to WC-134 and WG-101 to WG-114 delineate the extent of wetlands with the Study Area. The wooded portions of the wetland are dominated by eastern, cottonwood (*Populus deltoides*), black willow (*Salix nigra*), weeping willow (*Salix babylonica*), silver maple (*Acer saccharinum*), green ash (*Fraxinus pennsylvanica*), pin oak (*Quercus palustris*), gray birch (*Betula populifolia*), spicebush (*Lindera benzoin*), silky dogwood (*Cornus amomum*), common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*) and sensitive fern (*Onoclea sensibilis*). Small pockets of emergent wetlands were identified along a former access road alignment adjacent to the overhead utility line and within the northwestern corner of the Study Area. The vegetation with the emergent wetlands is dominated by reed canary grass, common reed, broad-leaved cattail (*Typha latifolia*), soft rush (*Juncus effusus*), purple loosestrife (*Lythrum salicaria*) and sedge/rush species (*Carex* and *Juncus* spp.).

The soils within the Study Area were comprised of historical fill (possibly dredge material) used to cover the landfill. The soils within the wetlands in the Study Area are highly variable due to the use of fill and other historical disturbances. The soil from 0-18 inches was generally observed to be a mixture of black (10YR 2/1), very dark gray (10YR 3/1), dark gray (10YR 4/1), gray (10YR 5/1), very dark brown (10YR 2/2), dark grayish brown (10YR 4/2) and brown (10YR 5/2) clay loam with yellowish red (5YR 5/8), strong brown (7.5YR 5/8) and yellowish brown (10YR 5/6) concentrations. The majority of the Study Area primarily receives its hydrology from

August 19, 2014

Reference No. 085121

- 5 -

a perched seasonal high groundwater table and surface runoff from the adjacent ditches and housing developments. Indicators of wetland hydrology observed included saturation of the soil at the ground surface, ponded surface water (0-12 inches in depth), groundwater in soil borings at the ground surface, blackened leaves, drainage patterns, and water marks on trees. The wetlands within the Study Area are documented on Data Forms DP-101 through DP-108, DP-110, DP-111, DP-114 and DP-115 in Appendix A and in the color photographs in Appendix B.

4.2 Uplands

The uplands within the Study Areas include small pocket uplands associated with a former access road, the former landfill, and portions of a pipeline (gas and brine line) easement. Flags WD-101 to WD-125, WE-101 to WE-125 and WF-101 to WG-122 delineate the extent of uplands associated with the former haul road within the Study Area. The dominant vegetation on the upland portions of the haul road consists of white oak (*Quercus alba*), black cherry (*Prunus serotina*), eastern cottonwood, multiflora rose (*Rosa multiflora*), Canada goldenrod (*Solidago canadensis*) ground ivy (*Glechoma hederacea*), common dandelion (*Taraxacum officinale*), plantain (*Plantago major*) Queen Anne's lance (*Daucus carota*), wild onion (*Allium vineale*), Kentucky bluegrass (*Poa pratensis*) and milkweed (*Asclepias syriaca*). Similar to the soil in the wetlands, the soil within the upland areas of the former haul road and landfill are comprised of fill and from 0 to 18 inches generally consist of a mixture of dark yellowish brown to very dark grayish brown (10YR 3/2), dark grayish brown (10YR 4/2) and dark brown (10YR 3/3) silt loam. Indicators of wetland hydrology were absent within the uplands portions of the Study Area. The uplands within the Study Area are documented on Data Forms DP-109, DP-111 and DP-113 in Appendix A and in the color photographs in Appendix B.

5.0 Conclusions

CRA's wetland investigation for the proposed remediation project identified and delineated wetlands within a large portion of the Study Area. The majority of the Study Area is comprised of wooded, scrub-shrub and emergent wetlands with small upland areas within the former haul road alignment within the western portion of the Study Area. The Study Area historically disturbed by former landfill activities within the Site and other past uses. The soils within the Study Area were comprised of historical fill (possibly dredge material) used to cover the landfill.

Wetlands and waterways are regulated by the United States Army Corps of Engineers (COE) and/or the NYSDEC. Activities such as earth disturbance, filling, or excavation in these areas will likely require permits or approvals from these agencies. Therefore, a Jurisdictional



**CONESTOGA-ROVERS
& ASSOCIATES**

August 19, 2014

Reference No. 085121

- 6 -

Determination from the COE and NYSDEC will be applied for as part of the Nationwide Permit 38 (NWP-38) application and NYSDEC Water Quality Application. The NWP-38 application will authorize activities associated with the remediation Project that will temporarily impact the delineated wetland areas within the Study Area.

If you require any additional information or assistance, please contact me at (610) 321-1800 ext. 15 or at candes@croworld.com.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Christopher S. Andes
Wetlands Scientist

CSA/smk/1
Encl.

cc: Mr. Dennis Hoyt, P.E., Conestoga-Rovers & Associates

FIGURES



SOURCE: NEW YORK STATE CLEARINGHOUSE, 2011 IMAGE DATASET

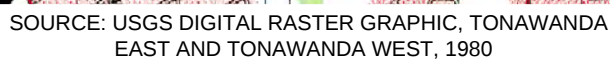
figure 1

SITE LOCATION MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



LEGEND

- SITE PROPERTY LINE
- WETLAND STUDY AREA



SITE TOPOGRAPHY MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



LEGEND

- SITE PROPERTY LINE
 WETLAND STUDY AREA



SOURCE: NEW YORK STATE CLEARINGHOUSE, 2011 IMAGE DATASET



LEGEND

-  SITE PROPERTY LINE
-  WETLAND STUDY AREA

figure 3

AERIAL PHOTOGRAPH OF SITE
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



Legend

Study Area
Site

Niagara County Soils

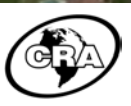
Soil Name, Symbol

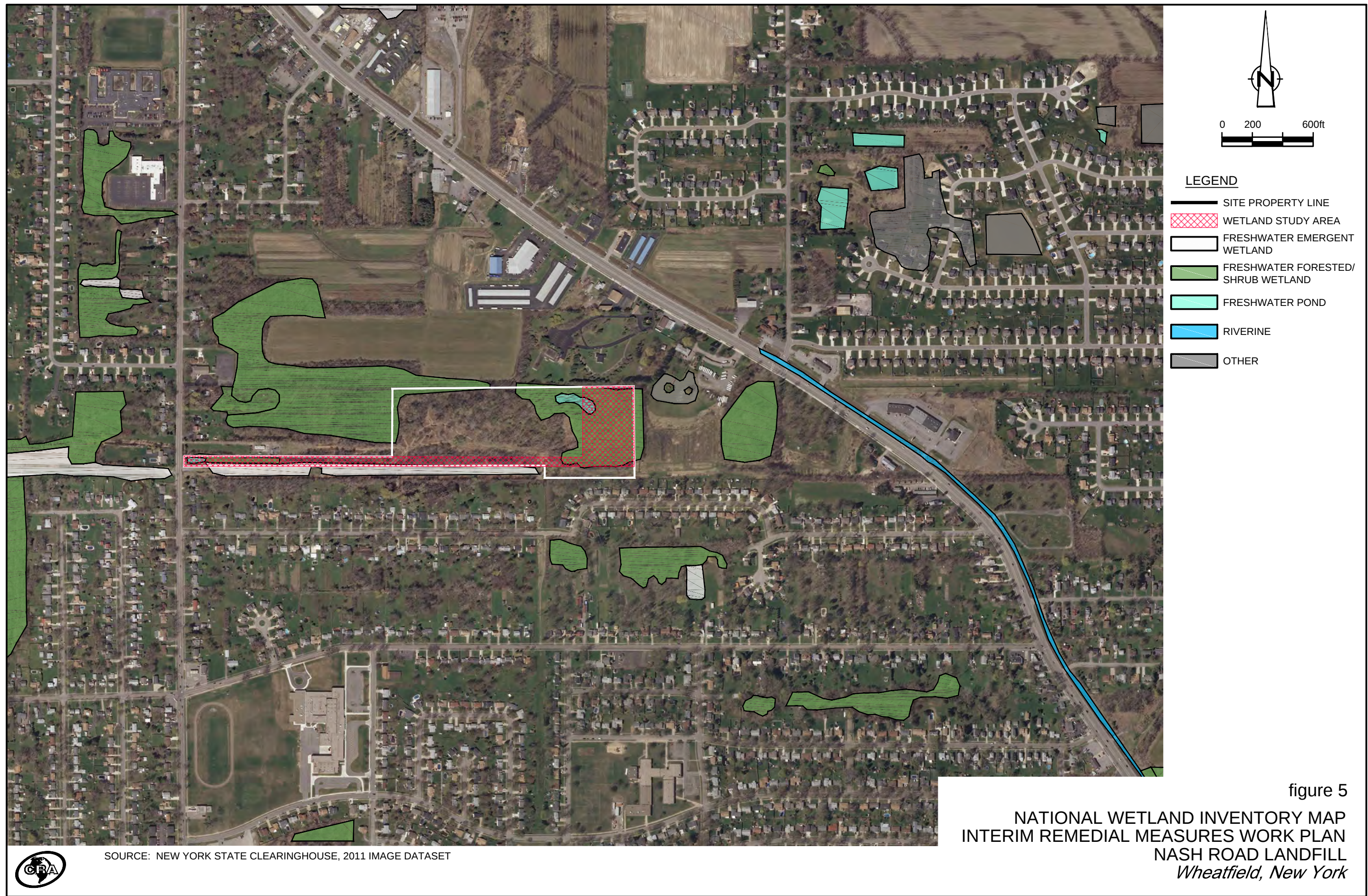
Canandaigua silt loam (Ca)

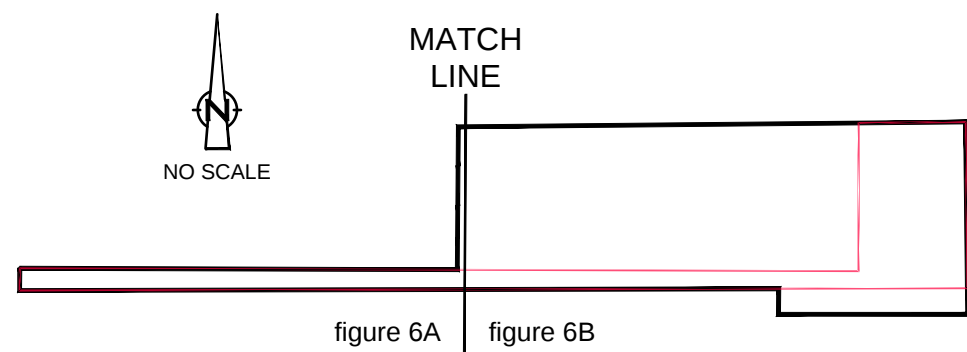
Raynham silt loam, 0 to 2 percent slopes (RaA)

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

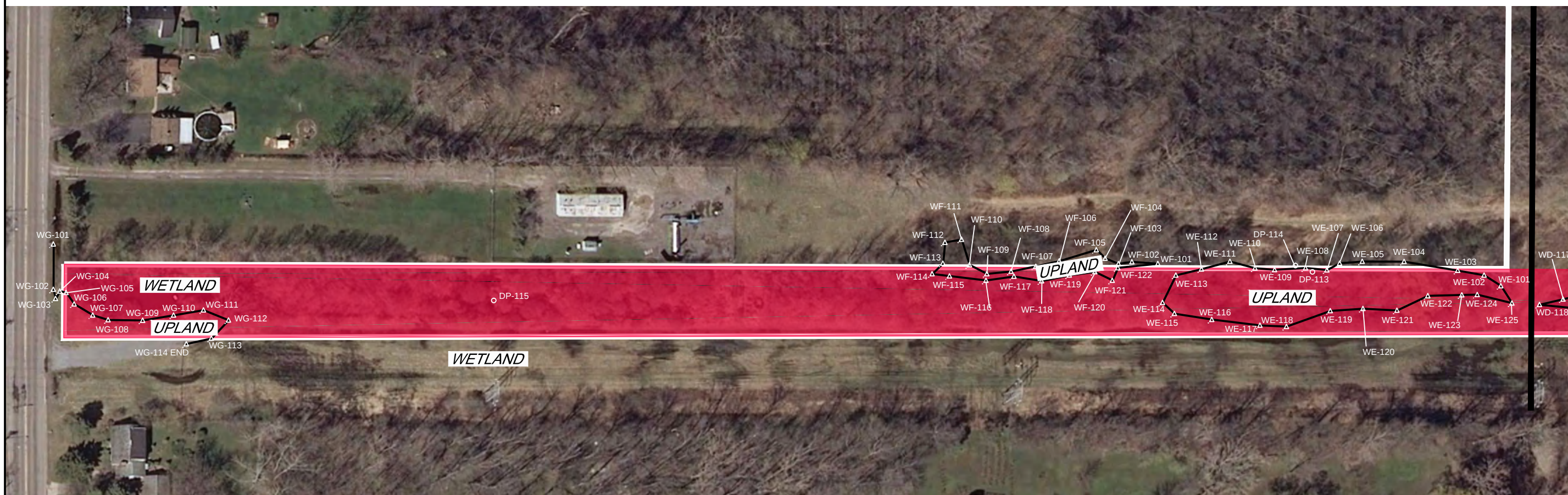
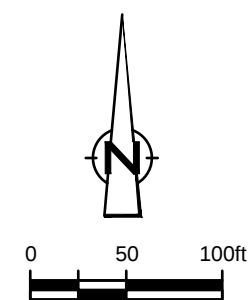
figure 4
SOILS MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York







KEY MAP



SOURCE: NEW YORK STATE CLEARINGHOUSE, 2011 IMAGE DATASET

LEGEND

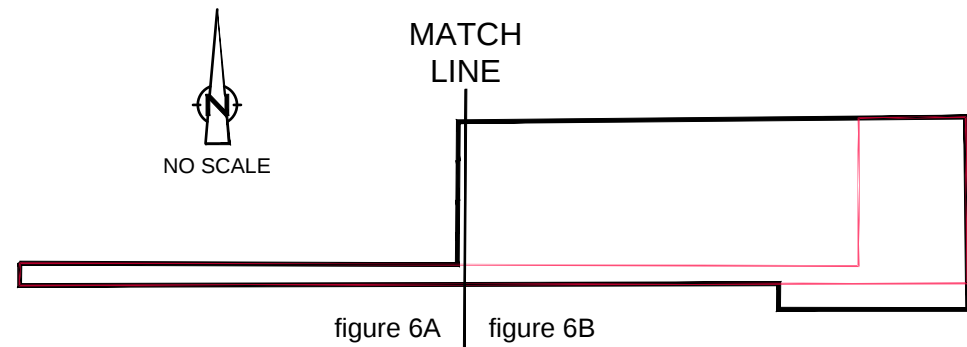
-  SITE PROPERTY LINE
-  WETLAND STUDY AREA
- WF-104  CRA WETLAND DELINEATION SURVEY POINT
- DP-115  CRA DATAPPOINT

NOTE:

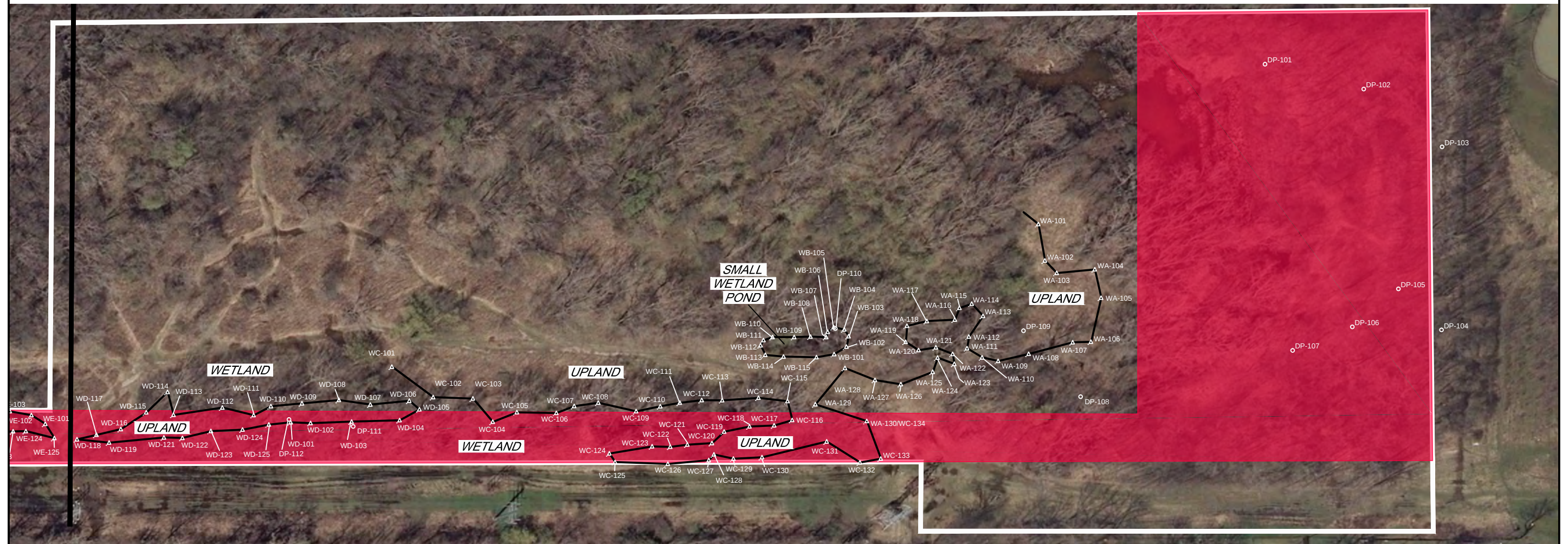
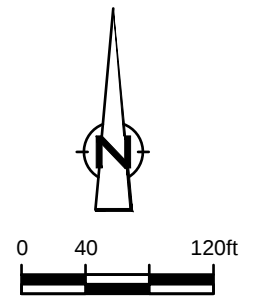
WETLANDS DELINEATED BY
CRA ON APRIL 23-24, 2014



figure 6A
WETLAND DELINEATION PLAN
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



KEY MAP



SOURCE: NEW YORK STATE CLEARINGHOUSE, 2011 IMAGE DATASET

LEGEND

- SITE PROPERTY LINE
- WETLAND STUDY AREA
- WF-104 ▲ CRA WETLAND DELINEATION SURVEY POINT
- DP-115 ○ CRA DATAPPOINT

NOTE:

WETLANDS DELINEATED BY
CRA ON APRIL 23-24, 2014

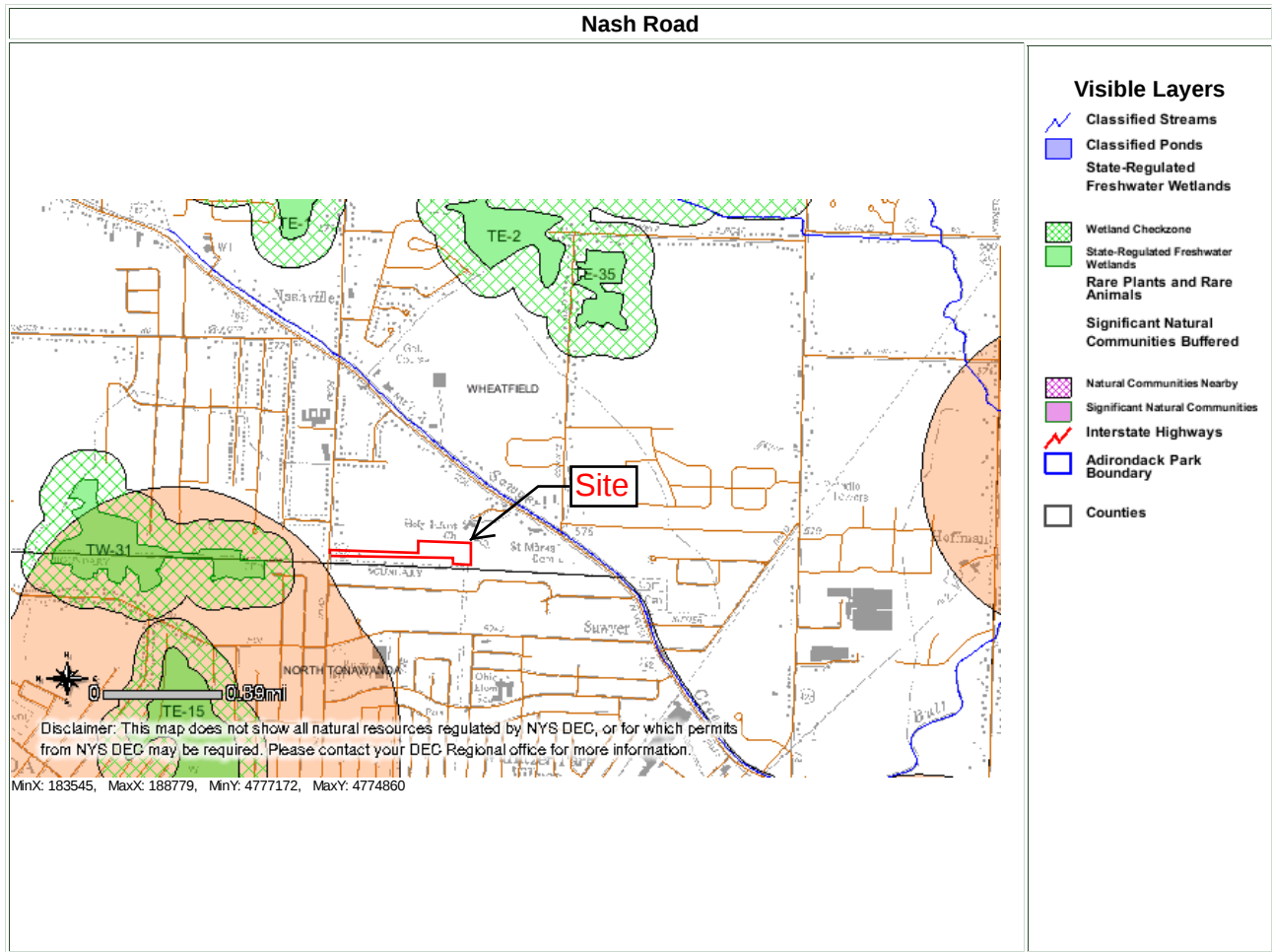
figure 6B

WETLAND DELINEATION PLAN
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



[\[print page\]](#) [\[close window\]](#)

Please set your printer orientation to "Landscape".



Disclaimer: This map was prepared by the New York State Department of Environmental Conservation using the most current data available. It is deemed accurate but is not guaranteed. NYS DEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data.

figure 7
NYSDEC ENVIRONMENTAL RESOURCES MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York

APPENDIX A

DATA SHEETS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 23, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-101
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118500 Long: 1075577 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: PFO1Bds

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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☒ 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)		<u>Secondary Indicators (minimum of two required)</u> ☐ 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 <u>X</u> No _____ Depth (inches): <u>0-1</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>16</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>11</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-101

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Acer rubrum</u>	45	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.7%</u> (A/B)																																
2. <u>Populus deltoides</u>	30	Yes	FAC																																	
3. <u>Salix nigra</u>	25	Yes	OBL																																	
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
100 =Total Cover																																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)																																				
1. <u>Lindera benzoin</u>	15	Yes	FACW	Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 20%;"></th> <th style="width: 20%;">Multiply by:</th> <th style="width: 20%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;">25</td> <td>x 1 =</td> <td style="text-align: center;">25</td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">80</td> <td>x 2 =</td> <td style="text-align: center;">160</td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">75</td> <td>x 3 =</td> <td style="text-align: center;">225</td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">0</td> <td>x 4 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">0</td> <td>x 5 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">180</td> <td>(A)</td> <td style="text-align: center;">410 (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td colspan="2" style="text-align: center;">2.28</td> </tr> </tbody> </table>	Total % Cover of:		Multiply by:		OBL species	25	x 1 =	25	FACW species	80	x 2 =	160	FAC species	75	x 3 =	225	FACU species	0	x 4 =	0	UPL species	0	x 5 =	0	Column Totals:	180	(A)	410 (B)	Prevalence Index = B/A =		2.28	
Total % Cover of:		Multiply by:																																		
OBL species	25	x 1 =	25																																	
FACW species	80	x 2 =	160																																	
FAC species	75	x 3 =	225																																	
FACU species	0	x 4 =	0																																	
UPL species	0	x 5 =	0																																	
Column Totals:	180	(A)	410 (B)																																	
Prevalence Index = B/A =		2.28																																		
2. <u>Cornus amomum</u>	30	Yes	FACW																																	
3. _____																																				
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
45 =Total Cover																																				
Herb Stratum (Plot size: <u>5</u>)																																				
1. <u>Phragmites australis</u>	35	Yes	FACW	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Carex spp</u>	20	Yes																																		
3. _____																																				
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
8. _____																																				
9. _____																																				
10. _____																																				
11. _____																																				
12. _____																																				
55 =Total Cover																																				
Woody Vine Stratum (Plot size: <u>30</u>)																																				
1. _____				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.																																
2. _____																																				
3. _____																																				
4. _____																																				
_____ =Total Cover																																				

 Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-101

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 23, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-102
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1188472 Long: 1075691 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: PFO1Bds

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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u>X</u> Surface Water (A1) <u>X</u> High Water Table (A2) <u>X</u> Saturation (A3) <u>X</u> Water Marks (B1) _____ Sediment Deposits (B2) _____ Drift Deposits (B3) _____ Algal Mat or Crust (B4) _____ Iron Deposits (B5) <u>X</u> Inundation Visible on Aerial Imagery (B7) _____ Sparsely Vegetated Concave Surface (B8) <u>X</u> Water-Stained Leaves (B9) _____ Aquatic Fauna (B13) _____ Marl Deposits (B15) _____ Hydrogen Sulfide Odor (C1) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) <u>X</u> Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>0-2</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).		

Sampling Point: DP-102

Remarks: (Include photo numbers here or on a separate sheet.)
Dominance of wetland vegetation.

SOIL

Sampling Point: DP-102

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 23, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-103
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118472 Long: 1075782 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: PFO1Bds

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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) <u>X</u> 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) <u>X</u> Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) <u>X</u> Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (water table and saturation).		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-103

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Quercus palustris</u>	60	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)																
2. <u>Populus deltoides</u>	20	Yes	FAC																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	80	=Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>105</u></td> <td>x 2 = <u>210</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>145</u> (A)</td> <td><u>350</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.41</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>105</u>	x 2 = <u>210</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>145</u> (A)	<u>350</u> (B)	Prevalence Index = B/A = <u>2.41</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>105</u>	x 2 = <u>210</u>																			
FAC species <u>20</u>	x 3 = <u>60</u>																			
FACU species <u>20</u>	x 4 = <u>80</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>145</u> (A)	<u>350</u> (B)																			
Prevalence Index = B/A = <u>2.41</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)																				
1. <u>Lindera benzoin</u>	25	Yes	FACW																	
2. <u>Cornus amomum</u>	20	Yes	FACW																	
3. <u>Prunus serotina</u>	15	Yes	FACU																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	60	=Total Cover		Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<u>Herb Stratum</u> (Plot size: <u>5</u>)																				
1. <u>Fragaria virginiana</u>	5	Yes	FACU																	
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	5	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)				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.																
1. _____																				
2. _____																				
3. _____																				
4. _____																				
				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
=Total Cover																				

 Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-103

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 23, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-104
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118194 Long: 1075781 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: PFO1Bds

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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) <u>X</u> 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)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) <u>X</u> Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): <u>12</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (water table and saturation).	

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-104

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	50	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)																
2. <u>Prunus serotina</u>	20	Yes	FACU																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	70	=Total Cover		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>35</u></td> <td>x 2 = <u>70</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.86</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>35</u>	x 2 = <u>70</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u> (A)	<u>300</u> (B)	Prevalence Index = B/A = <u>2.86</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>35</u>	x 2 = <u>70</u>																			
FAC species <u>50</u>	x 3 = <u>150</u>																			
FACU species <u>20</u>	x 4 = <u>80</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>105</u> (A)	<u>300</u> (B)																			
Prevalence Index = B/A = <u>2.86</u>																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <u>Lindera benzoin</u>	35	Yes	FACW																	
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	35	=Total Cover																		
Herb Stratum (Plot size: <u>5</u>)																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30</u>)																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
		=Total Cover																		

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 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 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.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-104

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 23, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-105
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118241 Long: 1075731 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: PFO1Bds

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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) <u>X</u> 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)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) <u>X</u> Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): <u>12</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).		

VEGETATION – Use scientific names of plants.

Sampling Point: DP-105

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <u>Populus deltoides</u>	65	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. <u>Fraxinus pennsylvanica</u>	10	No	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	75	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <u>Cornus amomum</u>	35	Yes	FACW	Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>75</u></td> <td>x 2 = <u>150</u></td> </tr> <tr> <td>FAC species <u>65</u></td> <td>x 3 = <u>195</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>140</u> (A)</td> <td><u>345</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.46</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>75</u>	x 2 = <u>150</u>	FAC species <u>65</u>	x 3 = <u>195</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>140</u> (A)	<u>345</u> (B)	Prevalence Index = B/A = <u>2.46</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>75</u>	x 2 = <u>150</u>																			
FAC species <u>65</u>	x 3 = <u>195</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>140</u> (A)	<u>345</u> (B)																			
Prevalence Index = B/A = <u>2.46</u>																				
2. <u>Lindera benzoin</u>	30	Yes	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	65	=Total Cover																		
Herb Stratum (Plot size: <u>5</u>)																				
1. _____				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30</u>)																				
1. _____				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.																
2. _____																				
3. _____																				
4. _____																				
		=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-105

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 23, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-106
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118197 Long: 1075678 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: PFO1Bds

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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) <u>X</u> 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)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) <u>X</u> Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).		

VEGETATION – Use scientific names of plants.

Sampling Point: DP-106

	Absolute % Cover	Dominant Species?	Indicator Status																	
<u>Tree Stratum</u> (Plot size: <u>30</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u>Populus deltoides</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>60</u>	=Total Cover																		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)				Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>40</u></td> <td>x 2 = <u>80</u></td> </tr> <tr> <td>FAC species <u>60</u></td> <td>x 3 = <u>180</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>260</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.60</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>40</u>	x 2 = <u>80</u>	FAC species <u>60</u>	x 3 = <u>180</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>260</u> (B)	Prevalence Index = B/A = <u>2.60</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>40</u>	x 2 = <u>80</u>																			
FAC species <u>60</u>	x 3 = <u>180</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>260</u> (B)																			
Prevalence Index = B/A = <u>2.60</u>																				
1. <u>Cornus amomum</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>40</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)				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.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-106

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 23, 2014
Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-107
Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118170 Long: 1075609 Datum: NAD 83
Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: PFO1Bds

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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) <u>X</u> Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) <u>X</u> 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)		<u>Secondary Indicators</u> (minimum of two required) _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) <u>X</u> Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>0-1</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-107

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <u>Fraxinus pennsylvanica</u>	60	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. <u>Populus deltoides</u>	30	Yes	FAC																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	90	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <u>Cornus amomum</u>	25	Yes	FACW	Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>290</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.23</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>130</u> (A)	<u>290</u> (B)	Prevalence Index = B/A = <u>2.23</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>100</u>	x 2 = <u>200</u>																			
FAC species <u>30</u>	x 3 = <u>90</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>130</u> (A)	<u>290</u> (B)																			
Prevalence Index = B/A = <u>2.23</u>																				
2. <u>Lindera benzoin</u>	15	Yes	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	40	=Total Cover																		
Herb Stratum (Plot size: <u>5</u>)																				
1. _____				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30</u>)																				
1. _____				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.																
2. _____																				
3. _____																				
4. _____																				
		=Total Cover																		

 Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-107

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 24, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-108
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118117 Long: 1075365 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: Upland

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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) <u>X</u> 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)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) <u>X</u> Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (water table and saturation).		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-108

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>60</u>	<u>=Total Cover</u>		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>105</u></td> <td>x 2 = <u>210</u></td> </tr> <tr> <td>FAC species <u>60</u></td> <td>x 3 = <u>180</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>165</u> (A)</td> <td><u>390</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.36</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>105</u>	x 2 = <u>210</u>	FAC species <u>60</u>	x 3 = <u>180</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>165</u> (A)	<u>390</u> (B)	Prevalence Index = B/A = <u>2.36</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>105</u>	x 2 = <u>210</u>																			
FAC species <u>60</u>	x 3 = <u>180</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>165</u> (A)	<u>390</u> (B)																			
Prevalence Index = B/A = <u>2.36</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Lindera benzoin</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Cornus amomum</u>	<u>45</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Ligustrum</u>	<u>15</u>	<u>No</u>																		
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>120</u>	<u>=Total Cover</u>		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 <u>X</u> No <u> </u>																
<u>Herb Stratum</u> (Plot size: <u>5</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>=Total Cover</u>																		
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>=Total Cover</u>																		

 Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-108

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 24, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-109
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): convex Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118193 Long: 1075299 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: Upland

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 _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Absence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ 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)	<u>Secondary Indicators (minimum of two required)</u> _____ 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 <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Absence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).	

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-109

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
1. <u>Prunus serotina</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Populus deltoides</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			<u>75</u> =Total Cover	
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			_____ =Total Cover	
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Barbarea vulgaris</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Plantago major</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
			<u>20</u> =Total Cover	
Woody Vine Stratum (Plot size: <u>30</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
			_____ =Total Cover	

Remarks: (Include photo numbers here or on a separate sheet.)
 Absence of wetland vegetation.

Hydrophytic Vegetation Present? Yes No X

SOIL

Sampling Point: DP-109

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 24, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-110
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118195 Long: 1075082 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: Upland

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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
☒ Surface Water (A1) ☒ High Water Table (A2) ☒ Saturation (A3) ☒ Water Marks (B1) _____ Sediment Deposits (B2) _____ Drift Deposits (B3) _____ Algal Mat or Crust (B4) _____ Iron Deposits (B5) _____ Inundation Visible on Aerial Imagery (B7) _____ Sparsely Vegetated Concave Surface (B8)	☒ Water-Stained Leaves (B9) _____ Aquatic Fauna (B13) _____ Marl Deposits (B15) _____ Hydrogen Sulfide Odor (C1) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks)	_____ 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 <u>X</u> No _____ Depth (inches): <u>0-2</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).			

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-110

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <u>Populus deltoides</u>	<u>80</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>80</u>	<u>=Total Cover</u>																		
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <u>Populus deltoides</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>130</u></td> <td>x 3 = <u>390</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>170</u> (A)</td> <td><u>510</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>130</u>	x 3 = <u>390</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>170</u> (A)	<u>510</u> (B)	Prevalence Index = B/A = <u>3.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>130</u>	x 3 = <u>390</u>																			
FACU species <u>20</u>	x 4 = <u>80</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>170</u> (A)	<u>510</u> (B)																			
Prevalence Index = B/A = <u>3.00</u>																				
2. <u>Prunus serotina</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Lindera benzoin</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>90</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5</u>)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30</u>)																				
1. _____	_____	_____	_____	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.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

 Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-110

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 24, 2014
Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-111
Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118082 Long: 1074526 Datum: NAD 83
Soil Map Unit Name: Canandaigua silt loam, 0 to 2 percent slopes (Ca) NWI classification: Upland
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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former haul road alignment associated with a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) <u>X</u> Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) <u>X</u> 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)		<u>Secondary Indicators</u> (minimum of two required) _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) <u>X</u> Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>0-2</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-111

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	80	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. <u>Quercus palustris</u>	15	No	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	95	=Total Cover		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.73</u></td> </tr> </tbody> </table>	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>80</u>	x 3 = <u>240</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>300</u> (B)	Prevalence Index = B/A = <u>2.73</u>	
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>80</u>	x 3 = <u>240</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>110</u> (A)	<u>300</u> (B)																			
Prevalence Index = B/A = <u>2.73</u>																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <u>Lindera benzoin</u>	15	Yes	FACW																	
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	15	=Total Cover																		
Herb Stratum (Plot size: <u>5</u>)																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30</u>)																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
		=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

Hydrophytic Vegetation
 Present? Yes X No _____

SOIL

Sampling Point: DP-111

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 24, 2014
Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-112
Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): convex Slope (%): 0-2
Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118090 Long: 1074452 Datum: NAD 83
Soil Map Unit Name: Canandaigua silt loam (Ca) NWI classification: Upland

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 _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Absence of the three required wetland criteria. Data point is located within a former haul road alignment associated with a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ 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)		<u>Secondary Indicators (minimum of two required)</u> ☐ 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 <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Absence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-112

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
1. <u>Prunus serotina</u>	<u>65</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
			<u>65</u> =Total Cover																	
Sapling/Shrub Stratum (Plot size: <u>15</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>110</u></td> <td>x 4 = <u>440</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>440</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.00</u></td> </tr> </table>	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>0</u>	x 3 = <u>0</u>	FACU species <u>110</u>	x 4 = <u>440</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>440</u> (B)	Prevalence Index = B/A = <u>4.00</u>
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>0</u>	x 3 = <u>0</u>																			
FACU species <u>110</u>	x 4 = <u>440</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>110</u> (A)	<u>440</u> (B)																			
Prevalence Index = B/A = <u>4.00</u>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
			_____ =Total Cover																	
Herb Stratum (Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Rosa multiflora</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Allium vineale</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Poa pratensis</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
			<u>45</u> =Total Cover																	
Woody Vine Stratum (Plot size: <u>30</u>)				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.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
			_____ =Total Cover																	

 Remarks: (Include photo numbers here or on a separate sheet.)
 Absence of wetland vegetation.

SOIL

Sampling Point: DP-112

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 24, 2014
Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-113
Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118099 Long: 1073992 Datum: NAD 83
Soil Map Unit Name: Canandaigua silt loam (Ca) NWI classification: Upland

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 _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Absence of the three required wetland criteria. Data point is located within a former haul road alignment associated with a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ 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)		<u>Secondary Indicators (minimum of two required)</u> ____ 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 <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Absence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).			

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-113

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>80</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>80</u>	=Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>110</u></td> <td>x 4 = <u>440</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>190</u> (A)</td> <td><u>680</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.58</u></td> </tr> </table>	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>80</u>	x 3 = <u>240</u>	FACU species <u>110</u>	x 4 = <u>440</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>190</u> (A)	<u>680</u> (B)	Prevalence Index = B/A = <u>3.58</u>	
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>80</u>	x 3 = <u>240</u>																			
FACU species <u>110</u>	x 4 = <u>440</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>190</u> (A)	<u>680</u> (B)																			
Prevalence Index = B/A = <u>3.58</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Rosa multiflora</u>	<u>45</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>45</u>	=Total Cover		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 <u> </u> No <u> X </u>																
<u>Herb Stratum</u> (Plot size: <u>5</u>)																				
1. <u>Glechoma hederacea</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Claytonia virginica</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Poa pratensis</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
	<u>65</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	=Total Cover																		

 Remarks: (Include photo numbers here or on a separate sheet.)
 Absence of wetland vegetation.

SOIL

Sampling Point: DP-113

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 24, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-114
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118105 Long: 1073976 Datum: NAD 83
 Soil Map Unit Name: Canandaigua silt loam, 0 to 2 percent slopes (Ca) NWI classification: Upland

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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former haul road alignment associated with a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u>X</u> Surface Water (A1) <u>X</u> High Water Table (A2) <u>X</u> Saturation (A3) <u>X</u> 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) <u>X</u> Water-Stained Leaves (B9) _____ Aquatic Fauna (B13) _____ Marl Deposits (B15) _____ Hydrogen Sulfide Odor (C1) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) <u>X</u> Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>0-2</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).	

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-114

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>60</u>	<u>=Total Cover</u>		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>60</u></td> <td>x 3 = <u>180</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>85</u></td> <td>(A) <u>230</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.71</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>60</u>	x 3 = <u>180</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>85</u>	(A) <u>230</u> (B)	Prevalence Index = B/A = <u>2.71</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>25</u>	x 2 = <u>50</u>																			
FAC species <u>60</u>	x 3 = <u>180</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>85</u>	(A) <u>230</u> (B)																			
Prevalence Index = B/A = <u>2.71</u>																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Lindera benzoin</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>25</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5</u>)				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 <u>X</u> No <u> </u>																
1. <u>Carex</u>	<u>30</u>	<u>Yes</u>																		
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
	<u>30</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

 Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-114

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nash Road Landfill City/County: Wheatfield/Niagara County Sampling Date: April 24, 2014
 Applicant/Owner: Glenn Springs Holdings, Inc. State: NY Sampling Point: DP-115
 Investigator(s): Christopher S. Andes and Leah Pabst - CRA Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 1118053 Long: 1072965 Datum: NAD 83
 Soil Map Unit Name: Raynham silt loam, 0 to 2 percent slopes (RaA) NWI classification: Upland

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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Presence of the three required wetland criteria. Data point is located within a former haul road alignment associated with a former landfill.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☒ 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)	<u>Secondary Indicators (minimum of two required)</u> ☐ 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 <u>X</u> No _____ Depth (inches): <u>0-4</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Presence of Wetland Indicators of Hydrology (primary and secondary) and other field observations (surface water, water table and saturation).	

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-115

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.3%</u> (A/B)																
2. <u>Betula populifolia</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>110</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)				Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>110</u></td> <td>x 3 = <u>330</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>210</u> (A)</td> <td><u>530</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.52</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>110</u>	x 3 = <u>330</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>210</u> (A)	<u>530</u> (B)	Prevalence Index = B/A = <u>2.52</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>100</u>	x 2 = <u>200</u>																			
FAC species <u>110</u>	x 3 = <u>330</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>210</u> (A)	<u>530</u> (B)																			
Prevalence Index = B/A = <u>2.52</u>																				
1. <u>Cornus amomum</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Lindera benzoin</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>60</u> =Total Cover																				
Herb Stratum (Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Phalaris arundinacea</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Carex</u>	<u>30</u>	<u>Yes</u>																		
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>70</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30</u>)				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.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

 Remarks: (Include photo numbers here or on a separate sheet.)
 Dominance of wetland vegetation.

SOIL

Sampling Point: DP-115

[illegible]

APPENDIX B

COLOR PHOTOGRAPHS



1. Looking south at forested wetlands located in the southwestern corner of the Study Area.



2. Looking north of the forested wetlands located in the central portion of the Study Area.



3. Looking west at forested wetland and drainage feature along the northern portion of the Study Area.



4. Looking south at an emergent wetland located in the northern portion of the Study Area adjacent to DP-101.



5. Looking west at an emergent wetland located in the northern portion of the Study Area adjacent to DP-101.



6. Looking south at forested wetlands and dirt trail located in the southwestern corner of the Study Area.



7. Looking north of typical uplands found northwest of the WB line.



8. Looking southwest of forested wetlands adjacent to the overhead power line easement located south of the Study Area.



9. Looking southwest of forested wetlands adjacent to the gas easement located north of the Study Area.



10. Looking east of upland area (WD line) within the Study Area. The upland area appears to be associated with a former access road to the Site.



11. Looking east of upland area (WE line) within the Study Area. The upland area appears to be associated with a former access road to the Site.



12. Looking northeast of forested/emergent wetlands adjacent to a gas line transfer station.



13. Looking southwest of emergent wetlands within the overhead power line easement located along the southern Site boundary.



14. Looking northwest at a road side swale adjacent to Nash Road. The swale connects to the forested/emergent wetlands located within the Study Area.



15. Looking south at a road side swale and culvert pipe adjacent to Nash Road. The swale connects to the forested/emergent wetlands located within the Study Area. The culvert pipe flows underneath Nash Road and connects to an off-site drainage ditch.



16. Looking west of the off-site drainage ditch along Nash Road.

ATTACHMENT G

RESOURCE AGENCY CORRESPONDANCE



410 Eagleview Boulevard, Suite 110
Exton, Pennsylvania 19341
Telephone: (610) 321-1800 Fax: (610) 321-2763
www.CRAworld.com

August 6, 2014

Reference No. 085121

New York State Office of Parks and Recreation and Historic Preservation
Historical Preservation Field Services Bureau
Peebles Island Resource Center
P.O. Box 189
Waterford, NY 12188-0189

Dear Sir or Madame:

Re: Request for Historical Preservation Review
Former Nash Road Landfill
NYSDEC Site #932054
Town of Wheatfield, Niagara County, New York

Conestoga-Rovers & Associates, Inc. (CRA) is requesting a review of the New York State Office of Parks and Recreation and Historic Preservation (NYPRHP), Historical Preservation Field Services Bureau database to determine if historical buildings (federal, state and local), historical sites and archeological sites are located on or within a 1-mile radius of the former Nash Road Landfill (Site) located on Nash Road in the Town of Wheatfield, Niagara County, New York. The enclosed 7.5-minute USGS topographic quadrangle map (Tonawanda West and Tonawanda East, NY) and aerial location map shows the location of the Site. The NYPRHP project review cover form and color photographs are included with this letter to assist in your review.

The Site is comprised of the former Nash Road Landfill which was operated by the Niagara Sanitation Company between 1964 and 1968 for disposal of municipal and industrial wastes. The Site is a rectangular-shaped property (historically disturbed) encompassing approximately 20 acres and is wooded with trees (eastern cottonwood, *Populus deltoides*) and heavy brush and contains areas of seasonally-influenced ponded water. Current access to the Site is not provided by any immediately identifiable means; however, historic access to the Site for disposal activities occurred along a haul road that was constructed from Nash Road, located west of the Site. The Site is bordered to the north by the Holy Infant Shrine, to the east by a cemetery and a property that contains a motel and livery service, to the south by utility right-of-ways (overhead electric and underground natural gas and brine pipelines) and residences, and to the west by undeveloped land and Nash Road.

Equal
Employment Opportunity
Employer

REGISTERED COMPANY FOR
ISO 9001
ENGINEERING DESIGN



**CONESTOGA-ROVERS
& ASSOCIATES**

August 6, 2014

Reference No. 085121

- 2 -

The Site is currently undergoing site remediation under the guidance of the New York State Department of Environmental Conservation (NYSDEC) (Site #932054). The project consists of the removal of impacted soil waste from the Site and restoration of the disturbed portions of the Site to comparable pre-excavation conditions. The industrial wastes within the soils in the Site are located approximately 10 to 12 feet below the existing ground surface. The majority of the Site has been historically excavated and disturbed (pipelines, landfills and monitoring well installation). The work activities include access road construction, installation of fencing and sheet piles, sampling, excavation, dewatering and disposal activities. The impacted soil waste will be disposed of at an approved off-site facility. The impacted areas will be restored by removing stone access roads and sheet piles, backfilling with fill/soil meeting NYSDEC DER-10 requirements, and seeding with a native grass seed mixture. The proposed activities will be conducted under an Army Corps of Engineers NWP-38, which requires coordination under Section 106 with the NYPRHP for potential conflicts with historical or archeological sites.

We look forward to your review and response. If you have any questions or require additional information, please contact me at (610) 321-1800 ext. 15 or candes@croworld.com.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

A handwritten signature in blue ink, appearing to read 'Christopher S. Andes', is written over a light blue horizontal line.

Christopher S. Andes
Ecologist

CSA/cjm/1

Encl.

cc: Dennis Hoyt, CRA



New York State Office of Parks, Recreation and Historic Preservation Historic Preservation Field Services Bureau

Peebles Island Resource Center, PO Box 189, Waterford, NY 12188-0189 (Mail)
Delaware Avenue, Cohoes 12047 (Delivery)

(518) 237-8643

PROJECT REVIEW COVER FORM

Rev. 5-05

Please complete this form and attach it to the top of **any and all information submitted to this office** for review.
Accurate and complete forms will assist this office in the timely processing and response to your request.

This information relates to a previously submitted project.

PROJECT NUMBER ____ PR ____

COUNTY _____

☐

If you have checked this box and noted the previous Project Review (PR) number assigned by this office you do not need to continue unless any of the required information below has changed.

2. This is a new project.

☒

If you have checked this box you will need to complete ALL of the following information.

Project Name Nash Road Landfill

Location Nash Road (In the vicinity of of 7403 Nash Road, no street address)
You MUST include street number, street name and/or County, State or Interstate route number if applicable

City/Town/Village Town of Wheatfield
List the correct municipality in which your project is being undertaken. If in a hamlet you must also provide the name of the town.

County Niagara
If your undertaking* covers multiple communities/counties please attach a list defining all municipalities/counties included.

TYPE OF REVIEW REQUIRED/REQUESTED (Please answer both questions)

A. Does this action involve a permit approval or funding, now or ultimately from any other governmental agency?

☐ No ☒ Yes

If Yes, list agency name(s) and permit(s)/approval(s)

Agency involved	Type of permit/approval	State	Federal
<u>USACE</u>	<u>Nationwide Permit 38</u>	☐	☒
<u>NYSDEC</u>	<u>401 Water Quality Certification</u>	☒	☐
_____	_____	☐	☐

B. Have you consulted the NYSHPO web site at ****<http://nysparks.state.ny.us>** to determine the preliminary presence or absence of previously identified cultural resources within or adjacent to the project area? If yes:

☒ Yes ☐ No

Was the project site wholly or partially included within an identified archeologically sensitive area?

☒ Yes ☐ No

Does the project site involve or is it substantially contiguous to a property listed or recommended for listing in the NY State or National Registers of Historic Places?

☐ Yes ☒ No

CONTACT PERSON FOR PROJECT

Name Christopher S. Andes Title Ecologist

Firm/Agency Conestoga-Rovers & Associates

Address 410 Eagleview Blvd., Suite 110 City Exton STATE PA Zip 19341

Phone (610) 321-1800 Fax (610) 321-2763 E-Mail candes@craworld.com

****<http://nysparks.state.ny.us>** then select **HISTORIC PRESERVATION** then select **On Line Resources**

The Historic Preservation Review Process in New York State

In order to insure that historic preservation is carefully considered in publicly-funded or permitted undertakings*, there are laws at each level of government that require projects to be reviewed for their potential impact/effect on historic properties. At the federal level, Section 106 of the National Historic Preservation Act of 1966 (NHPA) directs the review of federally funded, licensed or permitted projects. At the state level, Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law of 1980 performs a comparable function. Local environmental review for municipalities is carried out under the State Environmental Quality Review Act (SEQRA) of 1978.

regulations on line at:

<http://nysparks.state.ny.us> then select **HISTORIC PRESERVATION** then select **Environmental Review**

Project review is conducted in two stages. First, the Field Services Bureau assesses affected properties to determine whether or not they are listed or eligible for listing in the New York State or National Registers of Historic Places. If so, it is deemed "historic" and worthy of protection and the second stage of review is undertaken. The project is reviewed to evaluate its impact on the properties significant materials and character. Where adverse effects are identified, alternatives are explored to avoid, or reduce project impacts; where this is unsuccessful, mitigation measures are developed and formal agreement documents are prepared stipulating these measures.

ALL PROJECTS SUBMITTED FOR REVIEW SHOULD INCLUDE THE FOLLOWING MATERIAL(S).

X

Project Description

Attach a full description of the nature and extent of the work to be undertaken as part of this project. Relevant portions of the project applications or environmental statements may be submitted.

X

Maps Locating Project

Include a map locating the project in the community. The map must clearly show street and road names surrounding the project area as well as the location of all portions of the project. Appropriate maps include tax maps, Sanborn Insurance maps, and/or USGS quadrangle maps.

X

Photographs

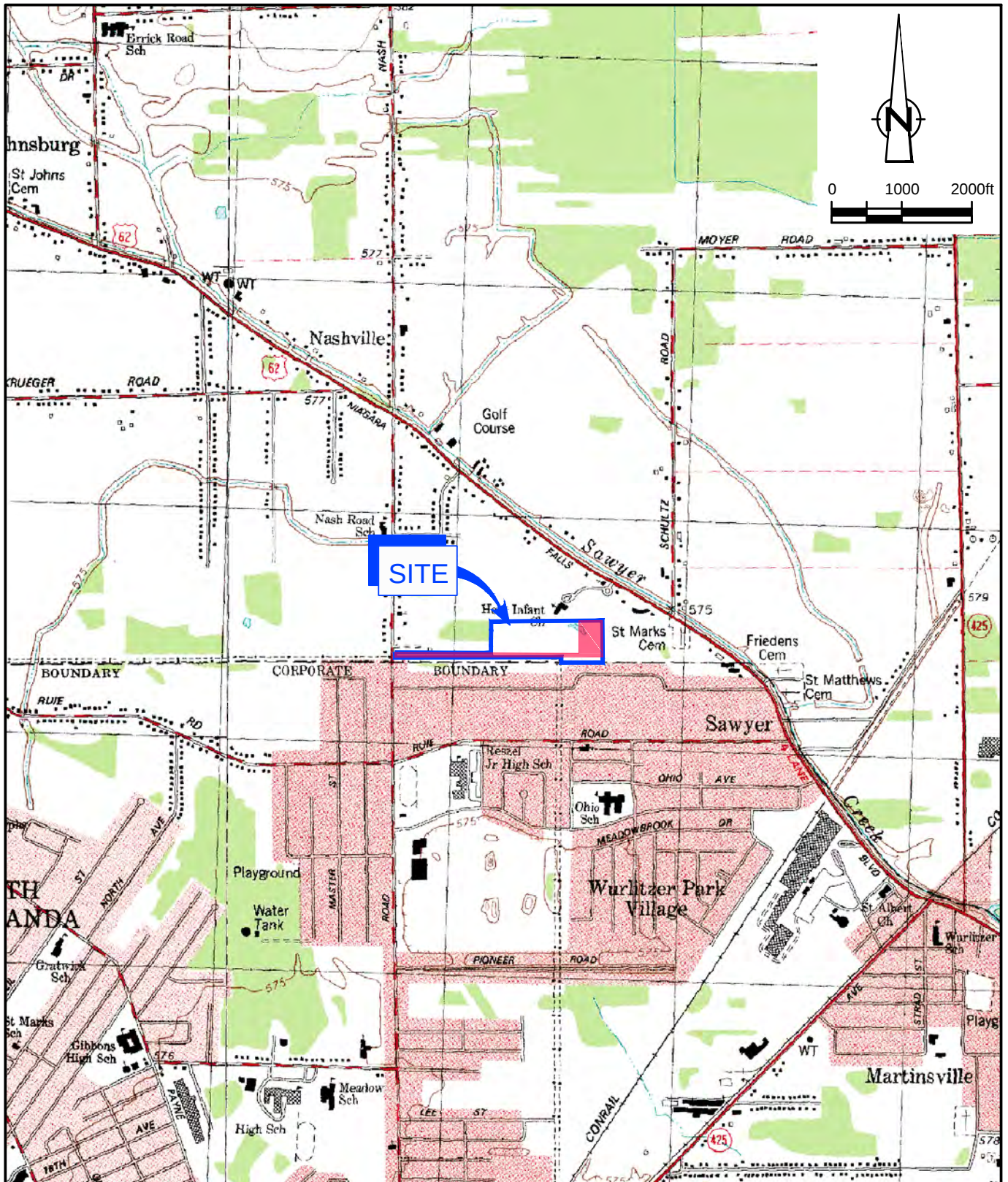
Photographs may be black and white prints, color prints, or color laser/photo copies; standard (black and white) photocopies are NOT acceptable.

-If the project involves rehabilitation, include photographs of the building(s) involved. Label each exterior view to a site map and label all interior views.

-If the project involves new construction, include photographs of the surrounding area looking out from the project site. Include photographs of any buildings (more than 50 years old) that are located on the project property or on adjoining property.

NOTE: Projects submissions will not be accepted via facsimile or e-mail.

***Undertaking** is defined as an agency's purchase, lease or sale of a property, assistance through grants, loans or guarantees, issuing of licenses, permits or approvals, and work performed pursuant to delegation or mandate.



SOURCE: USGS DIGITAL RASTER GRAPHIC, TONAWANDA
EAST AND TONAWANDA WEST, 1980

figure 2

SITE TOPOGRAPHY MAP INTERIM REMEDIAL MEASURES WORK PLAN NASH ROAD LANDFILL *Wheatfield, New York*

LEGEND



- SITE PROPERTY LINE
- WETLAND STUDY AREA



SOURCE: NEW YORK STATE CLEARINGHOUSE, 2011 IMAGE DATASET

figure 1

SITE LOCATION MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



LEGEND

- SITE PROPERTY LINE
- WETLAND STUDY AREA



410 Eagleview Boulevard, Suite 110
Exton, Pennsylvania 19341
Telephone: (610) 321-1800 Fax: (610) 321-2763
www.CRAworld.com

August 6, 2014

Reference No. 085121

New York Field Office Supervisor
U.S. Fish and Wildlife Service
3817 Luker Road
Cortland, NY 13045

Dear Sir or Madame:

Re: Information Request - Threatened and Endangered Species
Former Nash Road Landfill
NYSDEC Site #932054
Town of Wheatfield, Niagara County, New York

The purpose of this letter is to request information on any documented occurrences of federally listed threatened, endangered, rare, or candidate plant or animal species within the vicinity of the former Nash Road Landfill (Site) located on Nash Road in the Town of Wheatfield, Niagara County, New York. The enclosed 7.5-minute USGS topographic quadrangle map (Tonawanda West and Tonawanda East, NY) and aerial location map shows the location of the Site.

The Site is currently undergoing site remediation under the guidance of the New York State Department of Environmental Conservation (NYSDEC) (Site #932054). The project consists of the removal of impacted soil waste from the Site and restoration of the disturbed portions of the Site to comparable pre-excavation conditions. The work activities include access road construction, installation of fencing and sheet piles, sampling, excavation, dewatering and disposal activities. The impacted soil waste will be disposed of at an approved off-site facility. The impacted areas will be restored by removing stone access roads and sheet piles, backfilling with fill/soil meeting NYSDEC DER-10 requirements, and seeding with a native grass seed mixture. The proposed activities will be conducted under an Army Corps of Engineers NWP-38, which requires coordination with USFWS and NYSDEC for potential conflicts with threatened and/or endangered species.

The Site is comprised of the former Nash Road Landfill which was operated by the Niagara Sanitation Company between 1964 and 1968 for disposal of municipal and industrial wastes. The Site is a rectangular-shaped property (historically disturbed) encompassing approximately 20 acres and is wooded with trees (eastern cottonwood, *Populus deltoides*) and heavy brush and contains areas of seasonally-influenced ponded water. Current access to the Site is not

Equal
Employment Opportunity
Employer

REGISTERED COMPANY FOR
ISO 9001
ENGINEERING DESIGN



August 6, 2014

Reference No. 085121

- 2 -

provided by any immediately identifiable means; however, historic access to the Site for disposal activities occurred along a haul road that was constructed from Nash Road, located west of the Site. The Site is bordered to the north by the Holy Infant Shrine, to the east by a cemetery and a property that contains a motel and livery service, to the south by utility right-of-ways (overhead electric and underground natural gas and brine pipelines) and residences, and to the west by undeveloped land and Nash Road.

CRA reviewed the U.S. Fish and Wildlife Service's Information, Planning and Consultation system (IPaC) for potential threatened and endangered species in the vicinity of the Project Site. The IPaC review (attached) identified the northern long-eared bat (*Myotis septentrionalis*), proposed endangered species within the vicinity of the Site. While the northern long-eared bat was identified within the vicinity of the Site, the IPaC review did not identify any critical habitat for the northern long-eared bat within the Site. The Project is not anticipated to impact the population of northern long-eared bat or the habitat of migratory birds due to the historically disturbed nature of the Site. CRA also reviewed the NYSDEC Environmental Resource Mapper for threatened and endangered species within the Site. This program did not identify any threatened and endangered species within the Site.

We look forward to your review and response. If you have any questions or require additional information, please contact me at (610) 321-1800 ext. 15 or candes@croworld.com.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Christopher S. Andes
Ecologist

CSA/cjm/1

Encl.

cc: Dennis Hoyt, CRA



SOURCE: NEW YORK STATE CLEARINGHOUSE, 2011 IMAGE DATASET

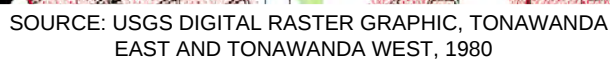
figure 1

SITE LOCATION MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



LEGEND

- SITE PROPERTY LINE
- WETLAND STUDY AREA



SITE TOPOGRAPHY MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



LEGEND

- SITE PROPERTY LINE
 WETLAND STUDY AREA



U.S. Fish and Wildlife Service

Trust Resources List

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
(607) 753-9334
<http://www.fws.gov/northeast/nyfo/es/section7.htm>

Project Name:

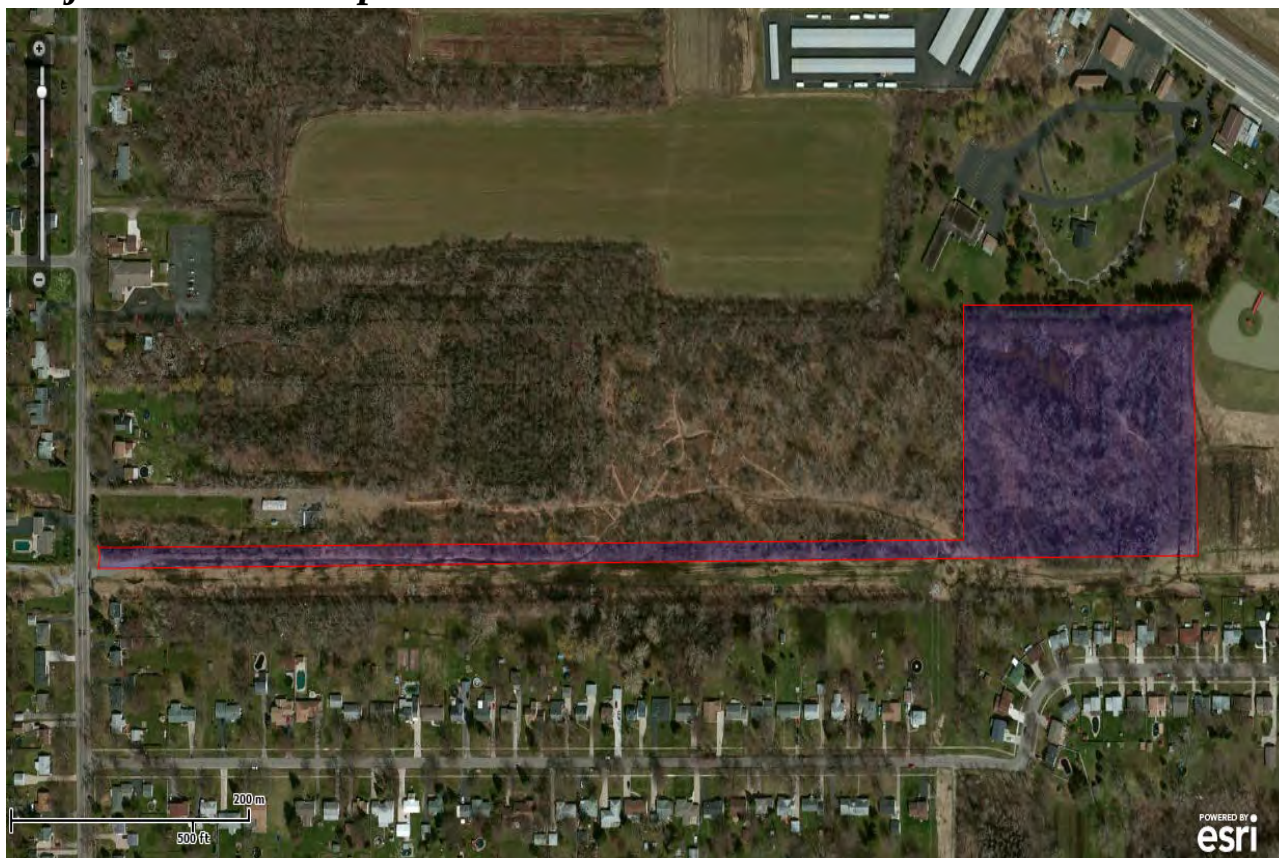
Nash Road



U.S. Fish and Wildlife Service

Trust Resources List

Project Location Map:



Project Counties:

Niagara, NY

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-78.8657871 43.0681119, -78.8657667 43.0681903, -78.8657881 43.068253, -78.8568403 43.0682843, -78.8568403 43.0696951, -78.85448 43.0696951, -78.8544156 43.0681895, -78.8657871 43.0681119)))

Project Type:

Superfund Site Remediation



Trust Resources List

Endangered Species Act Species List ([USFWS Endangered Species Program](#))

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section below for critical habitat that lies within your project area. Please contact the designated FWS office if you have questions.

Species that should be considered in an effects analysis for your project:

Mammals	Status		Has Critical Habitat	Contact
northern long-eared Bat (<i>Myotis septentrionalis</i>) Population:	Proposed Endangered	species info		New York Ecological Services Field Office

Critical habitats within your project area:

There are no critical habitats within your project area.

FWS National Wildlife Refuges ([USFWS National Wildlife Refuges Program](#))

There are no refuges found within the vicinity of your project.

FWS Migratory Birds ([USFWS Migratory Bird Program](#))

The protection of birds is regulated by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. For more information regarding these Acts see <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>.

All project proponents are responsible for complying with the appropriate regulations protecting birds when planning and developing a project. To meet these conservation obligations, proponents should identify potential or existing project-related impacts to migratory birds and their habitat and develop and implement conservation measures that avoid, minimize, or compensate for these impacts. The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without



Trust Resources List

additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

For information about Birds of Conservation Concern, go to
<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html>.

Migratory birds of concern that may be affected by your project:

There are **10** birds on your Migratory birds of concern list. The Division of Migratory Bird Management is in the process of populating migratory bird data with an estimated completion date of August 1, 2014; therefore, the list below may not include all the migratory birds of concern in your project area at this time. While this information is being populated, please contact the Field Office for information about migratory birds in your project area.

Species Name	Bird of Conservation Concern (BCC)	Species Profile	Seasonal Occurrence in Project Area
American bittern (<i>Botaurus lentiginosus</i>)	Yes	species info	Breeding
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Yes	species info	Year-round
Black tern (<i>Chlidonias niger</i>)	Yes	species info	Breeding
Black-crowned Night-Heron (<i>Nycticorax nycticorax</i>)	Yes	species info	Breeding
Canada Warbler (<i>Wilsonia canadensis</i>)	Yes	species info	Breeding
cerulean warbler (<i>Dendroica cerulea</i>)	Yes	species info	Breeding
Common tern (<i>Sterna hirundo</i>)	Yes	species info	Breeding
Golden-Winged Warbler (<i>Vermivora chrysoptera</i>)	Yes	species info	Breeding
Least Bittern (<i>Ixobrychus exilis</i>)	Yes	species info	Breeding
Wood Thrush (<i>Hylocichla mustelina</i>)	Yes	species info	Breeding

NWI Wetlands ([USFWS National Wetlands Inventory](#)).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to



Trust Resources List

wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

Data Limitations, Exclusions and Precautions

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Exclusions - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

The following wetland types intersect your project area in one or more locations:



U.S. Fish and Wildlife Service

Trust Resources List

Wetland Types	NWI Classification Code	Total Acres
Freshwater Emergent Wetland	PEM1Bd	3.4389
Freshwater Forested/Shrub Wetland	PSS1Ad	0.5456
Freshwater Forested/Shrub Wetland	PFO1Bds	6.5533
Freshwater Pond	PUBFx	0.3866
Freshwater Pond	PUBHx	0.0959



410 Eagleview Boulevard, Suite 110
Exton, Pennsylvania 19341
Telephone: (610) 321-1800 Fax: (610) 321-2763
www.CRAworld.com

August 6, 2014

Reference No. 085121

New York State Department of Environmental Conservation
The Division of Fish, Wildlife and Marine Resources
NY Natural Heritage Program
625 Broadway, 5th Floor
Albany, NY 12233-4757

Dear Sir or Madame:

Re: Request for Location and Identity of Significant Habitats
Natural Heritage Program Data
Former Nash Road Landfill
NYSDEC Site #932054
Town of Wheatfield, Niagara County, New York

Conestoga-Rovers & Associates, Inc. (CRA) is requesting a review of the NYSDEC-DFWMR Natural Heritage Program database to determine if New York State Significant Habitats are located on or within a 1-mile radius of the former Nash Road Landfill (Site) located on Nash Road in the Town of Wheatfield, Niagara County, New York. The enclosed 7.5-minute USGS topographic quadrangle map (Tonawanda West and Tonawanda East, NY) and aerial location map shows the location of the Site.

This is a request for information regarding whether rare species and/or significant habitats and natural communities (including habitats supporting threatened, endangered, or rare species, or species of special concern; regulated wetlands; wild, scenic and recreational rivers; significant coastal zones; streams and lakes) exist on or near the Site. CRA reviewed the NYSDEC Environmental Resource Mapper for threatened and endangered species within the Site. This program did not identify any threatened and endangered species within the Site.

The Site is comprised of the former Nash Road Landfill which was operated by the Niagara Sanitation Company between 1964 and 1968 for disposal of municipal and industrial wastes. The Site is a rectangular-shaped property (historically disturbed) encompassing approximately 20 acres and is wooded with trees (eastern cottonwood, *Populus deltoides*) and heavy brush and contains areas of seasonally-influenced ponded water. Current access to the Site is not provided by any immediately identifiable means; however, historic access to the Site for disposal activities occurred along a haul road that was constructed from Nash Road, located

Equal
Employment Opportunity
Employer

REGISTERED COMPANY FOR
ISO 9001
ENGINEERING DESIGN



**CONESTOGA-ROVERS
& ASSOCIATES**

August 6, 2014

Reference No. 085121

- 2 -

west of the Site. The Site is bordered to the north by the Holy Infant Shrine, to the east by a cemetery and a property that contains a motel and livery service, to the south by utility right-of-ways (overhead electric and underground natural gas and brine pipelines) and residences, and to the west by undeveloped land and Nash Road.

The Site is currently undergoing site remediation under the guidance of the New York State Department of Environmental Conservation (NYSDEC) (Site #932054). The project consists of the removal of impacted soil waste from the Site and restoration of the disturbed portions of the Site to comparable pre-excavation conditions. The work activities include access road construction, installation of fencing and sheet piles, sampling, excavation, dewatering and disposal activities. The impacted soil waste will be disposed of at an approved facility. The impacted areas will be restored by removing stone access roads and sheet piles, backfilling with fill/soil meeting NYSDEC DER-10 requirements, and seeding with a native grass seed mixture. The proposed activities will be conducted under an Army Corps of Engineers NWP-38, which requires coordination with USFWS and NYSDEC for potential conflicts with threatened and/or endangered species.

We look forward to your review and response. If you have any questions or require additional information, please contact me at (610) 321-1800 ext. 15 or candes@croworld.com.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Christopher S. Andes
Ecologist

CSA/cjm/1

Encl.

cc: Dennis Hoyt, CRA



SOURCE: NEW YORK STATE CLEARINGHOUSE, 2011 IMAGE DATASET

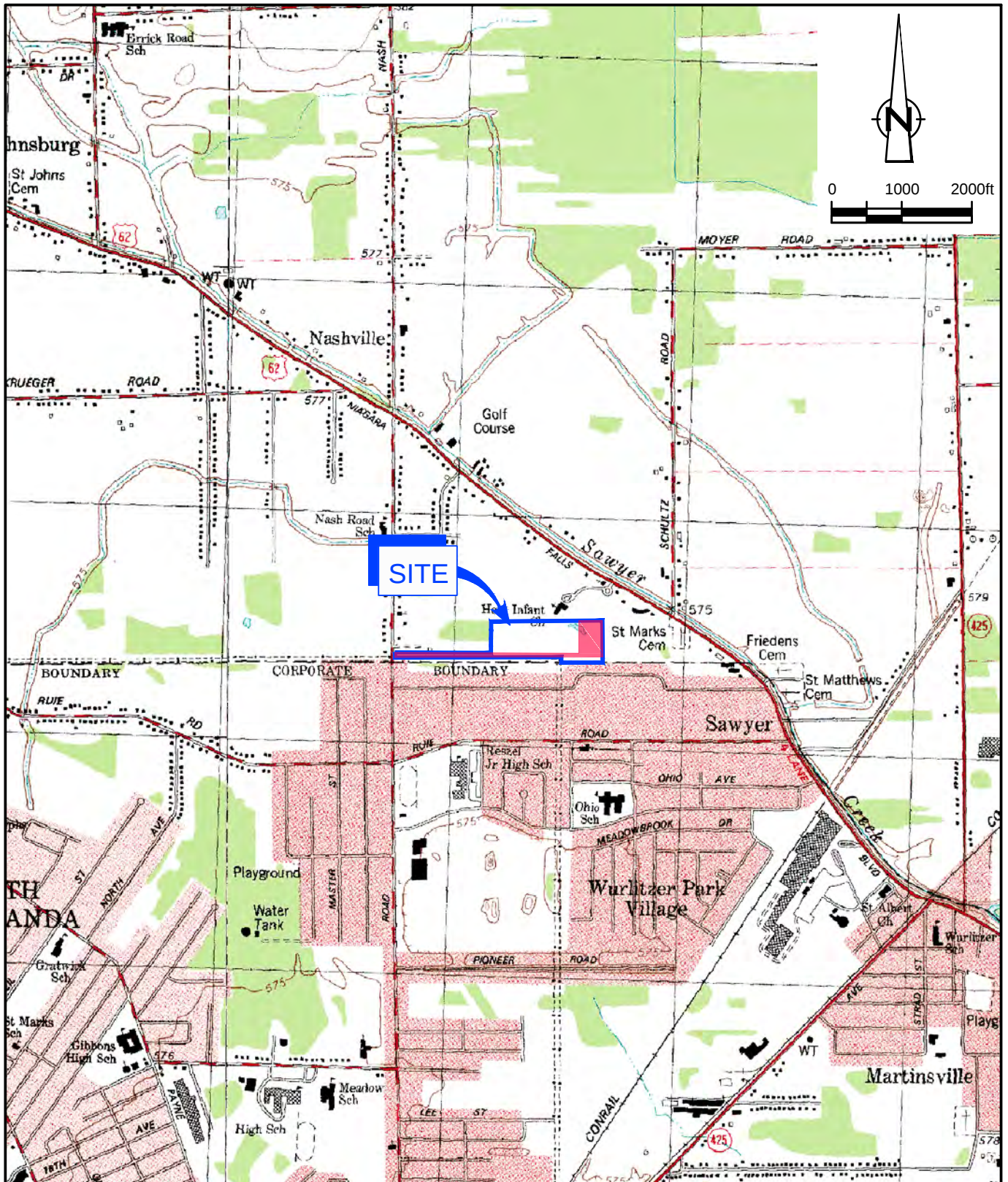
figure 1

SITE LOCATION MAP
INTERIM REMEDIAL MEASURES WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



LEGEND

- SITE PROPERTY LINE
- WETLAND STUDY AREA



SOURCE: USGS DIGITAL RASTER GRAPHIC, TONAWANDA
EAST AND TONAWANDA WEST, 1980

figure 2

SITE TOPOGRAPHY MAP INTERIM REMEDIAL MEASURES WORK PLAN NASH ROAD LANDFILL *Wheatfield, New York*

LEGEND



- SITE PROPERTY LINE
- WETLAND STUDY AREA

ATTACHMENT H

COLOR PHOTOGRAPHS



1. Looking south at forested wetlands located in the southwestern corner of the Study Area.



2. Looking north of the forested wetlands located in the central portion of the Study Area.



3. Looking west at forested wetland and drainage feature along the northern portion of the Study Area.



4. Looking south at an emergent wetland located in the northern portion of the Study Area adjacent to DP-101.



5. Looking west at an emergent wetland located in the northern portion of the Study Area adjacent to DP-101.



6. Looking south at forested wetlands and dirt trail located in the southwestern corner of the Study Area.



7. Looking north of typical uplands found northwest of the WB line.



8. Looking southwest of forested wetlands adjacent to the overhead power line easement located south of the Study Area.



9. Looking southwest of forested wetlands adjacent to the gas easement located north of the Study Area.



10. Looking east of upland area (WD line) within the Study Area. The upland area appears to be associated with a former access road to the Site.



11. Looking east of upland area (WE line) within the Study Area. The upland area appears to be associated with a former access road to the Site.



12. Looking northeast of forested/emergent wetlands adjacent to a gas line transfer station.



13. Looking southwest of emergent wetlands within the overhead power line easement located along the southern Site boundary.



14. Looking northwest at a road side swale adjacent to Nash Road. The swale connects to the forested/emergent wetlands located within the Study Area.

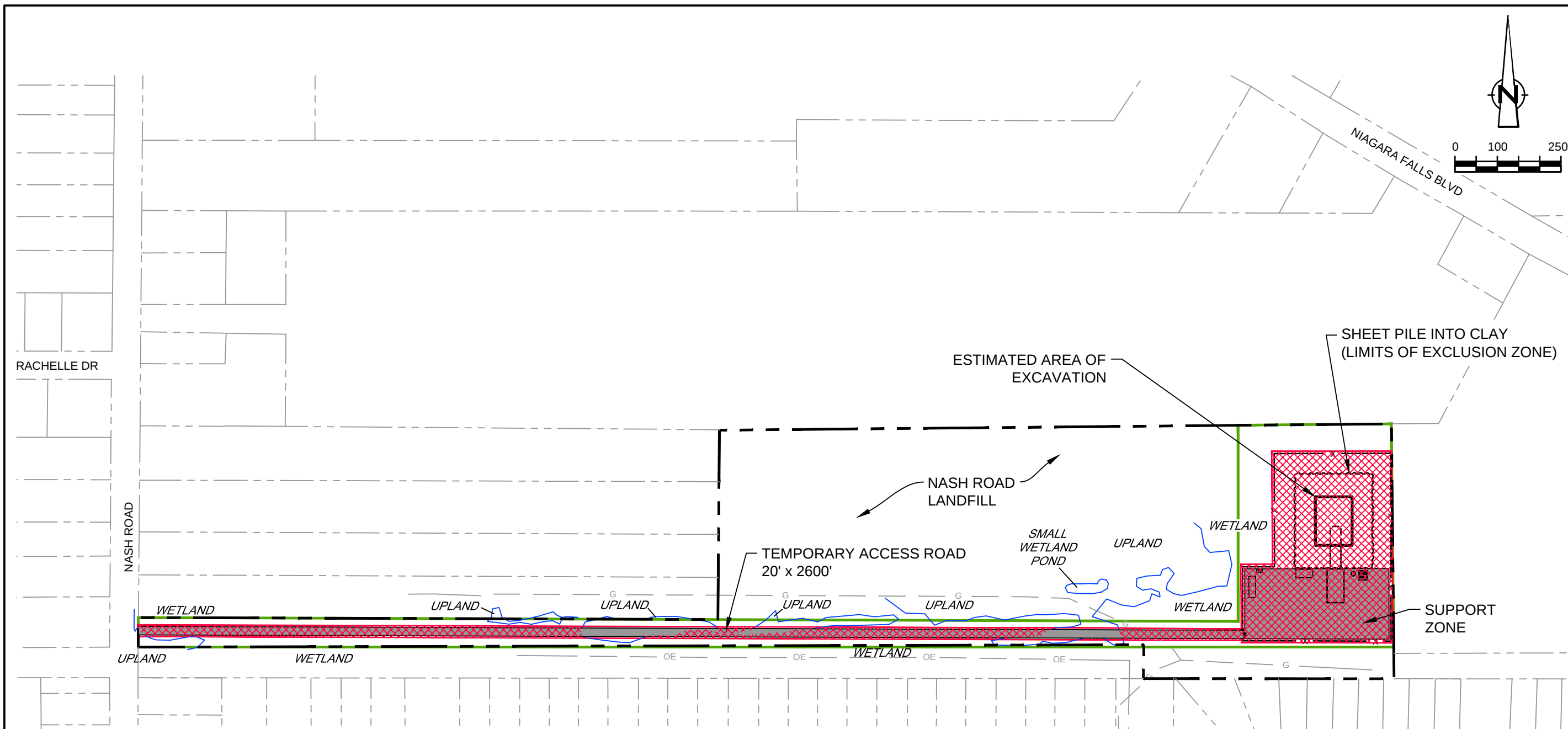


15. Looking south at a road side swale and culvert pipe adjacent to Nash Road. The swale connects to the forested/emergent wetlands located within the Study Area. The culvert pipe flows underneath Nash Road and connects to an off-site drainage ditch.



16. Looking west of the off-site drainage ditch along Nash Road.

ATTACHMENT I
PERMITTING PLANS



PARCEL AND TOWN LINE INFORMATION FROM NYS GIS CLEARINGHOUSE

LEGEND

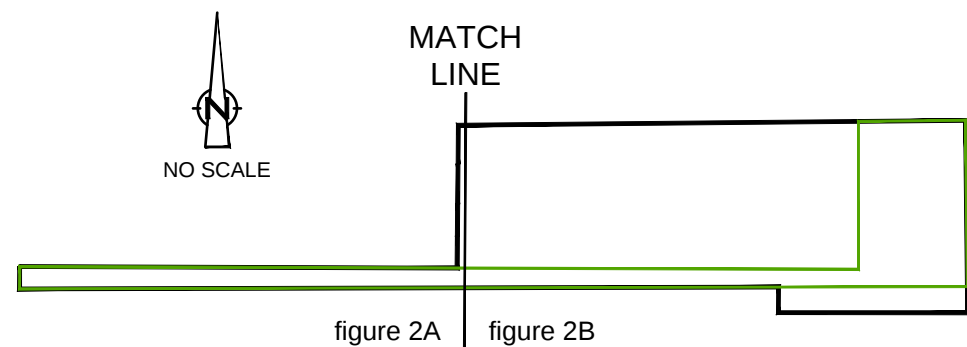
- — — — — PROPERTY LINES
- G — — — — — EXISTING GAS MAIN
- OE — — — — — EXISTING OVERHEAD ELECTRIC
- — — — — WETLAND BOUNDARY
- — — — — WETLAND STUDY AREA
- — — — — LIMITS OF DISTURBANCE
- XXXXX WETLAND IMACT AREA

NOTES:

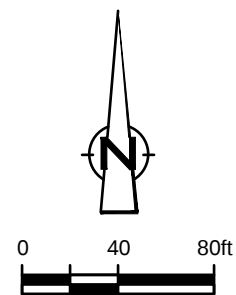
1. ACCESS ROAD WILL BE REMOVED, AREA RETURNED TO PRECONSTRUCTION GRADE AS MUCH AS POSSIBLE, AND AREA WILL BE STABILIZED USING AN APPROPRIATE SEED MIXTURE.
2. TEMPORARY WETLAND IMPACTS FOR ACCESS ROAD OF APPROXIMATELY 41,670 SQUARE FEET.
3. TEMPORARY WETLAND IMPACTS FOR WORK AREA OF APPROXIMATELY 141,550 SQUARE FEET.
4. SUPPORT ZONE, EXCAVATION AREA, SHEETPILES, AND FENCING WILL BE REMOVED, AREA RESTORED TO PRE-CONSTRUCTION GRADES, AND SEEDED WITH AN APPROPRIATE SEED MIXTURE.

WETLANDS PERMITTING PLAN
INTERIM REMEDIAL MEASURE WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York

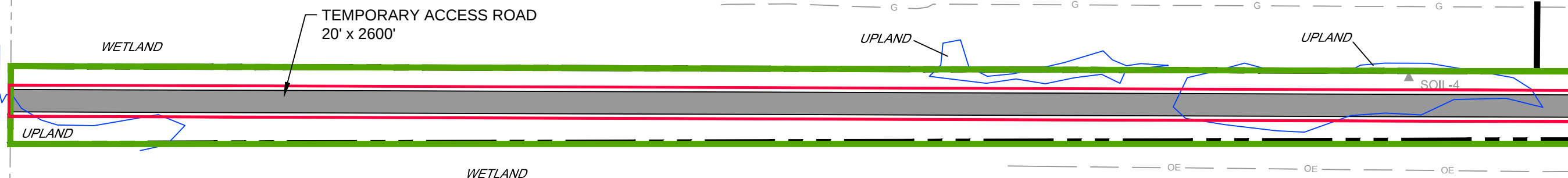




KEY MAP



NASH ROAD



PARCEL AND TOWN LINE INFORMATION FROM NYS GIS CLEARINGHOUSE

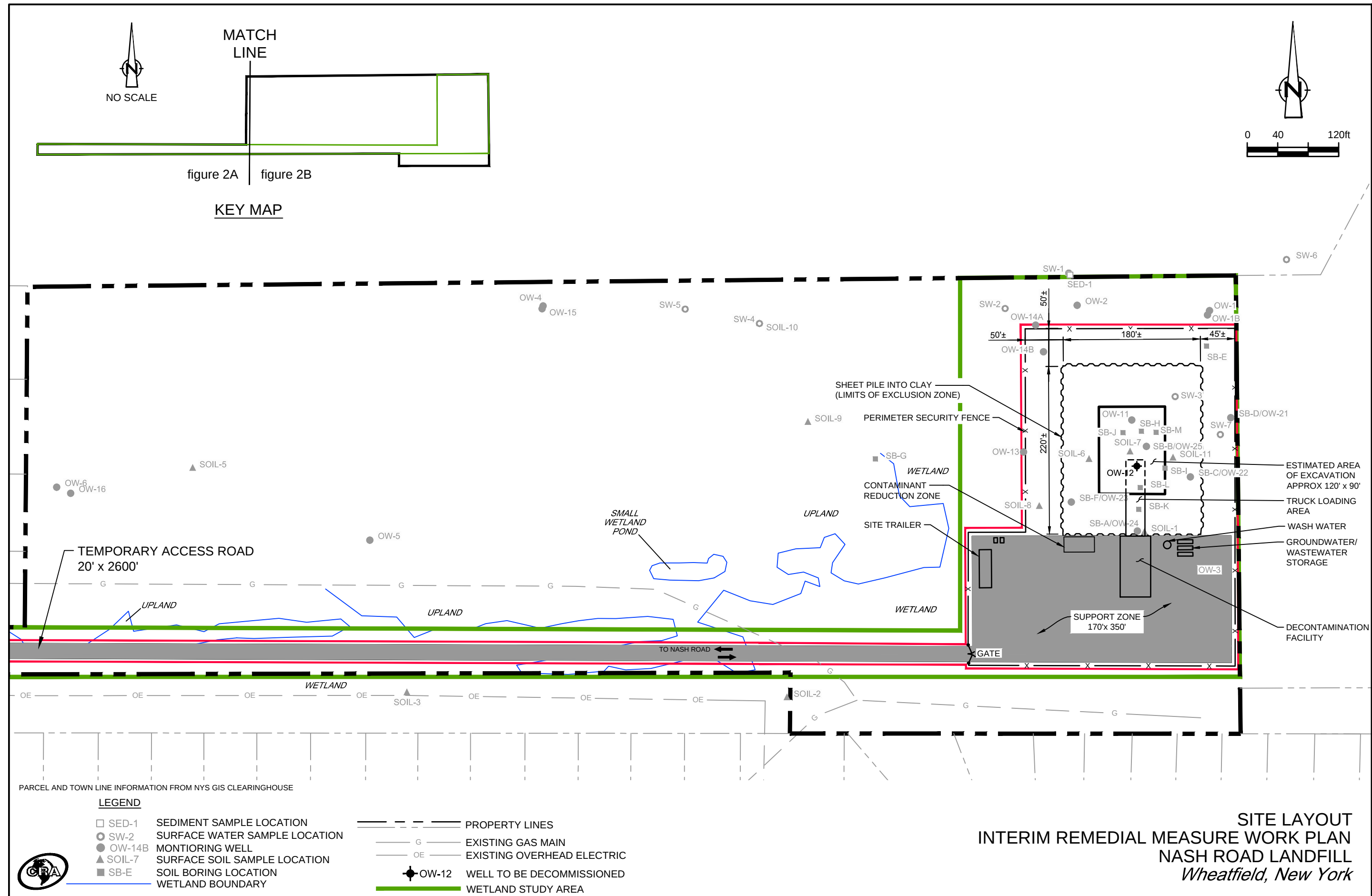
LEGEND

- SED-1 SEDIMENT SAMPLE LOCATION
- SW-2 SURFACE WATER SAMPLE LOCATION
- OW-14B MONITORING WELL
- ▲ SOIL-7 SURFACE SOIL SAMPLE LOCATION
- SB-E SOIL BORING LOCATION
- ◆ OW-12 WELL TO BE DECOMMISSIONED

- — — — — PROPERTY LINES
- G — — — — — EXISTING GAS MAIN
- OE — — — — — EXISTING OVERHEAD ELECTRIC
- — — — — WETLAND STUDY AREA
- — — — — LIMITS OF DISTURBANCE
- — — — — WETLAND BOUNDARY



SITE LAYOUT
INTERIM REMEDIAL MEASURE WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York



Site Restoration Activities

1. Site Backfill of excavation area with soil material from an approved source
2. Removal of sheet pile cutoff walls
3. Removal of vehicle decontamination area materials
4. Management and removal of non impacted access road and grading materials
5. Removal of fencing and sediment/erosion controls
6. Reestablishment of pre construction grades and elevations
7. Reestablishment of vegetation (grass)

From Ernst Seeds

ERNMX # ERNMX-126

Cost Per Pound \$23.51

Mix Type Storm Water Management Facility Sites

Ernst seed mixture (20 lbs per acre) to be mixed with
perennial rye grass (1 lb per acre)

Species List

25% Redtop Panicgrass, PA Ecotype (*Panicum rigidulum* (P. stipitatum), PA Ecotype)

16% Virginia Wildrye, PA Ecotype (*Elymus virginicus*, PA Ecotype)

16% Alkaligrass, 'Fults' (*Puccinellia distans*, 'Fults')

15% Fowl Bluegrass (*Poa palustris*)

10% Creeping Bentgrass (*Agrostis stolonifera*)

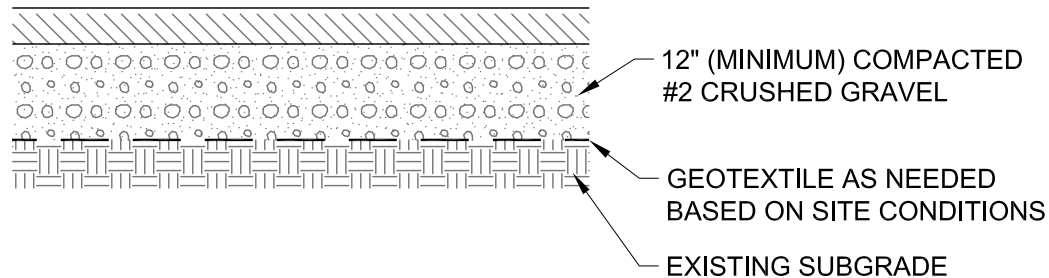
10% Ticklegrass (Rough Bentgrass), PA Ecotype (*Agrostis scabra*, PA Ecotype)

5% Soft Rush (*Juncus effusus*)

2% Autumn Bentgrass, PA Ecotype (*Agrostis perennans*, PA Ecotype)

1% Path Rush, PA Ecotype (*Juncus tenuis*, PA Ecotype)

Total: 100%



DETAIL

SCALE: 3/4" = 1'-0"

TYPICAL ACCESS ROAD/SUPPORT ZONE ROAD DETAIL
INTERIM REMEDIAL MEASURE WORK PLAN
NASH ROAD LANDFILL
Wheatfield, New York

