Approved JD under No. 2006-01224 and issued June 11, 2014



DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF:

June 11, 2014

Regulatory Branch

SUBJECT: Jurisdictional Determination No. 2006-01224

Russell Rutkowski Monroe County Dept. of Environmental Services City Place 50 West Main St, Suite 7100 Rochester, New York 14614-1228

Dear Mr. Ruthowski:

I am writing to you in regard to the recent wetland delineation report submitted on your behalf by Mrs. Johanna Duffy of Barton & Loguidice for a jurisdictional determination for the proposed Mill Seat Landfill Expansion area located along O'Brien and Bovee (Mahar Property) Roads, Town of Riga, Monroe County, New York.

Section 404 of the Clean Water Act establishes Corps of Engineers jurisdiction over the discharge of dredged or fill material into waters of the United States, including wetlands, as defined in 33 CFR Part 328.3.

I am hereby verifying the Federal wetland boundary as shown on the attached wetland delineation map dated October 2013. This verification was confirmed on November 15, 2013 and will remain valid for a period of five (5) years from the date of this correspondence unless new information warrants revision of the delineation before the expiration. At the end of this period, a new wetland delineation will be required if a project has not been completed on this property and additional impacts are proposed for waters of the United States. Further, this delineation/determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resource Conservation Service prior to starting work.

SUBJECT: Jurisdictional Determination 2006-01224

Based upon my review of the submitted delineation and on-site observations, I have determined that wetland areas D (34.97 acres), RG-6 (13.46 acres) & RG-7 (2.47 acres) and Tributary 1 (1,500 linear feet) on the subject parcel are part of a surface water tributary system to a navigable water of the United States as noted on the attached Jurisdictional Determination (JD) form. Therefore, the wetland(s) is/are regulated under Section 404 of the Clean Water Act. Department of the Army authorization is required if you propose a discharge of dredged or fill material in this/these area(s).

In addition, I have determined that there is no clear surface water connection or ecological continuum between wetland areas A1, B1, C1 & E1(Total = 0.68 acres) on the parcel and a surface tributary system to a navigable water of the United States. Therefore, these waters are considered isolated, non-navigable, intrastate waters and not regulated under Section 404 of the Clean Water Act. Accordingly, you do not need Department of the Army authorization to commence work in these areas.

I encourage you to contact the appropriate state and local governmental officials to ensure that the proposed work complies with their requirements.

Finally, this letter contains an approved JD for the subject parcel. If you object to this JD, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal the above JD, you must submit a completed RFA form within 60 days of the date on this letter to the Great Lakes/Ohio River Division Office at the following address:

Attn: Appeal Review Officer Great Lakes and Ohio River Division CELRD-PDS-O 550 Main Street, Room 10524 Cincinnati, OH 45202-3222 Phone: 513-684-6212; FAX 513-684-2460

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 C.F.R. part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by August 12, 2014.

It is not necessary to submit an RFA to the Division office if you do not object to the determination in this letter.

A copy of this correspondence has been sent to Mrs. Johanna Duffy of Barton and Loguidice.

Regulatory Branch

SUBJECT: Jurisdictional Determination 2006-01224

Questions pertaining to this matter should be directed to me by calling 716-879-4279, by writing to the following address: U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, New York 14207, or by e-mail at: joseph.m.rowley@usace.army.mil

Sincerely,

Joseph Rowley

Physical Scientist

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Monroe County Dept of Environmental Services	File Number: 2006-01224	Date: June 11, 2014
Attached is:		See Section below
INITIAL PROFFERED PERMIT (Standard Permit or I	Letter of permission)	A
PROFFERED PERMIT (Standard Permit or Letter of p	В	
PERMIT DENIAL		C
X APPROVED JURISDICTIONAL DETERMINATION		D
PRELIMINARY JURISDICTIONAL DETERMINAT	ION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

- A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.
- •ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- •OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT: You may accept or appeal the permit
- •ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- ●APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section 11 of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- •ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

CREATION TO A PROPERTY OF HEATTONIC TO	AN INDUCTAT DECEMBED DE	DMIT
SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO	AN INITIAL PROFFERED PE	RIVITI
REASONS FOR APPEAL OR OBJECTIONS: (Describe your	easons for appealing the decision of	or your objections to an initial
proffered permit in clear concise statements. You may attach addit	onal information to this form to cla	arify where your reasons or
1' d'an annual de and in the administration accord		,
objections are addressed in the administrative record.)		
		1
	6.1 1 1 1 1 1 1 1 1 1	Company to the formation
ADDITIONAL INFORMATION: The appeal is limited to a revi	ew of the administrative record, th	e Corps memorandum for the
record of the appeal conference or meeting, and any supplemental	information that the review officer	has determined is needed to
clarify the administrative record. Neither the appellant nor the Cor	ma may add navy information or an	alvess to the record. However
clarify the administrative record. Neither the appellant nor the Col	ps may add new information of an	alyses to the record. However,
you may provide additional information to clarify the location of in	nformation that is already in the ad	ministrative record.
POINT OF CONTACT FOR QUESTIONS OR INFORMATION		March March 1988 Control of the Party of the
	7C 1 1 1	1
If you have questions regarding this decision and/or the appeal	If you only have questions regard	ling the appeal process you may
process you may contact:	also contact:	
process you may remain		
	1 4 1	
Joseph Rowley	Attn: Appeal Review Officer	
United States Army Corps of Engineers	Great Lakes and Ohio River Divi	sion
	CELRD-PD-REG	
Buffalo District		
1776 Niagara Street	550 Main Street, Room 10524	
Buffalo, NY 14207	Cincinnati, OH 45202-3222	
	513-684-6212; FAX 513-684-24	60
716-879-4279	513-004-0212, FAA 513-004-24	00
joseph.m.rowley@usace.army.mil		
PICHT OF ENTRY Value 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	etmi to Comp of Engineers name	al and any government
RIGHT OF ENTRY: Your signature below grants the right of en	itry to Corps of Engineers personn	ei, and any government
consultants, to conduct investigations of the project site during the	course of the appeal process. You	i will be provided a 15 day
notice of any site investigation, and will have the opportunity to p	articinate in all site investigations	-
notice of any site investigation, and will have the opportunity to p		T-1
	Date:	Telephone number:
1		
	1	
Signature of appellant or agent.	1	

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

C	F	CTI	ION	Ι.	RA	CKCR	OUND	INFOR	MATION
3	Ľ	CH	IUN.	1:	BA	CKGK	OUND	INFUK	MALION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 10, 2014
- DISTRICT OFFICE, FILE NAME, AND NUMBER: LRB 2006-01224 (Monroe County-Mill St Landfill)
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: New York

County/parish/borough: Monroe

City: Riga

Center coordinates of site (lat/long in degree decimal format): Lat. 43.044 °N, Long. -77.93 °W

Universal Transverse Mercator: Click here to enter text.

Name of nearest waterbody: Tributary 2 of Mill Creek (aka Blue Pond Inlet)

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Genesee River

Name of watershed or Hydrologic Unit Code (HUC): 04130003

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different

REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: April 23, 2014

V Field Determination. Date(s): November 15, 2013

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Г Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: Click here to enter text.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

- 1. Waters of the U.S.
 - a. Indicate presence of waters of U.S. in review area (check all that apply): 1

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

V Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: # linear feet: # width (ft) and/or # acres.

Wetlands: 37.44 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): Click here to enter text.

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Boxes checked below shall be supported by completing the appropriate sections in Section III below.

For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months)

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: Click here to enter text.

Summarize rationale supporting determination: Click here to enter text.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Click here to enter text.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

General Area Conditions: Watershed size: # Choose an item. Drainage area: # Choose an item. Average annual rainfall: # inches Average annual snowfall: # inches (ii) Physical Characteristics: (a) Relationship with TNW: Tributary flows directly into TNW. Tributary flows through Choose an item. tributaries before entering TNW. Project waters are Choose an item. river miles from TNW. Project waters are Choose an item river miles from RPW. Project waters are Choose an item, aerial (straight) miles from TNW. Project waters are Choose an item. aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Click here to enter text. Identify flow route to TNW5: Click here to enter text. Tributary stream order, if known: Click here to enter text. (b) General Tributary Characteristics (check all that apply): Natural Tributary is: Artificial (man-made). Explain: Click here to enter text. Manipulated (man-altered). Explain: Click here to enter text.

Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	Averag Averag	properties with rest width: # feet the depth: # feet the side slopes: Ch	espect to top of bar	nk (estimate)):		
		utary substrate co	omposition (check	all that app	ly):	Concrete	
	□ c	obbles	Gravel			Muck	
	Г В	edrock	Vegetation	1. Type/% c	over: Click here t	o enter text.	
	Го	ther. Explain: Cli	ick here to enter text				
	Presence of Tributary ge	run/riffle/pool co cometry: Choose of	omplexes. Explain	n: Click here		in: Click here to enter text.	
(c)	Estimate ave Describ	oe flow regime: (se an item. flow events in rev Click here to enter te on and volume: Cli	xt.			
	Surface flov	v is: Choose an ite	m. Characteristics	S: Click here t	o ente r text .		
			em. Explain findi performed: Click i				
		clear, natural li changes in the shelving vegetation mate leaf litter distur- sediment depos water staining other (list): Clici iscontinuous OH	I indicators that an impressed on the character of soil ted down, bent, or the down washed awasition to the character to enter text.	he bank	destruction of the presence of sediment sortin scour multiple obser abrupt change	errestrial vegetation wrack line g yed or predicted flow ever in plant community Chek her	re to enter text.
	Г∣ н	igh Tide Line ind oil or scum lind fine shell or de physical markit tidal gauges		cts	ean High Water survey to avail physical marki		
Cha	Explain: Cli	utary (e.g., water ck here to enter tex			y film; water qua	lity; general watershed ch	aracteristics, etc.).

(iii)

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Third.

(iv)	Biol	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Click here to enter text.
		Wetland fringe. Characteristics: Click here to enter text.
		Habitat for:
		Federally Listed species. Explain findings: Click here to enter text.
		Fish/spawn areas. Explain findings: Click here to enter text.
		Other environmentally-sensitive species. Explain findings: Click here to enter text.
		Aquatic/wildlife diversity. Explain findings: Click here to enter text.
Cha	ıract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)		ysical Characteristics: General Wetland Characteristics: Properties: Wetland size: # acres Wetland type. Explain: Click here to enter text. Wetland quality. Explain: Click here to enter text. Project wetlands cross or serve as state boundaries. Explain: Click here to enter text.
	(b)	General Flow Relationship with Non-TNW: Flow is: Choose an item. Explain: Click here to enter text.
		Surface flow is: Choose an item. Characteristics: Click here to enter text.
		Subsurface flow: Choose an item. Explain findings: Click here to enter text. Dye (or other) test performed: Click here to enter text.
	(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Click here to enter text. Ecological connection. Explain: Click here to enter text. Separated by berm/barrier. Explain: Click here to enter text.
	(d)	Proximity (Relationship) to TNW Project wetlands are Choose an item. river miles from TNW. Project waters are Choose an item. aerial (straight) miles from TNW. Flow is from: Choose an item. Estimate approximate location of wetland as within the Choose an item. floodplain.
(ii)	Ch	nemical Characteristics: naracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Click here to enter text. entify specific pollutants, if known: Click here to enter text.
(ii	r r	ological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Click here to enter text. Vegetation type/percent cover. Explain: Click here to enter text. Habitat for: Federally Listed species. Explain findings: Click here to enter text.
		Fish/spawn areas. Explain findings: Click here to enter text.
		Other environmentally-sensitive species. Explain findings: Click here to enter text.
		Aquatic/wildlife diversity. Explain findings: Click here to enter text.
C	narac	cteristics of all wetlands adjacent to the tributary (if any)

2.

All wetland(s) being considered in the cumulative analysis: Choose an item.

Approximately (#) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Y /N'	2 J 2 g	Y/N	11
Y /N'	##	Y/N'	# J
Y/N	#	Y/N	#
Y/N	11	Y/N	#

Summarize overall biological, chemical and physical functions being performed: Click here to enter text.

C. SIGNIFICANT NEXUS DETERMINATION

8See Footnote # 3.

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: Click here to enter text.
- Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.
 Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Click here to enter text.
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Click here to enter text.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

	API	PLY):
	1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: # linear feet # width (ft), Or, # acres. Wetlands adjacent to TNWs: # acres.
	2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Click here to enter text Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Click here to enter text
3.		Provide estimates for jurisdictional waters in the review area (check all that apply): Tibutary waters: # linear feet # width (ft). Other non-wetland waters: # acres. Identify type(s) of waters: Click here to enter text. Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
		Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: # linear feet # width (ft). Other non-wetland waters: # acres. Identify type(s) of waters: Click here to enter text.
	4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

			[기	wetlands directly abutt RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetland D(RG-33) (34.97 acres) represents the headwater wetlands of an unnamed tributary to Mill Creek (also know as Blue Pond Inlet). Also, Wetland D(RG-33) is a mapped, NYSDEC regulated wetland. The wetland continues to the southeast beyond the limits of the delineated parcel. Based on a review of the NYSDEC's Environmental Resource Mapper and aerial photography, the wetland system continues east towards Route 166, where a mapped stream, an unnamed tributary to Mill Creek, begins. The unnamed tributary to Mill Creek is represented on the Churchville USGS as a solid blue line which indicates perennial flow.
				Delineated wetland RG-7 (2.47 acres) is associated with an unnamed Tributary to Hotel Creek, NYSDEC mapped Class C stream and bline line on the USGS Churchville quad. A culvert crosses underneath O'Brien Road within the limits of the delineated parcel/review area. The culvert provides a hydrological connection between wetland RG-7 north and RG-7 south. According to the delineation report, wetland RG-7 that surrounds O'Brien road has been observed to have standing water throughout much of the year. The unnamed tributary to Hotel Creek is located within the delineated limits of wetland RG-7; the wetland represents the headwaters of this tributary.
				Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Click here to enter text.
			Prov	ide acreage estimates for jurisdictional wetlands in the review area: # acres.
	5.	Wetl □	Wetl adja	sadjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. lands that do not directly abut an RPW, but when considered in combination with the tributary to which they are cent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data porting this conclusion is provided at Section III.C.
		Prov	ide a	creage estimates for jurisdictional wetlands in the review area: # acres.
	6.	Wet	Wet and	sadjacent to non-RPWs that flow directly or indirectly into TNWs. lands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting conclusion is provided at Section III.C.
		Prov	ide e	estimates for jurisdictional wetlands in the review area: # acres.
	7.	Imp	ound	Iments of jurisdictional waters.9
		As a	gene	eral rule, the impoundment of a jurisdictional tributary remains jurisdictional.
				nonstrate that impoundment was created from "waters of the U.S.," or
				nonstrate that water meets the criteria for one of the categories presented above (1-6), or
			Den	nonstrate that water is isolated with a nexus to commerce (see E below).
E.	OR	DES	TRU	INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION ICTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK APPLY): ¹⁰
				e or could be used by interstate or foreign travelers for recreational or other purposes.
		fron	n whi	ch fish or shellfish are or could be taken and sold in interstate or foreign commerce.
		whic	ch are	e or could be used for industrial purposes by industries in interstate commerce.
	П	Inte	rstate	e isolated waters. Explain: Click here to enter text.
		Oth	er fac	ctors. Explain: Click here to enter text
	Ide	ntify	wate	r body and summarize rationale supporting determination: Click here to enter text.
	Pro			ates for jurisdictional waters in the review area (check all that apply): v waters: # linear feet # width (ft).
		Oth	er no	n-wetland waters: # acres.
			Ident	ify type(s) of waters: Click here to enter text.
F.	Г	NO	N-JU	IRISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): sential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements.
	П			ew area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
	Г	,	Wate	ers do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Chek here to enter text.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Other: (explain, if not covered above): Click here to enter text.
Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).
Lakes/ponds: # acres.
Other non-wetland waters: # acres. List type of aquatic resource: Click here to enter text.
Wetlands: # acres.
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).
Lakes/ponds: # acres.
Other non-wetland waters: # acres. List type of aquatic resource: Click here to enter text
Wetlands: # acres.
SECTION IV: DATA SOURCES.
A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested items shall be included in case file and, where checked and requested items shall be included in case file and, where checked and requested items shall be included in case file and, where checked and requested items shall be included in case file and represent the checked items shall be included in case file and represent the checked items shall be included in case file and represent the checked items shall be included in case file and represent the checked items shall be included in case file and represent the checked items shall be included in case file and represent the checked items s
Data sheets prepared/submitted by or on behalf of the applicant/consultant.
Office concurs with data sheets/delineation report.
Office does not concur with data sheets/delineation report.
Data sheets prepared by the Corps: Click here to enter text.
Corps navigable waters' study: Click here to enter text.
U.S. Geological Survey Hydrologic Atlas: Click here to enter text.
USGS NHD data.
USGS 8 and 12 digit HUC maps.
U.S. Geological Survey map(s). Cite scale & quad name: Churchville Quad, 1:20,000
USDA Natural Resources Conservation Service Soil Survey. Citation: USDA/NRCS Web Soil Survey
National wetlands inventory map(s). Cite name: USFWS Wetland Mapper; Mapped Federal wetlands are within the vicinity of the
delineated parcel State/Local wetland inventory map(s): NYSDEC Environmental Resource Mapper, Multiple NYSDEC regulated are within the vicinity
of the delineated parcel FEMA/FIRM maps: Click here to enter text.
100-year Floodplain Elevation is: Click here to enter text. (National Geodectic Vertical Datum of 1929)
The state of the s
Previous determination(s). File no. and date of response letter: Click here to enter text.
Applicable/supporting case law:
Applicable/supporting scientific literature:
Other information (please specify):
B. ADDITIONAL COMMENTS TO SUPPORT JD: None
1.02
April 30, 2014

Joseph M. Rowley Project Manager

Date

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):-June 10, 2014
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER: 2006-01224 (Monroe County-Mill St Landfill)

C	PROJECT	LOCATION	AND BACKGROUN	D INFORMATION:
U.	FRUJECI	LUCATION	AILD DACKGROUN	D INCURIYIA I IUN

State: New York County/parish/borough: Monroe City: Riga

Center coordinates of site (lat/long in degree decimal format): Lat. 43.044 °N °, Long. -77.93 °W °

Universal Transverse Mercator: Click here to enter text.

Name of nearest waterbody: Hotel Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Genesee River

Name of watershed or Hydrologic Unit Code (HUC): 04130003

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: April 23, 2014

Field Determination. Date(s): November 15, 2013

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: Click here to enter text.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply): 1

Γ	TNWs, including territorial seas
	Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 1500 linear feet: 4-8 width (ft) and/or 0.46 acres. Wetlands: 13,46 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): Click here to enter text.

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: I conducted a site visit on November 15, 2013 and also reviewed in-house resources including, topographical maps, aerial photography and soils maps. I walked the perimeter of Wetlands A1, B1, C1 & E1(Total = 0.68 acres) and I did not observe any surface flow or culverts going away from them or any shallow subsurface connections. No ecological nexus to any drainageways were seen in the vicinty of wetlands A1, B1, C1 & E1. Wetland A1,B1,C1 & E1 appear to be only intermittently saturated, vernal pools that may support amphibian species. Wetlands A1,B1,C1 & E1 did not show evidence of standing water (no water marks or

Boxes checked below shall be supported by completing the appropriate sections in Section III below.

For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

drift lines) and therefore may not hold water long enough for substantial flood storage. I didn't observe any drainages or flow from WetlandS A1, B1, C1 & E1 into any other the wetland or drainageway. Wetlands A1,B1,C1 & E1 are geographically isolated and therefore are not jurisdictional.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: Click here to enter text.

Summarize rationale supporting determination: Click here to enter text.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Click here to enter text.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i)	General	Area	Conditions:
-----	---------	------	-------------

Watershed size: #2,373 square miles (Genesee River Watershed), 202 square miles (Black Creek Watershed)

Drainage area: # slightly over 100 acres Average annual rainfall: 35 inches Average annual snowfall: 63 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 15-20 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 10-15 aerial (straight) miles from TNW.

Project waters are 2-5 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: No

Identify flow route to TNW⁵: Wetland RG-6 flows south into an unnamed and unmapped drainage (referred to as RG-6's drainage) which empties into Hotel Creek. Hotel Creek is the ninth tributary of Black Creek, which is the 19th tributary of the Genesee River, the closet TNW.

Tributary stream order, if known: RG-6's drainage is unmapped but Hotel Creek, where the drainage empties into this waterbody, is a first order stream.

(b)	General Tributa	rv Characteristics	(check all that apply):

Tributary is:

Natural

Artificial (man-made). Explain: Click here to enter text.

Manipulated (man-altered). Explain: Channel has been excavated and modified in the past to carry runoff from adjacent agricultural fields and from RG-6 without the risk of flooding the fields themselves.

Tributary properties with respect to top of bank (estimate):

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West. ⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	Ave	erage side slopes: 2	:1 to 3:1	_			
	Primary	tributary substrate	composi	ition (check all that ap	oply):		
		Silts		Sands			Concrete
		Cobbles		Gravel			Muck
		Bedrock	V				and woody vinbes in channel with shrubs py cover along length of drainage.
	V	Other. Explain: su	ıbstrate	is primarily a clay loa	ım. Limite	ed cobble	s/rocks for most of its length.
	affect ba channel. Presence Tributary	nks. Due to the ame	ount of somplex ely strain	vegetative cover, bank tes. Explain: absent ght	iing banks ks are fair]. Explai ly stable,	in: water elevation doesn't get high enough to despite a consistent 2:1 to 3:1 slope along the
(c)	Flow:						
Tributary provides for: intermittent Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Wetland RG-6 and associated drainages rely on area surface runoff and discharge from the land site stormwater detention basin for their flow. Groundwater is not a major factor contributing recharge and it is estimated that groundwater discharge accounts for less than ½% of the total flow to the wetland with precipitation and runoff providing the primary source of recharge Other information on duration and volume: Click here to enter text.							area surface runoff and discharge from the landfill ng recharge and it is estimated that groundwater
	Surface	flow is: confined C	haracte	ristics: Surface water	flow with	in RG-6'	s drainage is confined to a channel for most of its
length.							
on previous h	ydrogeolo	gic work performed	d on the	n findings: amount of landfill site and for t med: <i>Click here to ente</i>	he soil bo		unknown but estimated to be very limited based project.
	다 다 다	changes in the shelving vegetation ma leaf litter distured leaf leaf litter leaf	all indication in the down of	ators that apply): bressed on the bank for the ter of soil wn, bent, or absent for washed away to enter text. Explain: Click here to the termine laby: g shore objects posits (foreshore) aracteristics	destruction destru	esence of ent sortinale observations of CV tent of CV th Water I to available all marking	errestrial vegetation wrack line g red or predicted flow events n plant community Click here to enter text. WA jurisdiction (check all that apply): Mark indicated by: able datum;
Cha	Explain: Explain: during lo ntify speci logical Cl Riparian variety o	Water flow within ow flow events or wific pollutants, if kninaracteristics. Characteristics were confidered to the corridor. Characteristics weget	RG-6's when the lown: N annel seristics (attion al	s drainage is generally e water is stagnet with o know pollutants upports (check all th	clear, soin the chan at apply) woody sl	metimes innel. : hrubs and	lity; general watershed characteristics, etc.). with an organic film on top of the water surface I saplings line the channel on both sides with a

Average width: 6 feet Average depth: 3 feet

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

			Habit	at for:						
				Federa	ally Listed speci	es. Explain findings: Cl	lick here to en	ter text.		
				Fish/sp	pawn areas. Exp	lain findings: Click here	to enter text.			
			П	Other (environmentally	-sensitive species. Exp	lain finding	S: Click here to enter text.		
				Aquati	ic/wildlife diver	sity. Explain findings:	Click here to	enter text.		
2.	Chs	ract	eristic	s of w	etlands adiacei	nt to non-TNW that flo	ow directly	or indirectly into TNW	7 (2. 1	
2.	(i)				cteristics:	21111		,		
	(1)		Gene	ral We	etland Character	ristics:				
				erties: /etland	d size: 13.46 acı	res				
			V	/etland	d type. Explain	: Palustrine forested		ufiltuation relient on ne	poinitation Vacatative wetle	and type is
of h	igh c	ualit		vetland	d quality. Expla	ain: Perched – limited gr	roundwater	nititration reliant on pro	ecipitation. Vegetative wetla	iliu type is
			Proje	ct wet	lands cross or s	erve as state boundaries.	. Explain: no	ot applicable		
		(b)	Gene	ral Flo	ow Relationship	with Non-TNW:	1 C 11/	atland DC 6 to its seess	isted drainegs is governed [hv
prec	ipita	tion	Flow events	us: Int	termittent Flow scharges from tl	Explain: Much of the fi he stormwater detention	tow from w basin also c	contribute surface water	tiated drainage is governed lead to the wetland. Wetland RC	3-6
disc	harg	es to	its dra	inage	primarily via a	culvert structure (installe	ed to provid	e access to agricultural	field to the west).	
			Surfa	ice flo	w is: Discrete	flow is not visually obse	erved within	wetland RG-6 except a	t the outlet and the stormwa	iter detention
basi	n dis	schar	ge loca	ition.	According to the	e delineation report, surf	face water h	as been observed within	the wetland throughout mu	ch of the
year	r.				1.5					
					-	ain findings: Subsurface performed: Click here to		tnown		
		(-)								
		(c)	well V		ctly abutting	mination with Non-TNV	<u> </u>			
					directly abutting	g				
					Discrete wetla	and hydrologic connecti-	on. Explain	: Click here to enter text.		
					_	nnection. Explain: Click				
				Π	Separated by	berm/barrier. Explain:	Click here to	enter lext.		
		(d)			(Relationship) t	<u>o TNW</u> 5 river miles from TNW	J			
			Proj	ect wa	ters are 2-5 aeri	al (straight) miles from				
			Flov	v is fro	om: wetland to r	navigable waters ation of wetland as withi	in the 500-v	ear or greater floodplain	ı.	
	(::)	Ch			racteristics:	ition of worlding as with		ou. o. B. ou. o. o. o. o.		
	(11)	Ch	aracte	rize we	etland system (e	e.g., water color is clear,	brown, oil	film on surface; water q	uality; general watershed ch	aracteristics
			etc.)	. Exp	lain: Water colo	or is fairly clear. Heavy o Wetland is at the heady	decompositi	on of vegetation within watershed. Stormwater	the wetland. Organic film o detention basin and wetland	n the water d RG-6 help
			to fi	lter see	diments from th	e surface water that flow	ws to the adj	acent non-TNW.		•
				_		known: none are known				
	(ii					Vetland supports (checiteristics (type, average v				
				-		cover. Explain: Primari				
		ſ	7 Ha	ıbitat f	for:					
				Fede	rally Listed spec	cies. Explain findings: (Click here to e	enter text.		
					•	xplain findings: Click her				
						lly-sensitive species. Ex			dlife species such as forest	
			14.1			amphibians/reptiles.	. tilo violiai.	a supporte annotation with		
3.	C	harad	teristi	ics of a	all wetlands ad	jacent to the tributary	(if any)			
		Al	l wetla	ınd(s)	being considere	d in the cumulative ana	lysis: I =	mulativa analysis		
					nd, specify the	n total are being conside following:	ered in the ci	amutative analysis.		
							г	Directly abuts? (Y/N)	Size (in acres)	
			ווע	W	<u>ıbuts? (Y/N)</u> 'etland RG-6 - Y			YN	#	
	C.				hiological chan	nical and physical functi	ione baing n	erformed: A hydrologic	al connection can be traced	trom wetlan

Summarize overall biological, chemical and physical functions being performed: A hydrological connection can be traced from wetland RG-6 and its drainage to Hotel Creek then to Black Creek the Genesee River, a TNW. Wetland RG-6 is primarily forested and a riparian buffer lines the stream resource on both sides throughout its length. Wetland RG-6 and to an extent the drainage remove sediment and other potential polluntants from the surface water before it reaches Hotel Creek.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the Rapanos Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: Click here to enter text.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

Wetland RG-6 (13.46 acres) occurs entirely within the boundaries of the project site. During the site visit the wetland was in a relatively saturated condition. Flood attenuation/runoff storage, pollutant trapping/water quality, removal of suspended solids, dissolved solids, toxins and retention/treatment of nitrogen and phosphorus, functions are considered to be minimal for the subject wetland. Wildlife habitat functions are considered to be minimal.

Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?

Moderate appreciable lifecycle support functions, with respect to Genesee River are performed by the non RPW unnamed tributary to Hotel Creek (1500 linear feet) and its adjacent wetland for this relevant reach. There is habitat in the wetland to support aquatic species, amphibians, insects that are also present in the TNW. The wetland provides habitat for local communities of insects, birds, some amphibians and small mammals and avian species. The avian species which likely use this wetland and tributary could be closely associated with use of the TNW.

Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?

Yes, the non-RPW unnamed tributary to Hotel Creek serves as a primary collector and processor of organic matter and nutrients for downstream waters which includes the TNW, Genesee River. The non-RPW carries nutrients and can transport organic debris to the TNW. The storage and transformation of organic matter is important to these types of systems because it prevents downstream water quality degradation as a result of excess organic matter. The non-RPW also transforms unusable organic matter (inorganic carbon) into food for aquatic organisms (organic carbon) that reside in the TNW

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Click here to enter text.

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CH	CK ALL THAT
	APPLY):	

TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

	TNWs: # linear feet # width (ft), Or, # acres.	
	Wetlands adjacent to TNWs: # acres.	
2.	Vs that flow directly or indirectly into TNWs.	
	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data ar tributary is perennial: Click here to enter text.	nd rationale indicating that
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three mon Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributo enter text.	ths each year) are jurisdictional itary flows seasonally: Click here
	Provide estimates for jurisdictional waters in the review area (check all that apply):	

		Tributary waters: # linear feet # width (ft).
		Other non-wetland waters: # acres.
		Identify type(s) of waters: Click here to enter text.
3.		Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a
		TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
		Provide estimates for jurisdictional waters within the review area (check all that apply):
		Tributary waters:1500linear feet 6width (ft).
		Other non-wetland waters: acres.
		Identify type(s) of waters: Click here to enter text.
	4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
		Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
		Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly
		abutting an RPW: Click here to enter text.
		Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that
		tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that
		wetland is directly abutting an RPW: Click here to enter text.
		Provide acreage estimates for jurisdictional wetlands in the review area: # acres.
	5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
		Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are
		adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
		Provide acreage estimates for jurisdictional wetlands in the review area: # acres.
	6	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
	6.	Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent
		and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting
		this conclusion is provided at Section III.C.
		Provide estimates for jurisdictional wetlands in the review area: 13.46 acres.
	7.	Impoundments of jurisdictional waters.9
		As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or
		Demonstrate that impoundment was created from waters of the C.S., of Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
		Demonstrate that water is isolated with a nexus to commerce (see E below).
E.	ISC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION R DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK
	OH AT	L THAT APPLY): 10
		which are or could be used by interstate or foreign travelers for recreational or other purposes.
		from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
		which are or could be used for industrial purposes by industries in interstate commerce.
		Interstate isolated waters. Explain: Click here to enter text.
		Other factors. Explain: Click here to enter text.
	Ide	entify water body and summarize rationale supporting determination: Click here to enter text.
	Pro	ovide estimates for jurisdictional waters in the review area (check all that apply):
	034	Tributary waters: # linear feet # width (ft).
	Γ	Other non-wetland waters: # acres.
		Identify type(s) of waters: Click here to enter text.
		Wetlands: # acres.
F.		NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers
		Wetland Delineation Manual and/or appropriate Regional Supplements.
	V	Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
		Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the
		"Migratory Bird Rule" (MBR).

3.

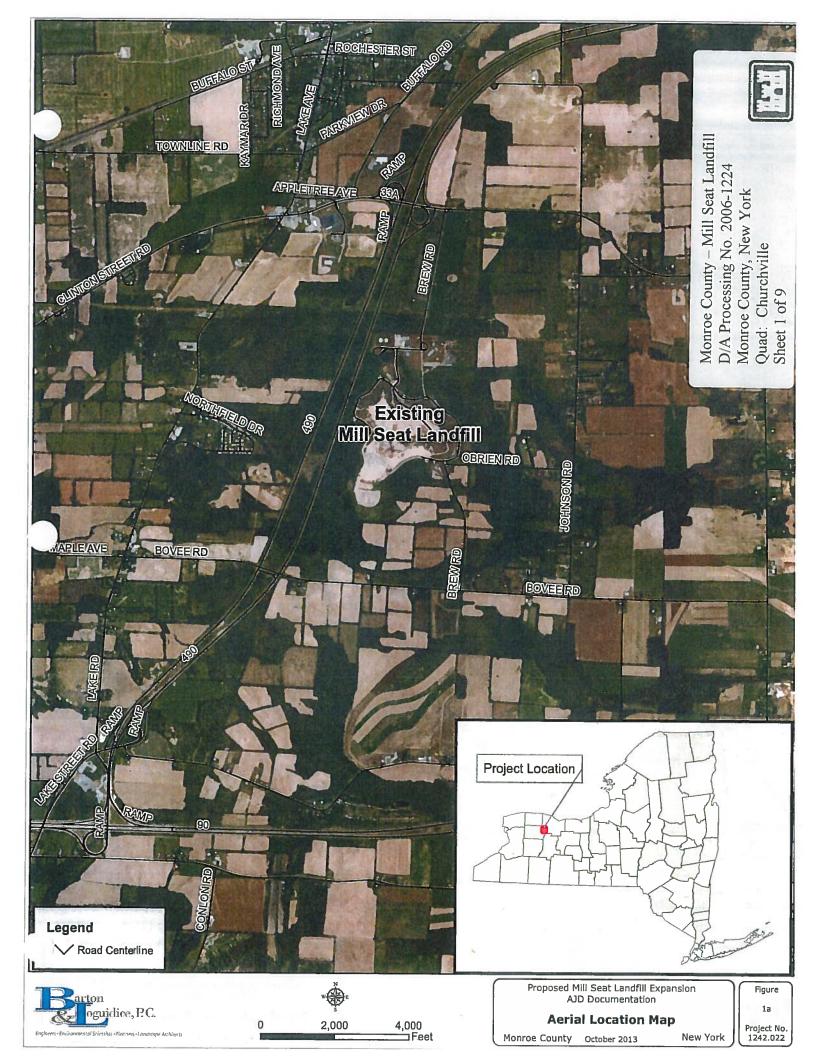
 ⁸ See Footnote # 3.
 9 To complete the analysis refer to the key in Section III D.6 of the Instructional Guidebook.
 10 Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

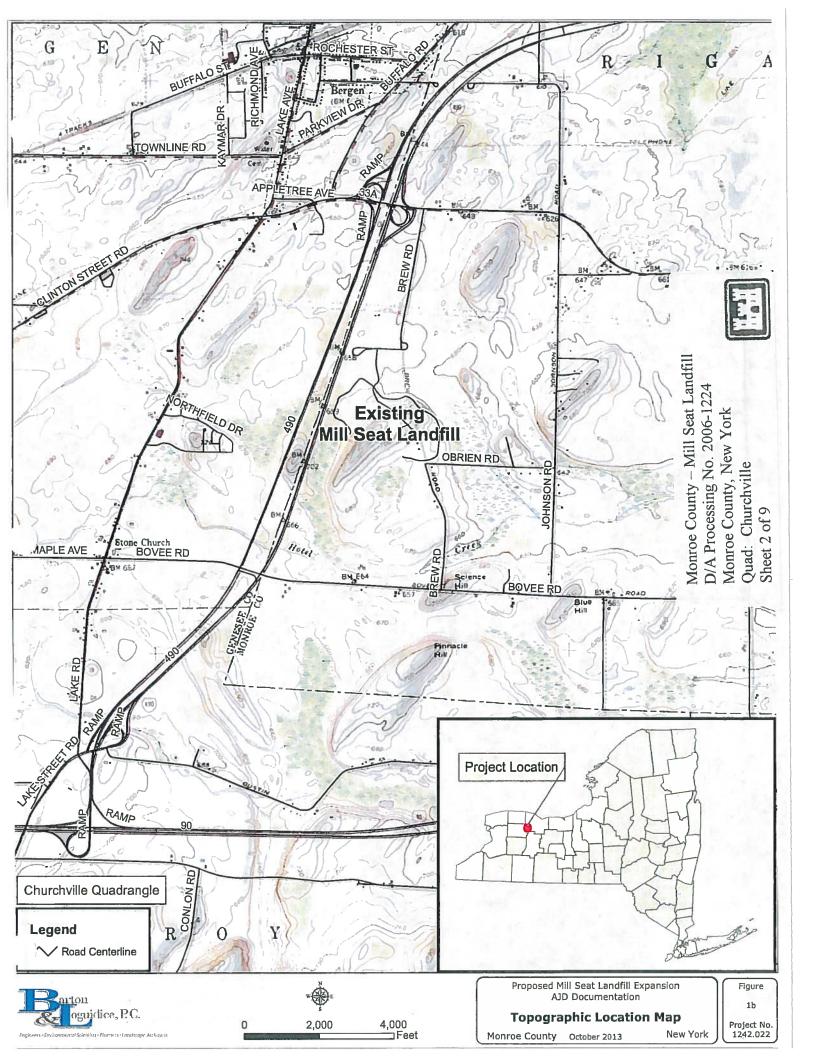
_	W
	Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Chek here to enter text
	Other: (explain, if not covered above): Click here to enter text.
(i.e.,	ide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment all that apply):
	Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).
	Lakes/ponds: # acres.
•	Other non-wetland waters: # acres. List type of aquatic resource: Click here to enter text.
	Wetlands: 0.68 acres.
findi	ide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a ng is required for jurisdiction (check all that apply):
	Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).
	Lakes/ponds: # acres.
	Other non-wetland waters: # acres. List type of aquatic resource:
V	Wetlands: 0.68 acres.
SECTIO	N IV: DATA SOURCES.
	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and
17	
	Data sheets prepared/submitted by or on behalf of the applicant/consultant.
	Office concurs with data sheets/delineation report.
	Office does not concur with data sheets/delineation report.
	Data sheets prepared by the Corps: Click here to enter text.
	Corps navigable waters' study: Click here to enter text.
ΓI	U.S. Geological Survey Hydrologic Atlas: Click here to enter text.
	USGS NHD data.
	USGS 8 and 12 digit HUC maps.
[7]	U.S. Geological Survey map(s). Cite scale & quad name: Churchville Quad, 1:20,000
	USDA Natural Resources Conservation Service Soil Survey. Citation: USDA/NRCS Web Soil Survey
IZI	National wetlands inventory map(s). Cite name: USFWS Wetland Mapper; Mapped Federal wetlands are within the vicinity of the
	delineated parcel
7	State/Local wetland inventory map(s): NYSDEC Environmental Resource Mapper, Multiple NYSDEC regulated are within the vicinity of the delineated parcel
F=1	FEMA/FIRM maps: Click here to enter text.
	100-year Floodplain Elevation is: Click here to enter text. (National Geodectic Vertical Datum of 1929)
[고]	Photographs: Aerial (Name & Date): Bing/Google Maps
	or Other (Name & Date): Chek here to enter text.
	Previous determination(s). File no. and date of response letter: Click here to enter text.
[ma]	Applicable/supporting case law:
1-1	Applicable/supporting scientific literature:
1 mil	Other information (please specify):
of Engin identified Quad or determing this case shellfish	PITIONAL COMMENTS TO SUPPORT JD: Isolated wetlands A1, B1, C1 & E1(Total = 0.68 acres) were field verified by the Corps eers on November 15, 2013. The perimeter of the wetlands were walked and no evidence of any connection to other waters were d. There were no connections between Wetlands A1, B1, C1 & E1(Total = 0.68 acres) and any other waters on the Churchville USGS the USDA/NRCS Web Soil Survey. Wetlands A1, B1, C1 & E1 are isolated and outside the Department of the Army's jurisdiction. The nation is supported by the review of in-house resources and verified from a site visit. None of the 328.3(a)(3)(i-iii) factors are relevant in Wetlands A1, B1, C1 & E1 offers no use for industrial or commercial purposes. Wetlands A1, B1, C1 & E1(Total = 0.68 acres) were need to be isolated and therefore non-jurisdictional.
	1 . A

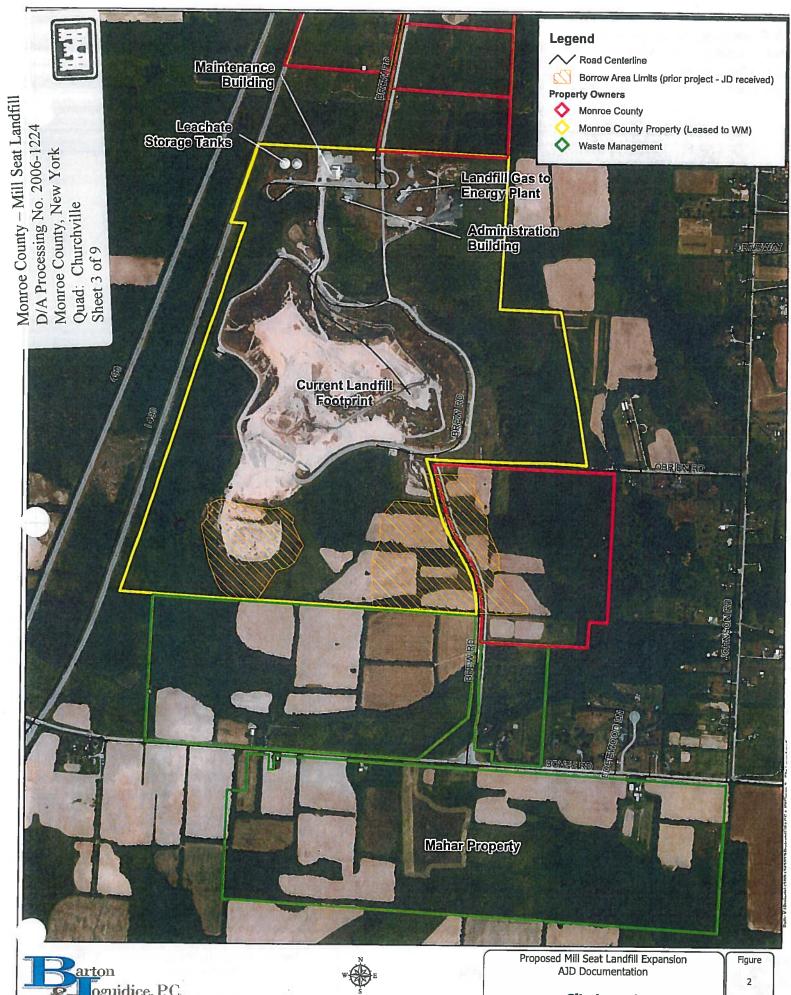
Joseph M. Rowley Project Manager

April 30, 2014

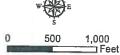
Date











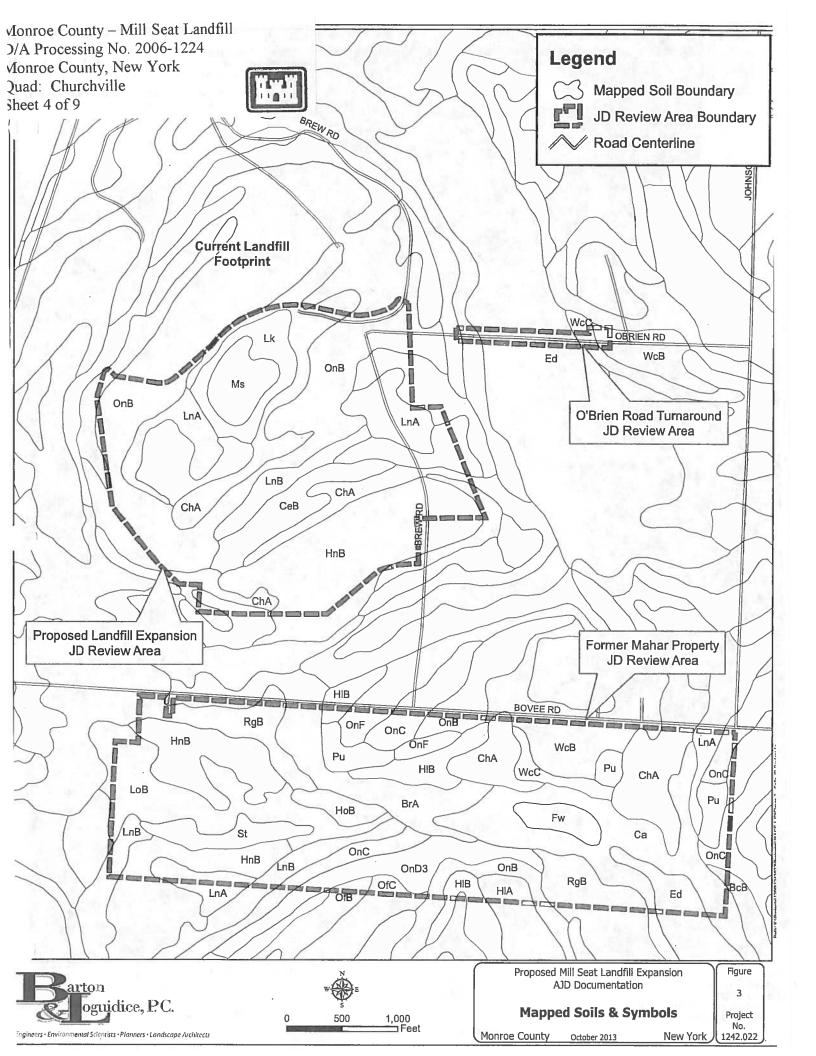
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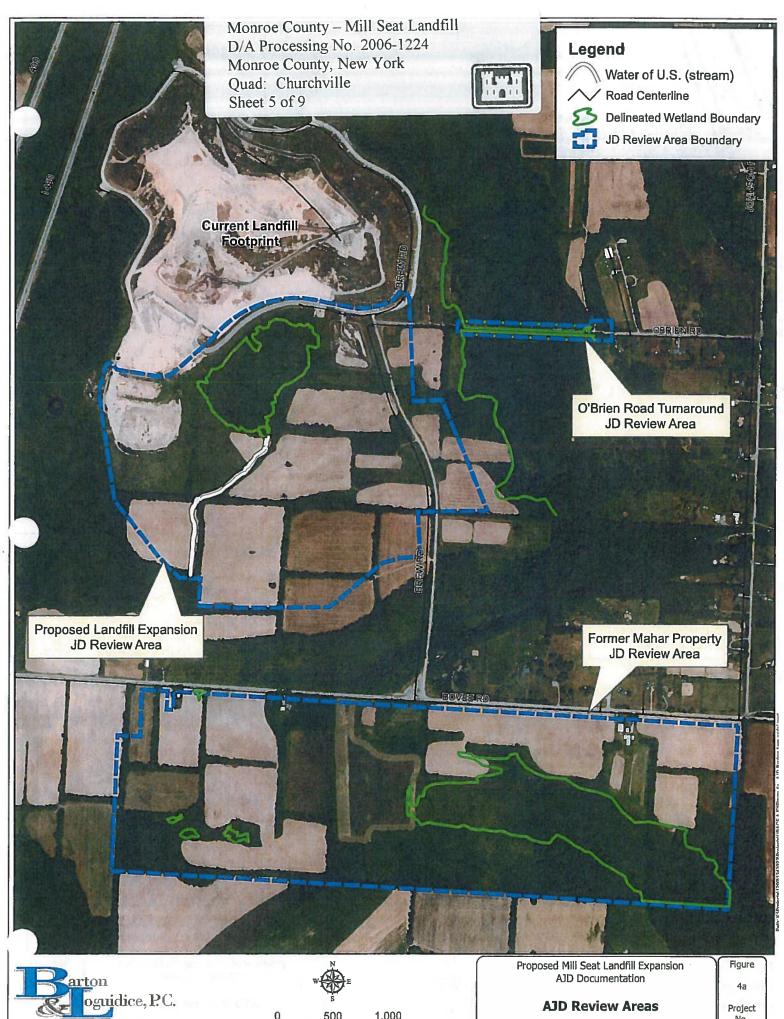
October 2013

Monroe County

New York

Project No. 1242.022





Engineers · Environmental Scientists · Planners · Landscape Architects

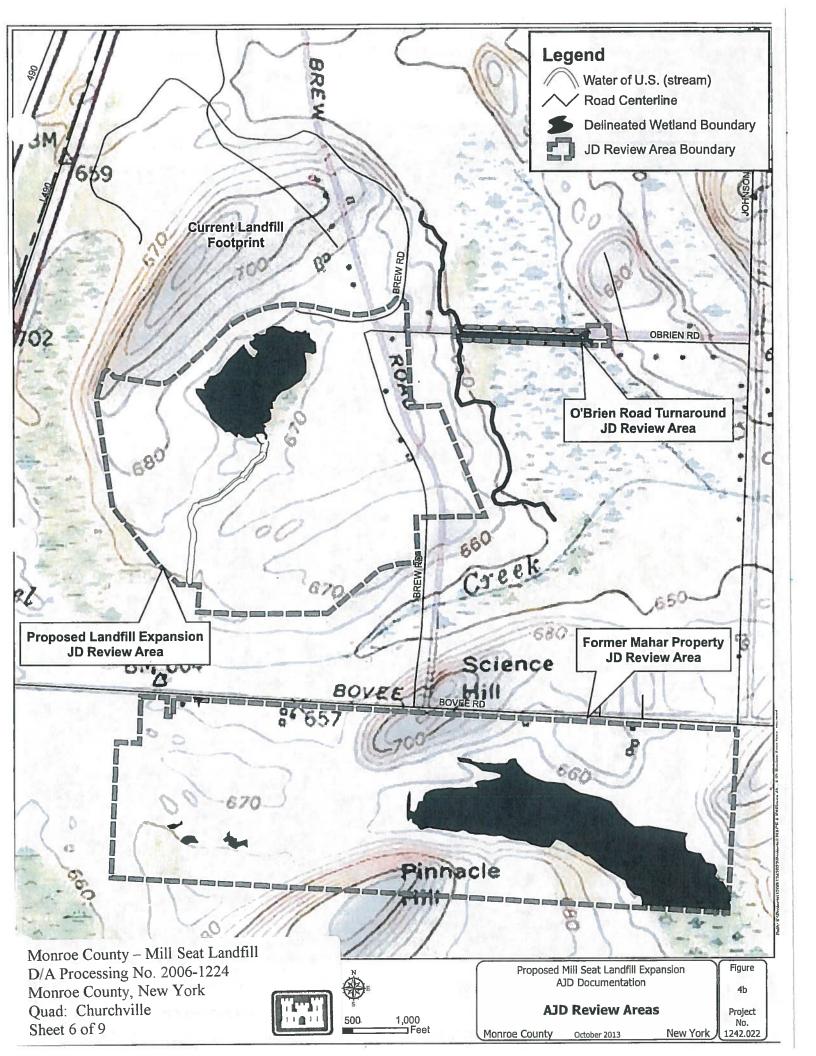
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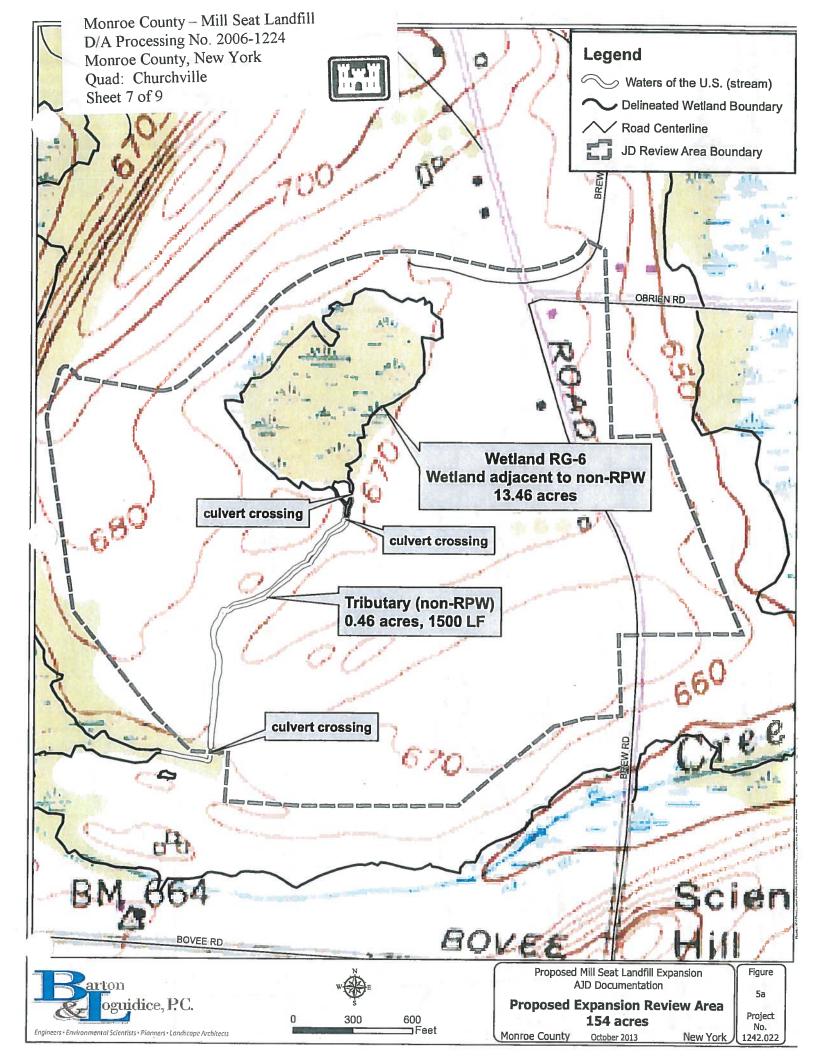
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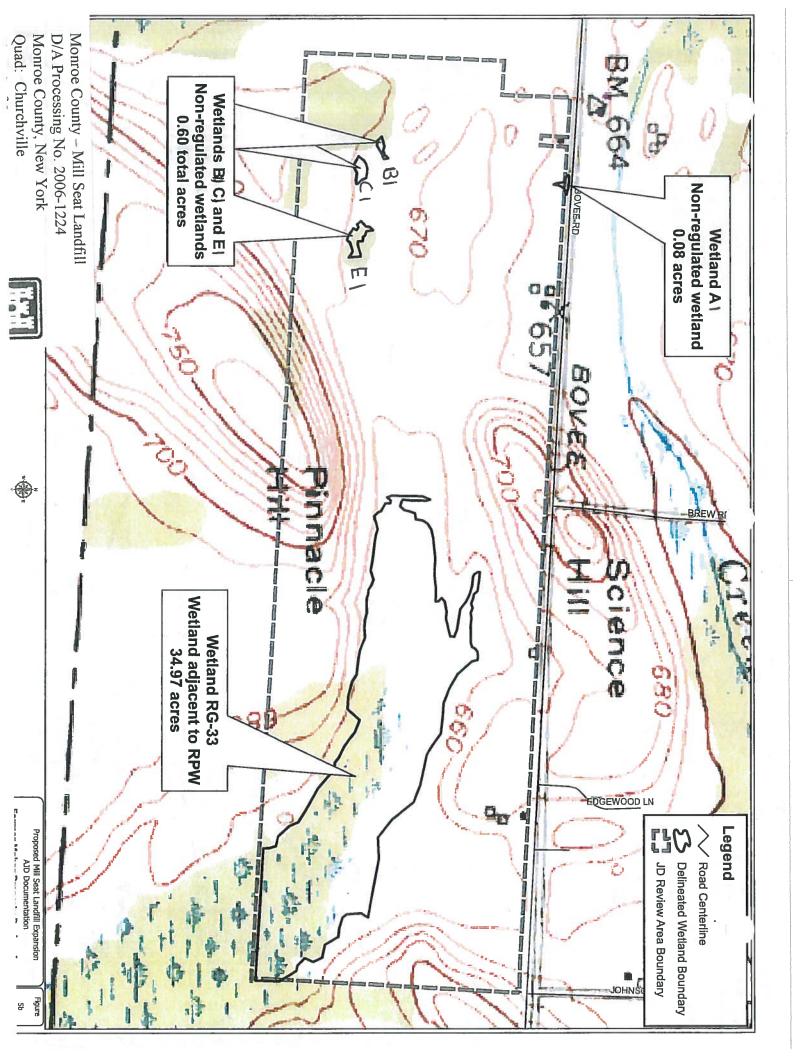
Monroe County

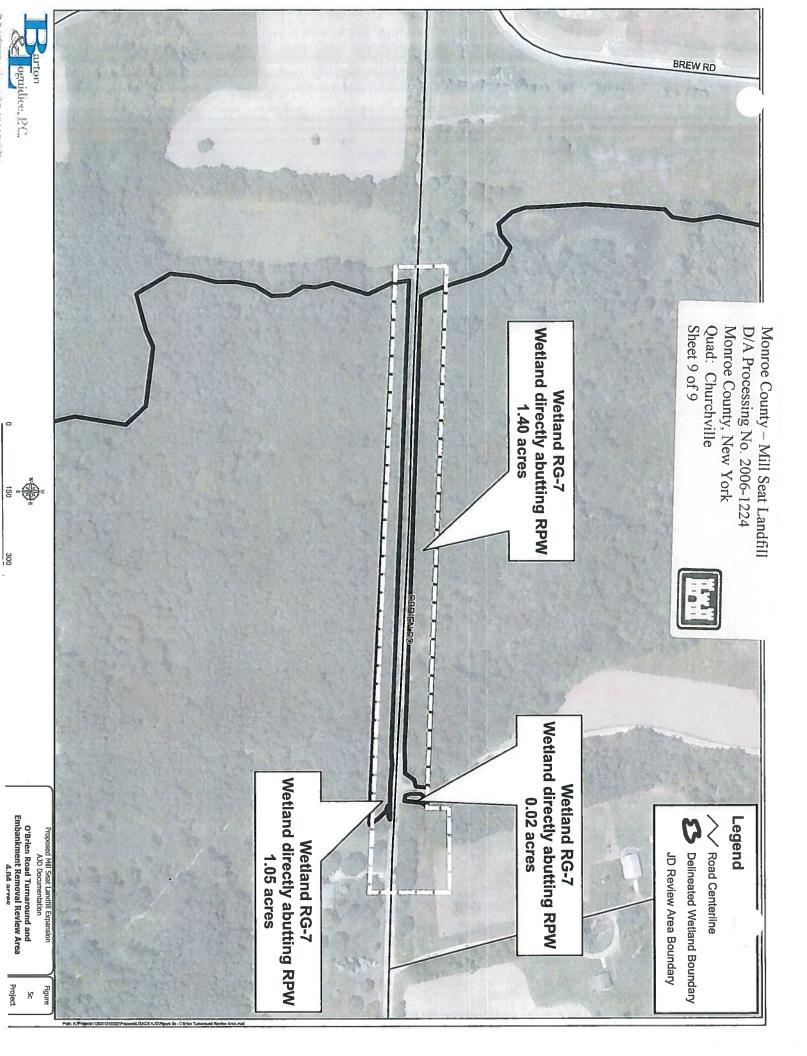
New York

1242.022









Approved JD under No. 2006-01224 and issued June 11, 2014



DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF:

June 11, 2014

Regulatory Branch

SUBJECT: Jurisdictional Determination No. 2006-01224

Russell Rutkowski Monroe County Dept. of Environmental Services City Place 50 West Main St, Suite 7100 Rochester, New York 14614-1228

Dear Mr. Ruthowski:

I am writing to you in regard to the recent wetland delineation report submitted on your behalf by Mrs. Johanna Duffy of Barton & Loguidice for a jurisdictional determination for the proposed Mill Seat Landfill Expansion area located along O'Brien and Bovee (Mahar Property) Roads, Town of Riga, Monroe County, New York.

Section 404 of the Clean Water Act establishes Corps of Engineers jurisdiction over the discharge of dredged or fill material into waters of the United States, including wetlands, as defined in 33 CFR Part 328.3.

I am hereby verifying the Federal wetland boundary as shown on the attached wetland delineation map dated October 2013. This verification was confirmed on November 15, 2013 and will remain valid for a period of five (5) years from the date of this correspondence unless new information warrants revision of the delineation before the expiration. At the end of this period, a new wetland delineation will be required if a project has not been completed on this property and additional impacts are proposed for waters of the United States. Further, this delineation/determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resource Conservation Service prior to starting work.

SUBJECT: Jurisdictional Determination 2006-01224

Based upon my review of the submitted delineation and on-site observations, I have determined that wetland areas D (34.97 acres), RG-6 (13.46 acres) & RG-7 (2.47 acres) and Tributary 1 (1,500 linear feet) on the subject parcel are part of a surface water tributary system to a navigable water of the United States as noted on the attached Jurisdictional Determination (JD) form. Therefore, the wetland(s) is/are regulated under Section 404 of the Clean Water Act. Department of the Army authorization is required if you propose a discharge of dredged or fill material in this/these area(s).

In addition, I have determined that there is no clear surface water connection or ecological continuum between wetland areas A1, B1, C1 & E1(Total = 0.68 acres) on the parcel and a surface tributary system to a navigable water of the United States. Therefore, these waters are considered isolated, non-navigable, intrastate waters and not regulated under Section 404 of the Clean Water Act. Accordingly, you do not need Department of the Army authorization to commence work in these areas.

I encourage you to contact the appropriate state and local governmental officials to ensure that the proposed work complies with their requirements.

Finally, this letter contains an approved JD for the subject parcel. If you object to this JD, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal the above JD, you must submit a completed RFA form within 60 days of the date on this letter to the Great Lakes/Ohio River Division Office at the following address:

Attn: Appeal Review Officer Great Lakes and Ohio River Division CELRD-PDS-O 550 Main Street, Room 10524 Cincinnati, OH 45202-3222 Phone: 513-684-6212; FAX 513-684-2460

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 C.F.R. part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by August 12, 2014.

It is not necessary to submit an RFA to the Division office if you do not object to the determination in this letter.

A copy of this correspondence has been sent to Mrs. Johanna Duffy of Barton and Loguidice.

Regulatory Branch

SUBJECT: Jurisdictional Determination 2006-01224

Questions pertaining to this matter should be directed to me by calling 716-879-4279, by writing to the following address: U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, New York 14207, or by e-mail at: joseph.m.rowley@usace.army.mil

Sincerely,

Joseph Rowley

Physical Scientist

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Monroe County Dept of Environmental Services	File Number: 2006-01224	Date: June 11, 2014
Attached is:		See Section below
INITIAL PROFFERED PERMIT (Standard Permit or I	Letter of permission)	A
PROFFERED PERMIT (Standard Permit or Letter of p	ermission)	В
PERMIT DENIAL		C
X APPROVED JURISDICTIONAL DETERMINATION		D
PRELIMINARY JURISDICTIONAL DETERMINAT	ION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

- A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.
- •ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- •OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT: You may accept or appeal the permit
- •ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- ●APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section 11 of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- •ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

CREATION TO A PROPERTY OF HEATTONIC TO	AN INDUCTAT DECEMBED DE	DMIT
SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO	AN INITIAL PROFFERED PE	RIVITI
REASONS FOR APPEAL OR OBJECTIONS: (Describe your	easons for appealing the decision of	or your objections to an initial
proffered permit in clear concise statements. You may attach addit	onal information to this form to cla	arify where your reasons or
1' d'an annual de and in the administration accord		,
objections are addressed in the administrative record.)		
		1
	6.1 1 1 1 1 1 1 1 1 1	Company to the formation
ADDITIONAL INFORMATION: The appeal is limited to a revi	ew of the administrative record, th	e Corps memorandum for the
record of the appeal conference or meeting, and any supplemental	information that the review officer	has determined is needed to
clarify the administrative record. Neither the appellant nor the Cor	ms may add navy information or an	alvess to the record. However
clarify the administrative record. Neither the appellant nor the Col	ps may add new information of an	alyses to the record. However,
you may provide additional information to clarify the location of in	nformation that is already in the ad	ministrative record.
POINT OF CONTACT FOR QUESTIONS OR INFORMATION		THE RESIDENCE OF THE PARTY OF T
	70 1 1	1
If you have questions regarding this decision and/or the appeal	If you only have questions regard	ling the appeal process you may
process you may contact:	also contact:	
process you may remain		
	1 4 1	
Joseph Rowley	Attn: Appeal Review Officer	
United States Army Corps of Engineers	Great Lakes and Ohio River Divi	sion
	CELRD-PD-REG	
Buffalo District		
1776 Niagara Street	550 Main Street, Room 10524	
Buffalo, NY 14207	Cincinnati, OH 45202-3222	
716-879-4279	513-684-6212; FAX 513-684-2460	
joseph.m.rowley@usace.army.mil		
PICHT OF ENTRY Value 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	etmi to Comp of Engineers name	al and any government
RIGHT OF ENTRY: Your signature below grants the right of en	itry to Corps of Engineers personn	ei, and any government
consultants, to conduct investigations of the project site during the	course of the appeal process. You	i will be provided a 15 day
notice of any site investigation, and will have the opportunity to p	articinate in all site investigations	-
notice of any site investigation, and will have the opportunity to p		T-1
	Date:	Telephone number:
1		
	1	
Signature of appellant or agent.	1	

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

C	F	CTI	ION	T.	RA	CKCR	OUND	INFOR	MATION
3	Ľ	CH	IUN.	1:	BA	CKGK	OUND	INFUK	MALION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 10, 2014
- DISTRICT OFFICE, FILE NAME, AND NUMBER: LRB 2006-01224 (Monroe County-Mill St Landfill)
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: New York

County/parish/borough: Monroe

City: Riga

Center coordinates of site (lat/long in degree decimal format): Lat. 43.044 °N, Long. -77.93 °W

Universal Transverse Mercator: Click here to enter text.

Name of nearest waterbody: Tributary 2 of Mill Creek (aka Blue Pond Inlet)

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Genesee River

Name of watershed or Hydrologic Unit Code (HUC): 04130003

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different

REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: April 23, 2014

V Field Determination. Date(s): November 15, 2013

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Г Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: Click here to enter text.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

- 1. Waters of the U.S.
 - a. Indicate presence of waters of U.S. in review area (check all that apply): 1

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

V Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: # linear feet: # width (ft) and/or # acres.

Wetlands: 37.44 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): Click here to enter text.

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Boxes checked below shall be supported by completing the appropriate sections in Section III below.

For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months)

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: Click here to enter text.

Summarize rationale supporting determination: Click here to enter text.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Click here to enter text.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

General Area Conditions: Watershed size: # Choose an item. Drainage area: # Choose an item. Average annual rainfall: # inches Average annual snowfall: # inches (ii) Physical Characteristics: (a) Relationship with TNW: Tributary flows directly into TNW. Tributary flows through Choose an item. tributaries before entering TNW. Project waters are Choose an item. river miles from TNW. Project waters are Choose an item river miles from RPW. Project waters are Choose an item, aerial (straight) miles from TNW. Project waters are Choose an item. aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Click here to enter text. Identify flow route to TNW5: Click here to enter text. Tributary stream order, if known: Click here to enter text. (b) General Tributary Characteristics (check all that apply): Natural Tributary is: Artificial (man-made). Explain: Click here to enter text. Manipulated (man-altered). Explain: Click here to enter text.

Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	Averag Averag	properties with respect to the width: # feet the depth: # feet the side slopes: Ch	espect to top of bar	nk (estimate)):		
		utary substrate co	omposition (check	all that app	ly):	Concrete	
	□ c	obbles	Gravel			Muck	
	Г В	edrock	Vegetation	1. Type/% c	over: Click here t	o enter text.	
	Го	ther. Explain: Cli	ick here to enter text				
	Presence of Tributary ge	run/riffle/pool co cometry: Choose of	omplexes. Explain	n: Click here		in: Click here to enter text.	
(c)	Estimate ave Describ	oe flow regime: (se an item. flow events in rev Click here to enter te on and volume: Cli	xt.			
	Surface flov	v is: Choose an ite	m. Characteristics	S: Click here t	o ente r text .		
			em. Explain findi performed: Click i				
		clear, natural li changes in the shelving vegetation mate leaf litter distur- sediment depos water staining other (list): Clici iscontinuous OH	I indicators that an impressed on the character of soil ted down, bent, or the down washed awasition to the character to enter text.	he bank	destruction of the presence of sediment sortin scour multiple obser abrupt change	errestrial vegetation wrack line g yed or predicted flow ever in plant community Chek her	re to enter text.
	Г∣ н	igh Tide Line ind oil or scum lind fine shell or de physical markit tidal gauges		cts	ean High Water survey to avail physical marki		
Cha	Explain: Cli	utary (e.g., water ck here to enter tex			y film; water qua	lity; general watershed ch	aracteristics, etc.).

(iii)

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Third.

(iv)	Biol	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Click here to enter text.
		Wetland fringe. Characteristics: Click here to enter text.
		Habitat for:
		Federally Listed species. Explain findings: Click here to enter text.
		Fish/spawn areas. Explain findings: Click here to enter text.
		Other environmentally-sensitive species. Explain findings: Click here to enter text.
		Aquatic/wildlife diversity. Explain findings: Click here to enter text.
Cha	ıract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)		ysical Characteristics: General Wetland Characteristics: Properties: Wetland size: # acres Wetland type. Explain: Click here to enter text. Wetland quality. Explain: Click here to enter text. Project wetlands cross or serve as state boundaries. Explain: Click here to enter text.
	(b)	General Flow Relationship with Non-TNW: Flow is: Choose an item. Explain: Click here to enter text.
		Surface flow is: Choose an item. Characteristics: Click here to enter text.
		Subsurface flow: Choose an item. Explain findings: Click here to enter text. Dye (or other) test performed: Click here to enter text.
	(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Click here to enter text. Ecological connection. Explain: Click here to enter text. Separated by berm/barrier. Explain: Click here to enter text.
	(d)	Proximity (Relationship) to TNW Project wetlands are Choose an item. river miles from TNW. Project waters are Choose an item. aerial (straight) miles from TNW. Flow is from: Choose an item. Estimate approximate location of wetland as within the Choose an item. floodplain.
(ii)	Ch	nemical Characteristics: naracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Click here to enter text. entify specific pollutants, if known: Click here to enter text.
(ii	r r	ological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Click here to enter text. Vegetation type/percent cover. Explain: Click here to enter text. Habitat for: Federally Listed species. Explain findings: Click here to enter text.
		Fish/spawn areas. Explain findings: Click here to enter text.
		Other environmentally-sensitive species. Explain findings: Click here to enter text.
		Aquatic/wildlife diversity. Explain findings: Click here to enter text.
C	narac	cteristics of all wetlands adjacent to the tributary (if any)

2.

All wetland(s) being considered in the cumulative analysis: Choose an item.

Approximately (#) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Y /N'	2 J 2 g	Y/N	11
Y /N'	##	Y/N'	# J
Y/N	#	Y/N	#
Y/N	11	Y/N	#

Summarize overall biological, chemical and physical functions being performed: Click here to enter text.

C. SIGNIFICANT NEXUS DETERMINATION

8See Footnote # 3.

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: Click here to enter text.
- Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.
 Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Click here to enter text.
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Click here to enter text.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

	API	PLY):
	1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: # linear feet # width (ft), Or, # acres. Wetlands adjacent to TNWs: # acres.
	2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Click here to enter text Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Click here to enter text
3.		Provide estimates for jurisdictional waters in the review area (check all that apply): Tibutary waters: # linear feet # width (ft). Other non-wetland waters: # acres. Identify type(s) of waters: Click here to enter text. Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
		Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: # linear feet # width (ft). Other non-wetland waters: # acres. Identify type(s) of waters: Click here to enter text.
	4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

			[기	wetlands directly abutt RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetland D(RG-33) (34.97 acres) represents the headwater wetlands of an unnamed tributary to Mill Creek (also know as Blue Pond Inlet). Also, Wetland D(RG-33) is a mapped, NYSDEC regulated wetland. The wetland continues to the southeast beyond the limits of the delineated parcel. Based on a review of the NYSDEC's Environmental Resource Mapper and aerial photography, the wetland system continues east towards Route 166, where a mapped stream, an unnamed tributary to Mill Creek, begins. The unnamed tributary to Mill Creek is represented on the Churchville USGS as a solid blue line which indicates perennial flow.
				Delineated wetland RG-7 (2.47 acres) is associated with an unnamed Tributary to Hotel Creek, NYSDEC mapped Class C stream and bline line on the USGS Churchville quad. A culvert crosses underneath O'Brien Road within the limits of the delineated parcel/review area. The culvert provides a hydrological connection between wetland RG-7 north and RG-7 south. According to the delineation report, wetland RG-7 that surrounds O'Brien road has been observed to have standing water throughout much of the year. The unnamed tributary to Hotel Creek is located within the delineated limits of wetland RG-7; the wetland represents the headwaters of this tributary.
				Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Click here to enter text.
			Prov	ide acreage estimates for jurisdictional wetlands in the review area: # acres.
	5.	Wetl □	Wetl adja	sadjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. lands that do not directly abut an RPW, but when considered in combination with the tributary to which they are cent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data porting this conclusion is provided at Section III.C.
		Prov	ide a	creage estimates for jurisdictional wetlands in the review area: # acres.
	6.	Wet	Wet and	sadjacent to non-RPWs that flow directly or indirectly into TNWs. lands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting conclusion is provided at Section III.C.
		Prov	ide e	estimates for jurisdictional wetlands in the review area: # acres.
	7.	Imp	ound	Iments of jurisdictional waters.9
		As a	gene	eral rule, the impoundment of a jurisdictional tributary remains jurisdictional.
				nonstrate that impoundment was created from "waters of the U.S.," or
				nonstrate that water meets the criteria for one of the categories presented above (1-6), or
			Den	nonstrate that water is isolated with a nexus to commerce (see E below).
E.	OR	DES	TRU	INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION ICTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK APPLY): ¹⁰
				e or could be used by interstate or foreign travelers for recreational or other purposes.
		fron	n whi	ch fish or shellfish are or could be taken and sold in interstate or foreign commerce.
		whic	ch are	e or could be used for industrial purposes by industries in interstate commerce.
	П	Inte	rstate	e isolated waters. Explain: Click here to enter text.
		Oth	er fac	ctors. Explain: Click here to enter text
	Ide	ntify	wate	r body and summarize rationale supporting determination: Click here to enter text.
	Pro			ates for jurisdictional waters in the review area (check all that apply): v waters: # linear feet # width (ft).
		Oth	er no	n-wetland waters: # acres.
			Ident	ify type(s) of waters: Click here to enter text.
F.	Г	NO	N-JU	IRISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): sential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements.
	П			ew area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
	Г	,	Wate	ers do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Chek here to enter text.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Other: (explain, if not covered above): Click here to enter text.
Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).
Lakes/ponds: # acres.
Other non-wetland waters: # acres. List type of aquatic resource: Click here to enter text.
Wetlands: # acres.
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).
Lakes/ponds: # acres.
Other non-wetland waters: # acres. List type of aquatic resource: Click here to enter text
Wetlands: # acres.
SECTION IV: DATA SOURCES.
A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested items shall be included in case file and, where checked and requested items shall be included in case file and, where checked and requested items shall be included in case file and, where checked and requested items shall be included in case file and represent the checked items shall be included in case file and represent the checked items shall be included in case file and represent the checked items shall be included in case file and represent the checked items shall be included in case file and represent the checked items shall be included in case file and represent the checked items s
Data sheets prepared/submitted by or on behalf of the applicant/consultant.
Office concurs with data sheets/delineation report.
Office does not concur with data sheets/delineation report.
Data sheets prepared by the Corps: Click here to enter text.
Corps navigable waters' study: Click here to enter text.
U.S. Geological Survey Hydrologic Atlas: Click here to enter text.
USGS NHD data.
USGS 8 and 12 digit HUC maps.
U.S. Geological Survey map(s). Cite scale & quad name: Churchville Quad, 1:20,000
USDA Natural Resources Conservation Service Soil Survey. Citation: USDA/NRCS Web Soil Survey
National wetlands inventory map(s). Cite name: USFWS Wetland Mapper; Mapped Federal wetlands are within the vicinity of the
delineated parcel State/Local wetland inventory map(s): NYSDEC Environmental Resource Mapper, Multiple NYSDEC regulated are within the vicinity
of the delineated parcel FEMA/FIRM maps: Click here to enter text.
100-year Floodplain Elevation is: Click here to enter text. (National Geodectic Vertical Datum of 1929)
The state of the s
Previous determination(s). File no. and date of response letter: Click here to enter text.
Applicable/supporting case law:
Applicable/supporting scientific literature:
Other information (please specify):
B. ADDITIONAL COMMENTS TO SUPPORT JD: None
1.02
April 30, 2014

Joseph M. Rowley Project Manager

Date

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):-June 10, 2014
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER: 2006-01224 (Monroe County-Mill St Landfill)

C.	PROJECT	LOCATION	AND BACKGROUND INFORM.	ATION:

State: New York County/parish/borough: Monroe City: Riga

Center coordinates of site (lat/long in degree decimal format): Lat. 43.044 °N °, Long. -77.93 °W °

Universal Transverse Mercator: Click here to enter text.

Name of nearest waterbody: Hotel Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Genesee River

Name of watershed or Hydrologic Unit Code (HUC): 04130003

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: April 23, 2014

Field Determination. Date(s): November 15, 2013

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: Click here to enter text.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply): 1

TNWs, including territorial seas
Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 1500 linear feet: 4-8 width (ft) and/or 0.46 acres.

Wetlands: 13.46 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): Click here to enter text.

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: I conducted a site visit on November 15, 2013 and also reviewed in-house resources including, topographical maps, aerial photography and soils maps. I walked the perimeter of Wetlands A1, B1, C1 & E1(Total = 0.68 acres) and I did not observe any surface flow or culverts going away from them or any shallow subsurface connections. No ecological nexus to any drainageways were seen in the vicinty of wetlands A1, B1, C1 & E1. Wetland A1,B1,C1 & E1 appear to be only intermittently saturated, vernal pools that may support amphibian species. Wetlands A1,B1,C1 & E1 did not show evidence of standing water (no water marks or

Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

drift lines) and therefore may not hold water long enough for substantial flood storage. I didn't observe any drainages or flow from WetlandS A1, B1, C1 & E1 into any other the wetland or drainageway. Wetlands A1,B1,C1 & E1 are geographically isolated and therefore are not jurisdictional.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: Click here to enter text.

Summarize rationale supporting determination: Click here to enter text.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Click here to enter text.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i)	General	Area	Conditions:
-----	---------	------	-------------

Watershed size: #2,373 square miles (Genesee River Watershed), 202 square miles (Black Creek Watershed)

Drainage area: # slightly over 100 acres Average annual rainfall: 35 inches Average annual snowfall: 63 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 15-20 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 10-15 aerial (straight) miles from TNW.

Project waters are 2-5 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: No

Identify flow route to TNW⁵: Wetland RG-6 flows south into an unnamed and unmapped drainage (referred to as RG-6's drainage) which empties into Hotel Creek. Hotel Creek is the ninth tributary of Black Creek, which is the 19th tributary of the Genesee River, the closet TNW.

Tributary stream order, if known: RG-6's drainage is unmapped but Hotel Creek, where the drainage empties into this waterbody, is a first order stream.

(b)	General Tributa	rv Characteristics	(check all that apply):

Tributary is:

Natural

Artificial (man-made). Explain: Click here to enter text.

Manipulated (man-altered). Explain: Channel has been excavated and modified in the past to carry runoff from adjacent agricultural fields and from RG-6 without the risk of flooding the fields themselves.

Tributary properties with respect to top of bank (estimate):

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West. ⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	Average side slopes: 2:1 to 3:1							
	Primary tributary substrate composition (check all that apply):							
		Silts		Sands			Concrete	
		Cobbles		Gravel			Muck	
		Bedrock	V				and woody vinbes in channel with shrubs py cover along length of drainage.	
	V	Other. Explain: su	ıbstrate	is primarily a clay loa	ım. Limite	ed cobble	s/rocks for most of its length.	
	affect ba channel. Presence Tributary	ary condition/stability [e.g., highly eroding, sloughing banks]. Explain: water elevation doesn't get high enough to banks. Due to the amount of vegetative cover, banks are fairly stable, despite a consistent 2:1 to 3:1 slope along the el. ce of run/riffle/pool complexes. Explain: absent ary geometry: relatively straight ary gradient (approximate average slope): 30%						
(c)	Flow:							
site stormwate	Tributary provides for: intermittent Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Wetland RG-6 and associated drainages rely on area surface runoff and discharge from the landfil site stormwater detention basin for their flow. Groundwater is not a major factor contributing recharge and it is estimated that groundwater discharge accounts for less than ½% of the total flow to the wetland with precipitation and runoff providing the primary source of recharge Other information on duration and volume: Click here to enter text.							
	Surface	flow is: confined C	haracte	ristics: Surface water	flow with	in RG-6'	s drainage is confined to a channel for most of its	
length.								
on previous h	ydrogeolo	gic work performed	d on the	n findings: amount of landfill site and for t med: <i>Click here to ente</i>	he soil bo		unknown but estimated to be very limited based project.	
	다 다 다	changes in the shelving vegetation ma leaf litter distured leaf leaf litter leaf	all indication in the down of	ators that apply): bressed on the bank for the ter of soil wn, bent, or absent for washed away to enter text. Explain: Click here to the termine laby: g shore objects posits (foreshore) aracteristics	destruction destru	esence of ent sortinale observations of CV tent of CV th Water I to available all marking	errestrial vegetation wrack line g red or predicted flow events n plant community Click here to enter text. WA jurisdiction (check all that apply): Mark indicated by: able datum;	
Cha	racterize Explain: during lo ntify speci logical Cl Riparian variety o	Water flow within ow flow events or wific pollutants, if kninaracteristics. Characteristics were confidered to the corridor. Characteristics weget	RG-6's when the lown: N annel seristics (attion al	s drainage is generally e water is stagnet with o know pollutants upports (check all th	clear, soin the chan at apply) woody sl	metimes innel. : hrubs and	lity; general watershed characteristics, etc.). with an organic film on top of the water surface I saplings line the channel on both sides with a	

Average width: 6 feet Average depth: 3 feet

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

			Habit	at for:						
				Federa	ally Listed speci	es. Explain findings: Cl	lick here to en	ter text.		
				Fish/sp	pawn areas. Exp	lain findings: Click here	to enter text.			
			П	Other (environmentally	-sensitive species. Exp	lain finding	S: Click here to enter text.		
				Aquati	ic/wildlife diver	sity. Explain findings:	Click here to	enter text.		
2.	Chs	ract	eristic	s of w	etlands adiacei	nt to non-TNW that flo	ow directly	or indirectly into TNW	7 (2. 1	
2.	(i)				cteristics:	21111	,	,		
	(1)		Gene	ral We	etland Character	ristics:				
				erties: /etland	d size: 13.46 acı	res				
			V	/etland	d type. Explain	: Palustrine forested		ufiltuation relient on ne	poinitation Vacatative wetle	and type is
of h	igh c	ualit		vetland	d quality. Expla	ain: Perched – limited gr	roundwater	nititration reliant on pro	ecipitation. Vegetative wetla	iliu type is
			Proje	ct wet	lands cross or s	erve as state boundaries.	. Explain: no	ot applicable		
		(b)	Gene	ral Flo	ow Relationship	with Non-TNW:	1 C 11/	atland DC 6 to its seess	isted drainegs is governed [hv
prec	ipita	tion	Flow events	us: Int	termittent Flow scharges from tl	Explain: Much of the fi he stormwater detention	tow from w basin also c	contribute surface water	tiated drainage is governed lead to the wetland. Wetland RC	3-6
disc	harg	es to	its dra	inage	primarily via a	culvert structure (installe	ed to provid	e access to agricultural	field to the west).	
			Surfa	ice flo	w is: Discrete	flow is not visually obse	erved within	wetland RG-6 except a	t the outlet and the stormwa	iter detention
basi	n dis	schar	ge loca	ition.	According to the	e delineation report, surf	face water h	as been observed within	the wetland throughout mu	ch of the
year	r.				1.5					
					-	ain findings: Subsurface performed: Click here to		tnown		
		(-)								
		(c)	well V		ctly abutting	mination with Non-TNV	<u> </u>			
					directly abutting	g				
					Discrete wetla	and hydrologic connecti-	on. Explain	: Click here to enter text.		
					_	nnection. Explain: Click				
				Π	Separated by	berm/barrier. Explain:	Click here to	enter lext.		
		(d)			(Relationship) t	<u>o TNW</u> 5 river miles from TNW	J			
			Proj	ect wa	ters are 2-5 aeri	al (straight) miles from				
			Flov	v is fro	om: wetland to r	navigable waters ation of wetland as withi	in the 500-v	ear or greater floodplain	ı.	
	(::)	Ch			racteristics:	ition of worlding as with		ou. o. B. ou. o. o. o. o.		
	(11)	Ch	aracte	rize we	etland system (e	e.g., water color is clear,	brown, oil	film on surface; water q	uality; general watershed ch	aracteristics
			etc.)	. Exp	lain: Water colo	or is fairly clear. Heavy o Wetland is at the heady	decompositi	on of vegetation within watershed. Stormwater	the wetland. Organic film o detention basin and wetland	n the water d RG-6 help
			to fi	lter see	diments from th	e surface water that flow	ws to the adj	acent non-TNW.		•
				_		known: none are known				
	(ii					Vetland supports (checiteristics (type, average v				
				-		cover. Explain: Primari				
		ſ	7 Ha	ıbitat f	for:					
				Fede	rally Listed spec	cies. Explain findings: (Click here to e	enter text.		
					•	xplain findings: Click her				
						lly-sensitive species. Ex			dlife species such as forest	
			14.1			amphibians/reptiles.	. tilo violiai.	a supporte annotation with		
3.	C	harad	teristi	ics of a	all wetlands ad	jacent to the tributary	(if any)			
		Al	l wetla	ınd(s)	being considere	d in the cumulative ana	lysis: I =	mulativa analysis		
					nd, specify the	n total are being conside following:	ered in the ci	amutative analysis.		
							г	Directly abuts? (Y/N)	Size (in acres)	
			ווע	W	<u>ıbuts? (Y/N)</u> 'etland RG-6 - Y			YN	#	
	C.				hiological chan	nical and physical functi	ione baing n	erformed: A hydrologic	al connection can be traced	trom wetlan

Summarize overall biological, chemical and physical functions being performed: A hydrological connection can be traced from wetland RG-6 and its drainage to Hotel Creek then to Black Creek the Genesee River, a TNW. Wetland RG-6 is primarily forested and a riparian buffer lines the stream resource on both sides throughout its length. Wetland RG-6 and to an extent the drainage remove sediment and other potential polluntants from the surface water before it reaches Hotel Creek.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the Rapanos Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: Click here to enter text.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

Wetland RG-6 (13.46 acres) occurs entirely within the boundaries of the project site. During the site visit the wetland was in a relatively saturated condition. Flood attenuation/runoff storage, pollutant trapping/water quality, removal of suspended solids, dissolved solids, toxins and retention/treatment of nitrogen and phosphorus, functions are considered to be minimal for the subject wetland. Wildlife habitat functions are considered to be minimal.

Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?

Moderate appreciable lifecycle support functions, with respect to Genesee River are performed by the non RPW unnamed tributary to Hotel Creek (1500 linear feet) and its adjacent wetland for this relevant reach. There is habitat in the wetland to support aquatic species, amphibians, insects that are also present in the TNW. The wetland provides habitat for local communities of insects, birds, some amphibians and small mammals and avian species. The avian species which likely use this wetland and tributary could be closely associated with use of the TNW.

Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?

Yes, the non-RPW unnamed tributary to Hotel Creek serves as a primary collector and processor of organic matter and nutrients for downstream waters which includes the TNW, Genesee River. The non-RPW carries nutrients and can transport organic debris to the TNW. The storage and transformation of organic matter is important to these types of systems because it prevents downstream water quality degradation as a result of excess organic matter. The non-RPW also transforms unusable organic matter (inorganic carbon) into food for aquatic organisms (organic carbon) that reside in the TNW

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Click here to enter text.

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CH	CK ALL THAT
	APPLY):	

TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

	TNWs: # linear feet # width (ft), Or, # acres.	
	Wetlands adjacent to TNWs: # acres.	
2.	Vs that flow directly or indirectly into TNWs.	
	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data ar tributary is perennial: Click here to enter text.	nd rationale indicating that
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three mon Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributo enter text.	ths each year) are jurisdictional itary flows seasonally: Click here
	Provide estimates for jurisdictional waters in the review area (check all that apply):	

		Tributary waters: # linear feet # width (ft).
		Other non-wetland waters: # acres.
		Identify type(s) of waters: Click here to enter text.
3.		Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a
		TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
		Provide estimates for jurisdictional waters within the review area (check all that apply):
		Tributary waters:1500linear feet 6width (ft).
		Other non-wetland waters: acres.
		Identify type(s) of waters: Click here to enter text.
	4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
		Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
		Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly
		abutting an RPW: Click here to enter text.
		Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that
		tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that
		wetland is directly abutting an RPW: Click here to enter text.
		Provide acreage estimates for jurisdictional wetlands in the review area: # acres.
	5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
		Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are
		adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
		Provide acreage estimates for jurisdictional wetlands in the review area: # acres.
	6	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
	6.	Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent
		and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting
		this conclusion is provided at Section III.C.
		Provide estimates for jurisdictional wetlands in the review area: 13.46 acres.
	7.	Impoundments of jurisdictional waters.9
		As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or
		Demonstrate that impoundment was created from waters of the C.S., of Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
		Demonstrate that water is isolated with a nexus to commerce (see E below).
E.	ISC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION R DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK
	OH AT	L THAT APPLY): 10
		which are or could be used by interstate or foreign travelers for recreational or other purposes.
		from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
		which are or could be used for industrial purposes by industries in interstate commerce.
		Interstate isolated waters. Explain: Click here to enter text.
		Other factors. Explain: Click here to enter text.
	Ide	entify water body and summarize rationale supporting determination: Click here to enter text.
	Pro	ovide estimates for jurisdictional waters in the review area (check all that apply):
	034	Tributary waters: # linear feet # width (ft).
	Γ	Other non-wetland waters: # acres.
		Identify type(s) of waters: Click here to enter text.
		Wetlands: # acres.
F.		NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers
		Wetland Delineation Manual and/or appropriate Regional Supplements.
	V	Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
		Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the
		"Migratory Bird Rule" (MBR).

3.

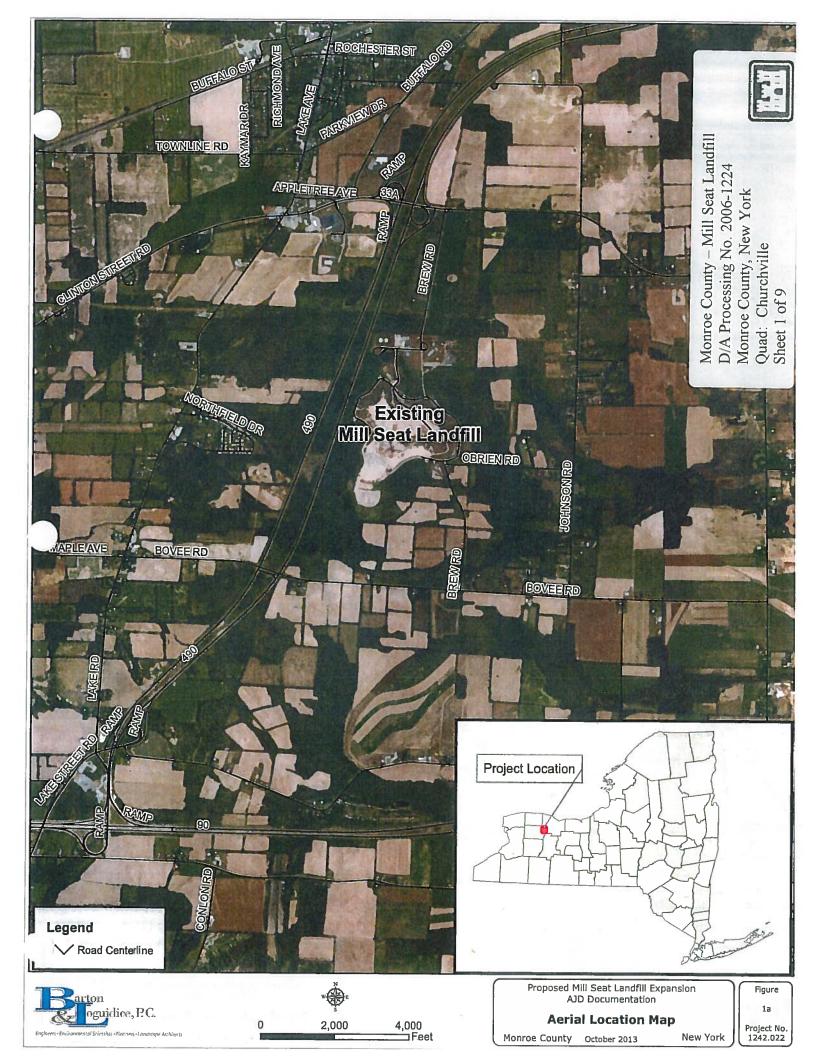
 ⁸ See Footnote # 3.
 9 To complete the analysis refer to the key in Section III D.6 of the Instructional Guidebook.
 10 Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

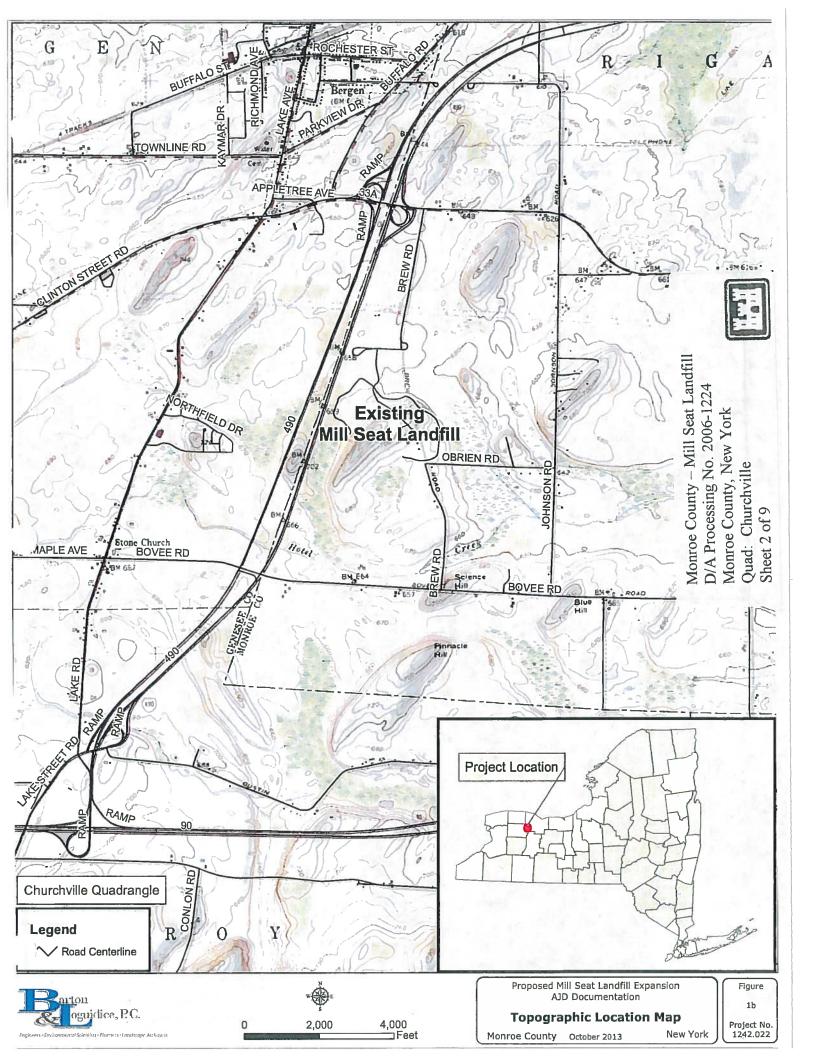
_	W						
	Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Chek here to enter text						
	Other: (explain, if not covered above): Click here to enter text.						
Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MB (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional jurisdiction is the MB (check all that apply):							
	Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).						
	Lakes/ponds: # acres.						
•	Other non-wetland waters: # acres. List type of aquatic resource: Click here to enter text.						
	Wetlands: 0.68 acres.						
findi	ide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a ng is required for jurisdiction (check all that apply):						
	Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).						
	Lakes/ponds: # acres.						
	Other non-wetland waters: # acres. List type of aquatic resource:						
V	Wetlands: 0.68 acres.						
SECTIO	N IV: DATA SOURCES.						
	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and						
17							
	Data sheets prepared/submitted by or on behalf of the applicant/consultant.						
	Office concurs with data sheets/delineation report.						
	Office does not concur with data sheets/delineation report.						
	Data sheets prepared by the Corps: Click here to enter text.						
	Corps navigable waters' study: Click here to enter text.						
ΓI	U.S. Geological Survey Hydrologic Atlas: Click here to enter text.						
	USGS NHD data.						
	USGS 8 and 12 digit HUC maps.						
[7]	U.S. Geological Survey map(s). Cite scale & quad name: Churchville Quad, 1:20,000						
	USDA Natural Resources Conservation Service Soil Survey. Citation: USDA/NRCS Web Soil Survey						
IZI	National wetlands inventory map(s). Cite name: USFWS Wetland Mapper; Mapped Federal wetlands are within the vicinity of the						
	delineated parcel						
7	State/Local wetland inventory map(s): NYSDEC Environmental Resource Mapper, Multiple NYSDEC regulated are within the vicinity of the delineated parcel						
F=1	FEMA/FIRM maps: Click here to enter text.						
	100-year Floodplain Elevation is: Click here to enter text. (National Geodectic Vertical Datum of 1929)						
[고]	Photographs: Aerial (Name & Date): Bing/Google Maps						
	or Other (Name & Date): Chek here to enter text.						
	Previous determination(s). File no. and date of response letter: Click here to enter text.						
[ma]	Applicable/supporting case law:						
1-1	Applicable/supporting scientific literature:						
1 mil	Other information (please specify):						
of Engin identified Quad or determing this case shellfish	PITIONAL COMMENTS TO SUPPORT JD: Isolated wetlands A1, B1, C1 & E1(Total = 0.68 acres) were field verified by the Corps eers on November 15, 2013. The perimeter of the wetlands were walked and no evidence of any connection to other waters were d. There were no connections between Wetlands A1, B1, C1 & E1(Total = 0.68 acres) and any other waters on the Churchville USGS the USDA/NRCS Web Soil Survey. Wetlands A1, B1, C1 & E1 are isolated and outside the Department of the Army's jurisdiction. The nation is supported by the review of in-house resources and verified from a site visit. None of the 328.3(a)(3)(i-iii) factors are relevant in Wetlands A1, B1, C1 & E1 offers no use for industrial or commercial purposes. Wetlands A1, B1, C1 & E1(Total = 0.68 acres) were need to be isolated and therefore non-jurisdictional.						
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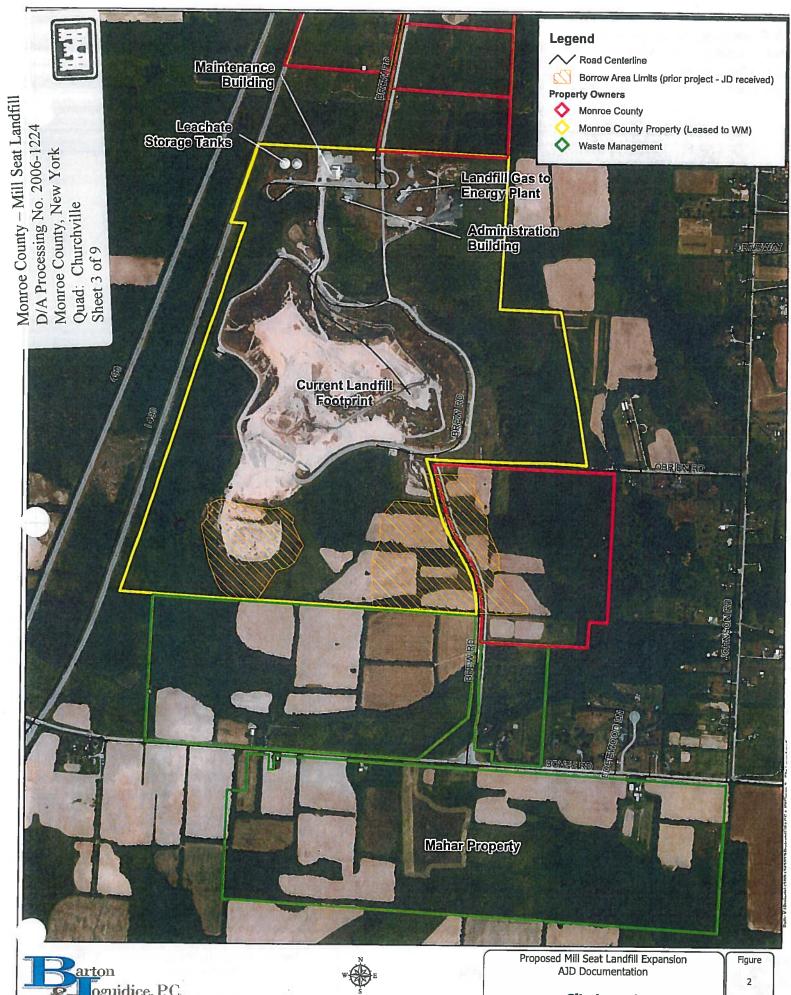
Joseph M. Rowley Project Manager

April 30, 2014

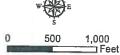
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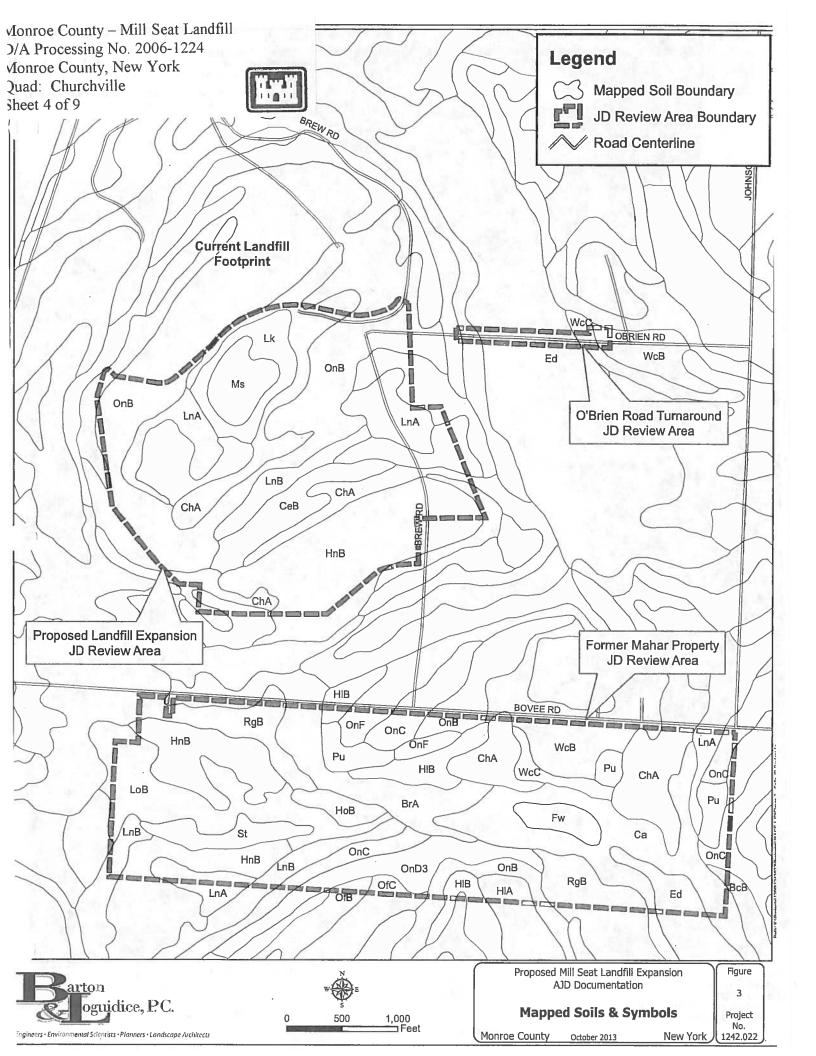
Site Layout

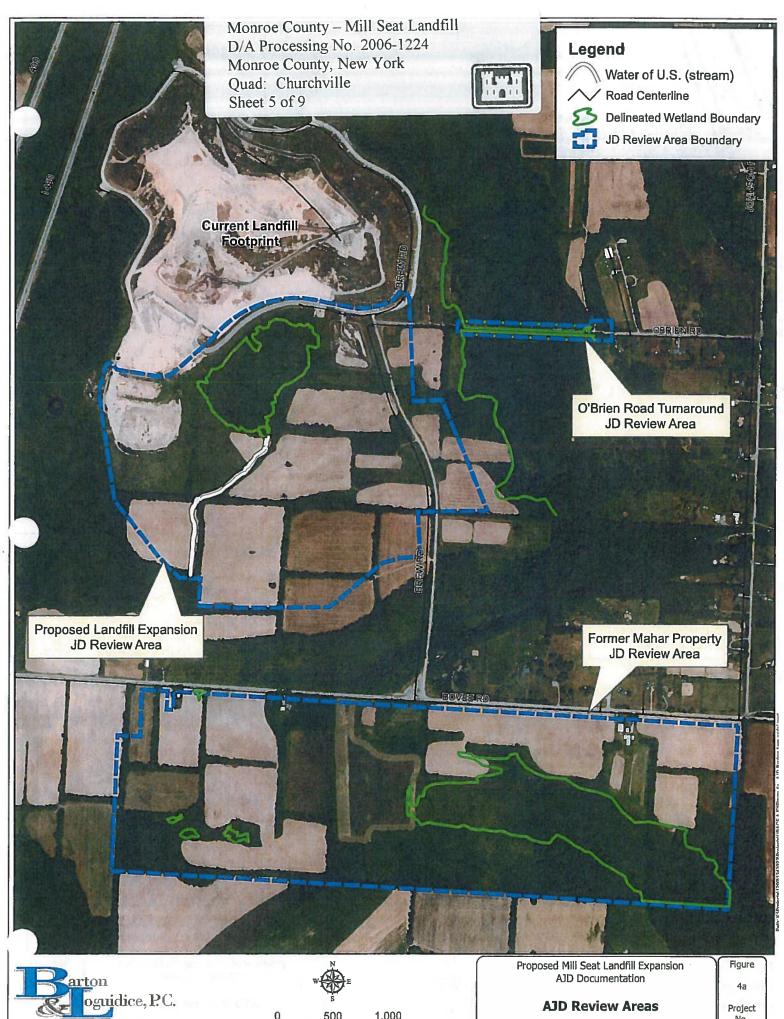
October 2013

Monroe County

New York

Project No. 1242.022





Engineers · Environmental Scientists · Planners · Landscape Architects

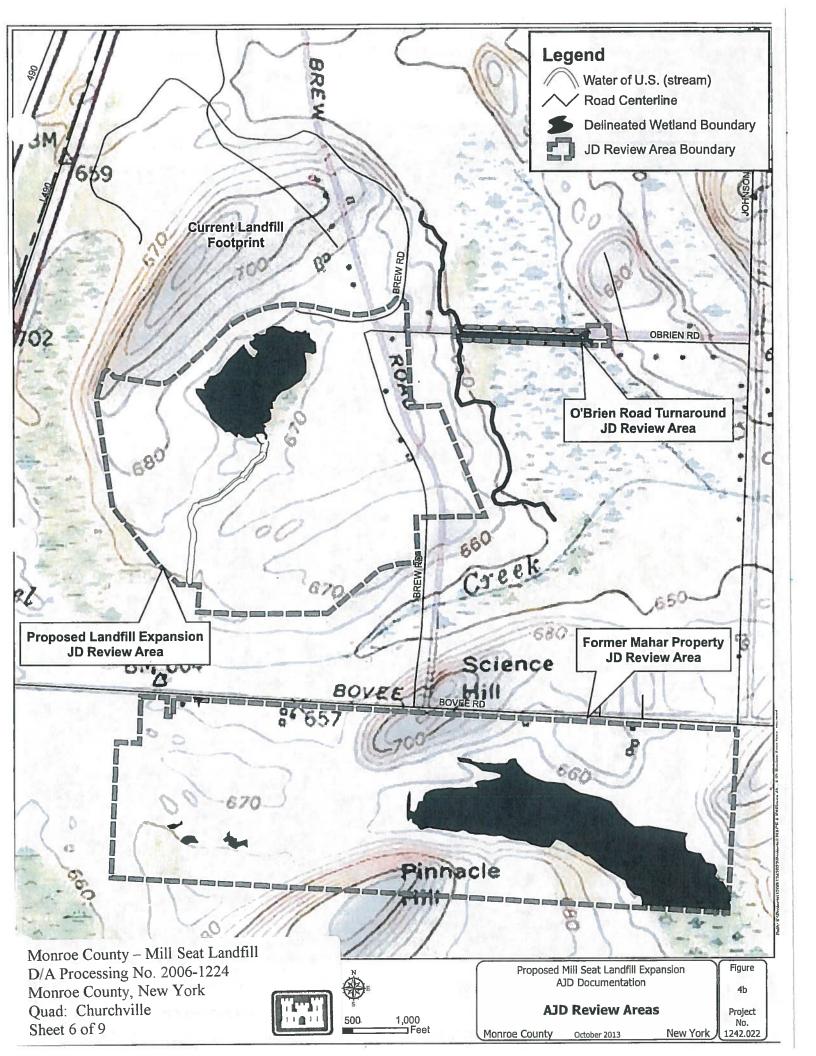
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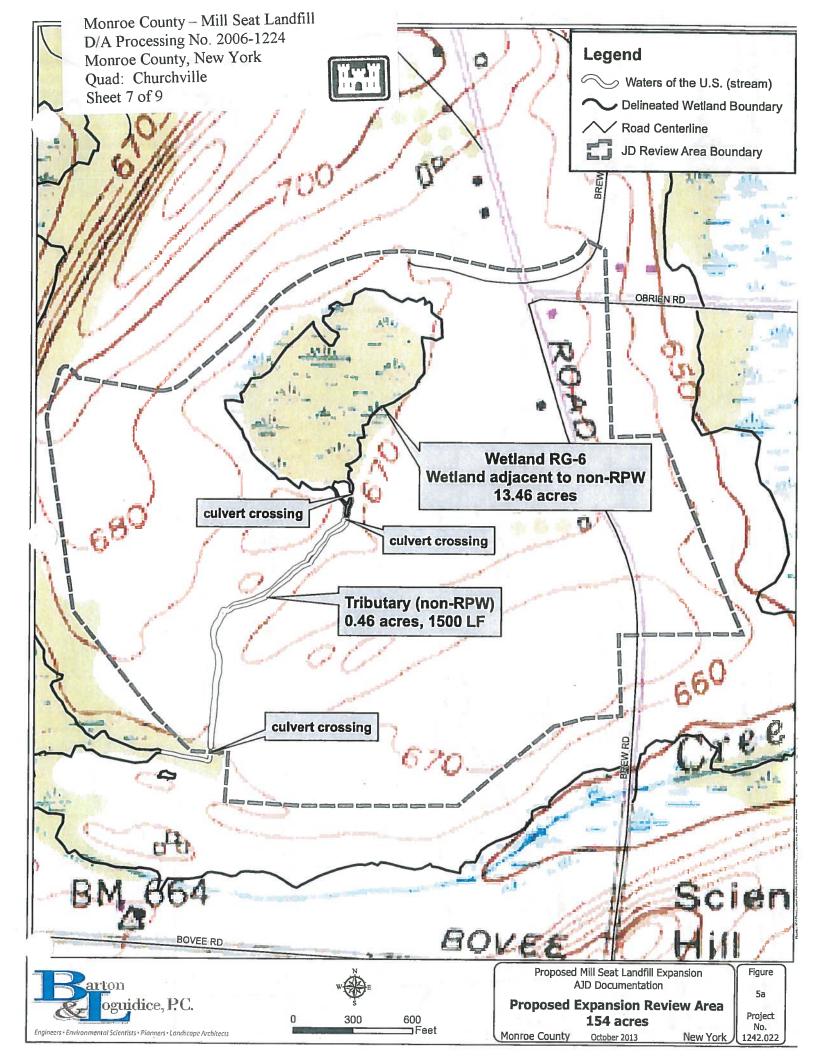
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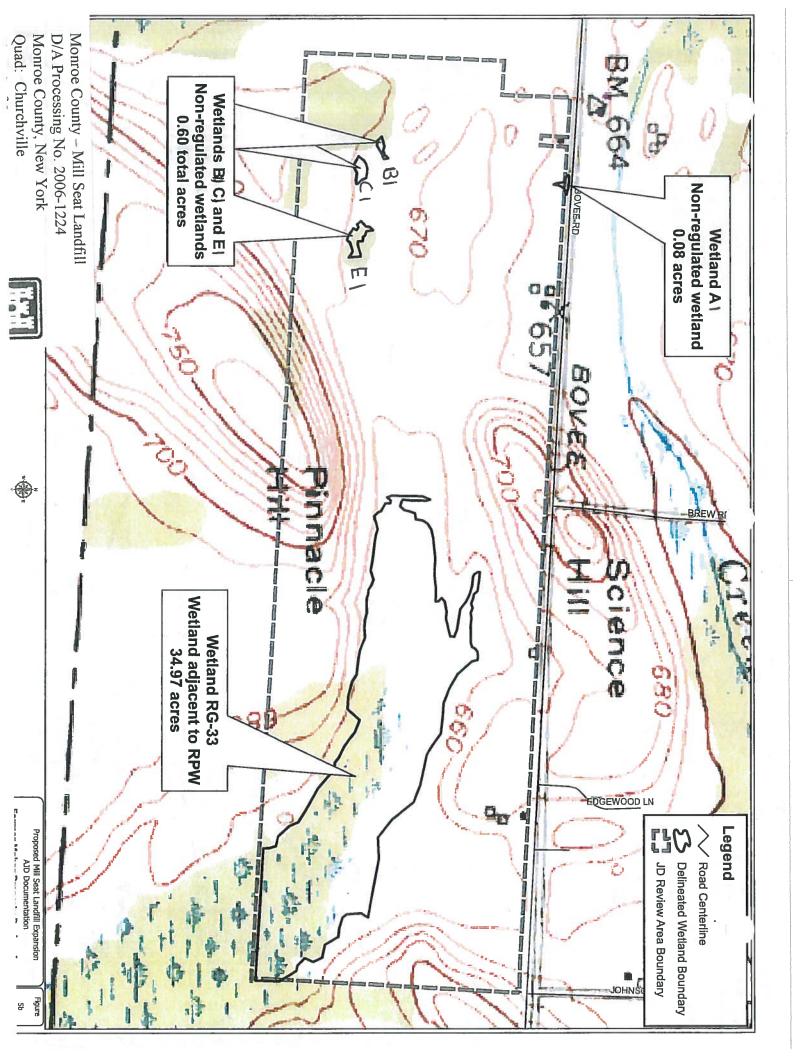
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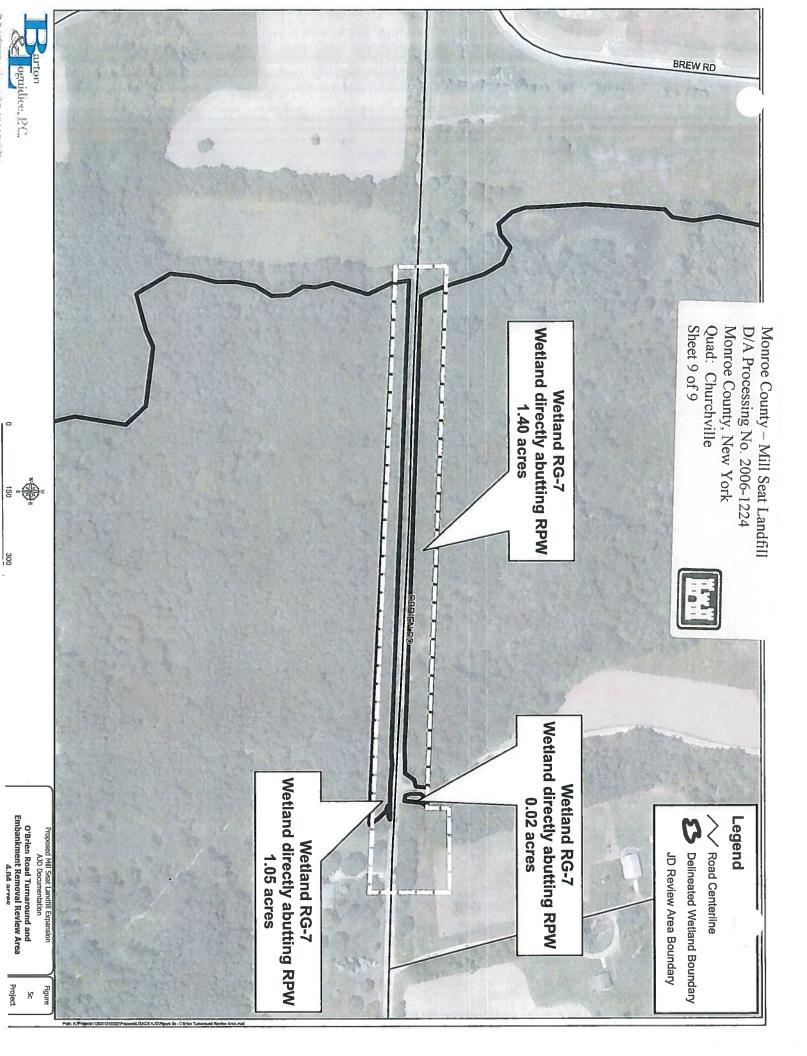
New York

1242.022









Waste Management of New York, Inc.

Monroe County, New York

Wetland Delineation Report for the Proposed Mill Seat Landfill Soil Borrow Area Expansion

August 2009



Proposed Mill Seat Landfill Soil Borrow Area Expansion

Town of Riga Monroe County, New York

Wetland Delineation Report

August 2009

Prepared For:

Mr. Jeff Richardson
District Manager
Waste Management of New York, Inc.
303 Brew Road
Bergen, New York 14416

Prepared By:

Barton & Loguidice, P.C.
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Appendices

Appendix A – Wetland Field Delineation Data Sheets

Appendix B – Site Photographs

1.0 Introduction

This report describes the wetland resources located within the approximately 280-acre field delineated area, which is situated on lands owned by Monroe County and lands owned by Waste Management of New York, Inc., the operator of the Mill Seat Landfill. The Mill Seat Landfill is currently owned by Monroe County; the landfill properties total approximately 385 acres. The field wetland delineation was completed on lands south of the existing Mill Seat Landfill footprint, in the Town of Riga, Monroe County, New York (site location map, Figure 1). The field delineated area includes lands both east of west of Brew Road and a small section of land located north of O'Brien Road.

The fieldwork detailed in this report was completed in support of a proposal to modify the existing Solid Waste Management Facility Permit at the Mill Seat Landfill to construct and operate two soil borrow areas. These two areas, designated as the west borrow area and the east borrow area, have proposed areas of 20 acres and 42 acres, respectively. The soil from these proposed areas will be used to meet the demand for future construction and operation activities of the currently permitted landfill cells at the Mill Seat Landfill.

The wetlands located within the field delineated area that met the Federal wetland criteria were delineated using the methods set forth in the 1987 Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987).

This report contains a description of the project area including the site ecology, the methods used to determine the wetland boundaries, agency resource information obtained for the site, and the results of the wetland field delineation. Wetland

delineation field data sheets and photographs of the wetland resources located within the project area are found in Appendices A and B at the end of this report.

2.0 Site Description

2.1 Location

The Town of Riga is located in the southwest corner of Monroe County, forming the County boundary between Monroe and Genesee Counties with the Town of Bergen. The Mill Seat Landfill is located off of State Route 33A (Chili Avenue), bisecting Brew Road into two sections, a north section and a south section. The west side of the Mill Seat Landfill property abuts the right-of-way boundary for Interstate 490.

This report relates to the proposed construction of east and west soil borrow areas, to be located south of the existing landfill footprint, herein referred to as "the Project." The field delineated area consists of lands owned by Monroe County and lands owned by Waste Management of New York, Inc. The field delineated area is depicted on site Figures 1 and 2.

2.2 Site Use

Aside from the landfill, land use surrounding the project area is predominantly agricultural. Waste Management of New York, Inc., leases sections of its property and the Mill Seat Landfill property to individuals for crop production and haying. Many of these leased agricultural lands are included in the field delineated boundary and can be seen on Figure 1. Residential properties are also adjacent to the Mill Seat Landfill, particularly along O'Brien Road and Bovee Road, southeast of the existing landfill footprint. No residential properties are located within or immediately adjacent to the proposed soil borrow

areas. The lands located within the field delineated area, south of the southern limits of the proposed borrow areas, are included in agricultural district MOR02.

2.3 Surface Water

Two streams are mapped by the New York State Department of Environmental Conservation (NYSDEC) within or adjacent to the limits of the field delineated area, analyzed as part of the project. Hotel Creek, Ont. 117-19-9, flows eastward along the southern boundary of the field delineated area. Hotel Creek is a tributary of Black Creek, which is the nineteenth tributary of the Genesee River. Hotel Creek begins in the Town of Bergen in Genesee County, as a result of runoff from a nearby hill. Water then flows east across the county boundary, south of the proposed project area, and eventually empties into Black Creek in the Town of Riga, just north of Robertson Road. Tributary b of Hotel Creek flows south adjacent to the east side of the field delineated area. Waters, including Hotel Creek and its tributaries, located within the general area of the Mill Seat Landfill are located in the Upper Genesee River Drainage Basin.

Hotel Creek was observed in the field during the field wetland delineation and is associated with delineated Wetland A and NYSDEC mapped wetland RG-5. Tributary b of Hotel Creek was not observed in the field due to its location outside of the field delineated area; however, this water is associated with delineated Wetland D and NYSDEC mapped wetland RG-7. The locations of Hotel Creek and Tributary b are depicted on the United States Geological Survey (USGS) Churchville quadrangle (Figure 2).

3.0 Agency Resource Information

Prior to undertaking the field wetland delineation, topography, mapped wetlands, and background information regarding soils were reviewed for the project area. This background information included the USGS topographic quadrangle maps (Churchville Quadrangle), National Wetland Inventory mapping (Churchville Quadrangle), NYSDEC Freshwater Wetlands map (southwestern Monroe County coverage), and soils information from the Natural Resource Conservation Service (NRCS Web Soil Survey).

3.1 <u>USGS Topographic Quadrangle Map</u>

The Churchville 7.5 Minute Series Topographic Quadrangle Map, last revised in 1943, was examined. As seen in Figure 2, this quadrangle shows the approximate locations of wetland areas and the location of Hotel Creek, in relation to I-490 and Brew Road.

3.2 Natural Resource Conservation Service Soils Information

The NRCS web soil survey was reviewed for information regarding the mapped soils within the project area. The acquired information shows 18 soil units mapped within the wetland delineation project limits. Figure 3 shows the boundaries of these soils mapped within the field delineated area. Table 1, below, lists the series and phases of each soil mapped within the project limits.

Table 1. Soil Survey Information	
Soil Symbol	Soil Series and Phase
BrA	Brockport silty clay loam, 0-2% slopes
CeB	Cayuga silt loam, 2-6% slopes
ChA	Churchville silt loam, 0-2% slopes
Ed	Edwards muck
HnB	Honeoye silt loam, 3-8% slopes
HnC	Honeoye silt loam, 8-15% slopes
Le	Lakemont silt loam
Lk	Lakemont silt loam, loamy variant
LnA	Lima silt loam, 0-3% slopes
LnB	Lima silt loam, 3-8% slopes
Ms	Muck, shallow
OnB	Ontario loam, 3-8% slopes
OnC	Ontario loam, 8-15% slopes
OnF	Ontario Ioam, 25-60% slopes
PaB	Palmyra gravelly fine sandy loam, 3-8% slopes
RgB	Riga silt loam, 2-8% slopes
St	Sun loam, moderately shallow variant
Wg	Wayland silt loam

Six of the mapped soils within the project area are designated as hydric soils according to the NRCS. These hydric soils include Ed – Edwards muck, Le – Lakemont silt loam, Lk – Lakemont silt loam (loamy variant), Ms – shallow Muck, St – Sun loam (moderately shallow cariant), and Wg – Wayland silt loam. There are also two soil units that have the potential for hydric inclusions: Brockport silty clay loam (BrA) and Churchville silt loam (ChA). The hydric soils identified above are predominantly mapped in areas where freshwater wetlands were delineated.

3.3 <u>National Wetlands Inventory Map</u>

Figure 4 shows the mapped National Wetlands Inventory (NWI) wetlands adjacent to and within the proposed project limits. There are numerous NWI wetland polygons mapped within and adjacent to the field delineated area. These mapped polygons represent the following wetland types: palustrine emergent, palustrine scrub-shrub, palustrine forested, and palustrine unconsolidated bottom. The locations of these mapped wetlands associate themselves well with the mapped locations of NYSDEC freshwater wetlands (discussed in section 3.3) and the freshwater wetlands delineated in the field (discussed in section 6).

3.4 NYSDEC Freshwater Wetlands

Figure 5 shows the NYSDEC mapped freshwater wetland boundaries located within and adjacent to the limits of the proposed project area. There are three NYSDEC regulated wetlands located within the field delineated project area: RG-5, RG-6, and RG-7. RG-5 is a Class 2 wetland reported as 108.2 acres in size, RG-6 is a Class 3 wetland reported as 17.4 acres in size, and RG-7 is a Class 2 wetland detailed as being 112.6 acres in size.

3.5 Results of Background Information Review

The preliminary review of background information conducted prior to the wetland field investigation indicated a high probability for potential federally regulated wetlands to be located within the project area. This determination was based on the abundance of NWI and NYSDEC mapped freshwater wetlands within the project limits and the high frequency of hydric soils and soils with

potential hydric inclusions mapped within and adjacent to the project area. A field-based wetland delineation was conducted throughout the project limits to confirm the extent to which these preliminary findings are valid.

4.0 Site Ecology

4.1 Upland Vegetative Cover Types

The majority of land included in the project area is currently associated with agricultural practices. Therefore, most of the cover types observed within the project limits were upland meadows and fields, bordered by hedgerows and deciduous tree lines. Some areas of upland forest and shrub land were also noted within the field delineated limits, as well as some disturbed areas that are part of the Mill Seat Landfill property.

4.2 <u>Wetland Vegetative Cover Types</u>

Wetland cover types identified within the project area include forested wetlands, scrub-shrub wetlands, and emergent wetlands. Some of the wetlands exhibited only one cover type while others demonstrated characteristics of more than one cover type.

4.2.1 Forested Wetland

Forested wetlands are dominated by woody vegetation taller than 20 feet, where soil is at least periodically saturated or covered by water. Forested wetlands within the field delineated area commonly included deciduous trees with an under story of hydrophytic herbaceous vegetation. The denseness of the understory was observed to vary by location. These wetlands were often observed bordering cultivated agricultural fields and other disturbed areas.

4.2.2 Scrub-Shrub

This wetland cover type is primarily found in areas that were formerly open or otherwise cleared. Scrub-shrub wetlands are often found in areas of shallow standing water. Woody vegetation that is less than 20 feet in height helps classify these wetlands. Within the project area, scrub-shrub wetlands were observed bordering emergent wetlands or noted as localized pockets within larger forested wetland areas.

4.2.3 Emergent

Erect, rooted, herbaceous hydrophytic plants characterize emergent wetlands. This vegetation can be observed throughout the majority of the growing season. These wetlands typically have standing water above the soil surface for a portion of the year and often include fringe communities on open water edges. Emergent wetlands were often observed in connection with scrub-shrub and wet meadow cover types. Emergent wetlands were predominantly delineated along Hotel Creek and around small open water ponds, previously constructed as wildlife habitat components, located to the east and west of the Mill Seat Landfill, within delineated Wetlands A and B.

5.0 Wetland Delineation Methodology

The background data described in Section 3 was reviewed prior to conducting the wetland field investigation. The Routine Wetlands Determination Method with Onsite Inspection (Environmental Laboratory, 1987) was used to identify wetlands and Waters of the United States located within the project area, which are subject to jurisdiction by the U.S. Army Corps of Engineers (USACE) and/or the NYSDEC.

Barton & Loguidice, P.C. (B&L), performed data collection and delineation of the wetland boundaries during fieldwork conducted on November 10-14, 2008, and June 8, 2009. Observations of vegetative communities, soil characteristics, and hydrology were recorded and used to demarcate the wetland boundaries in the field.

All of the data collected during the field wetland delineation were recorded on data sheets (located in Appendix A). The boundaries of all four (4) wetlands, designated with letters "A" through "D," that were identified during the wetland delineation are mapped on Figure 6. Figure 7 also shows the boundaries of the delineated wetlands, along with the data plot locations detailed in Appendix A. Upland and wetland data plots were recorded at representative wetland locations in order to illustrate the site characteristics that led to the establishment of the wetland boundaries in the field.

The first step in the wetland delineation was to determine whether normal conditions were present at each identified wetland location and whether any of the wetland sites were located within potential problem areas. Each location was then examined for significant disturbance, particularly any evidence of natural or human induced alteration of vegetation, soils, or hydrology. These investigations were followed by analyzing the surrounding area and determining where the wetland/upland interface

lay. Vegetation, hydrology, and soils were examined in the field at selected points in order to help determine the location of this boundary.

The presence of wetland vegetation was determined by evaluating the indicator status of dominant plant species in each vegetative stratum (i.e., herbaceous layer, shrub/sapling layer, tree layer, and woody vine layer). The quadrat sizes selected for each vegetative stratum were a 5-foot radius for herbaceous vegetation and a 30-foot radius for trees, shrubs, and woody vines. Dominant plant species were determined using percent aerial coverage estimates. The most abundant plant species (when ranked in descending order of abundance and cumulatively totaled) that immediately exceeded 50 percent of the total dominance measure for a given stratum, plus any additional species comprising 20 percent or more of the total dominance measure for that stratum, were considered to be dominant species for the stratum.

The wetland indicator status (obligate - OBL, facultative wetland - FACW, facultative - FAC, facultative upland - FACU, or upland - UPL) for all dominant plant species identified in the sample plots was determined from the National List of Plant Species That Occur in Wetlands: 1988 National Summary (U.S. Fish and Wildlife Service, 1988). The wetland vegetation criterion was met if greater than 50 percent of the dominant plants in a sample plot had an indicator status of OBL, FACW, and/or FAC.

Plant community data recorded at each data plot are included on the wetland delineation field data sheets found in Appendix A.

The presence of primary hydrologic indicators (such as inundation, watermarks, drift lines, or sediment deposits) or secondary hydrologic indicators (such as oxidized root channels in the upper 12-inches of the soil profile, water stained leaves, or the FAC

neutral test) was determined by making observations at the data plot locations and surrounding areas. Soil saturation was determined by sampling the soils at a minimum depth of 12-inches, if possible. These soil test holes were observed in order to record the depth to which water rose in the hole. Hydrologic data gathered in the field at each data plot is included on the wetland delineation field data sheets found in Appendix A.

The presence of hydric soil indicators was determined by obtaining soil samples, by the use of a soil auger, up to a minimal depth of 12-inches, if possible. Munsell Soil Color Charts (2000 Edition) were used to determine soil color immediately below the Ahorizon, or at a depth of 12-inches, whichever was shallower. Soil color was also determined for the B-horizon and the C-horizon, if present. Soil color information and other observations recorded at each data plot location are included on the wetland delineation field data sheets found in Appendix A.

A wetland determination was made at each data plot after characterizing vegetation, hydrologic indicators, and soil characteristics. If the hydrophytic vegetation, hydrology, and hydric soil criteria were met, the area was determined to be a wetland. If the criteria from one or more of the three-wetland indicators was not met, and the area was determined to be undisturbed, then a non-wetland determination was made at that location.

The boundaries of each wetland location were surveyed in the field using a handheld Global Positioning System (GPS). A Trimble GeoXT model with sub-meter accuracy was used to identify each point location and map the delineated wetland boundaries. These wetland boundaries were later added to the Geographic Information System (GIS) base mapping for the project.

Representative photographs taken at wetland locations throughout the field delineated area are included in Appendix B. Figure 8 shows the locations and directions of these photographs.

6.0 Results

6.1 Wetland Labeling

The wetland field delineation for this project occurred on November 10-14, 2008, and June 8, 2009. Over the course of this field delineation, four wetland areas were identified and delineated within the limits of the field delineated area (Figure 6). Four wetlands were delineated within the project limits, three (3) of these wetlands, Wetlands A, B, and D, are associated with mapped streams or drainages. The fourth delineated wetland area, Wetland C, was observed to be potentially isolated from other wetlands and waters. No defined inlets or outlets for this wetland were observed in the field.

Wetlands were identified alphabetically from A to D. Data plots locations were situated within representative areas at each delineated wetland. Wetland delineation datasheets are included in Appendix A. The total acreage of Wetlands B and C could be determined from the delineation since their entire boundaries are located within the field delineated area. The acreages of these two wetlands were calculated at 12.54 acres for Wetland B and 0.76 acres for Wetland C. The total acreages for Wetland A and D could not be determined since their boundaries extended outside of the field delineated area.

6.2 <u>Delineated Wetlands</u>

Wetland A

Wetland A is located along the west and south boundaries of the field delineated area. Hotel Creek is included within this wetland system and was observed in the field. Hotel Creek is determined to be a relatively permanent water (RPW) and Wetland A constitutes a wetland area that directly abuts and flows into an RPW. Hotel Creek passes through a culvert crossing near the farm buildings located on the north side of Bovee Road, south of Wetland A. This crossing provides equipment access to the agricultural fields located within the field delineated area. Though located outside of the field delineated area, Wetland A and Hotel Creek continue to flow east of Brew Road, via a culvert underneath the roadway.

Two data plots were recorded for Wetland A. The data sheets detailing the vegetative, hydrologic, and soil characteristics of these two locations are included in Appendix A.

Wetland B

Wetland B is located immediately south of the existing Mill Seat Landfill footprint, in between the proposed locations of the east and west soil borrow areas. An existing sedimentation pond abuts Wetland B to the east and outlets water to Wetland B though a culvert. This additional water source has expanded the northeast corner of Wetland A, based on previous site delineations and the shape of the wetland boundary near the outfall location. During periods of high flow, water from Wetland B drains

south by means of a linear wetland drainage. This linear drainage was delineated in the field and averages 10-feet in width. Water flow from Wetland B passes through a culvert before entering the linear drainage. The drainage ends at a pair of ceramic culverts located adjacent to a section of deciduous forest located near the southwest corner of the field delineated area (Figure 6). A defined channel or flow pathway was not observed in the field after the locations of the ceramic culverts. It was observed that water exiting the ceramic culverts appears to sheet flow into the forested area. Both of these culvert sets were initially installed to provide access to adjacent agricultural fields. Currently, only the southern field access is frequently used. If the wetland drainage section of Wetland B is determined to be non-jurisdictional by the U.S. Army Corps, then Wetland B has the potential to be determined isolated. This determination would not change the fact that Wetland B is under jurisdiction by the NYSDEC.

Two data plots were recorded for Wetland B. The data sheets detailing the vegetative, hydrologic, and soil characteristics of these two locations are included in Appendix A.

Wetland C

Wetland C is a small, scrub-shrub wetland that was determined in the field to be isolated. No inlets or outlets were observed around the perimeter of this wetland, leading to the isolated determination. Wetland C is located just east of Brew Road, south of O'Brien Road. Wetland C is located among a patch of saplings and shrubs that are surrounded by abandoned agricultural fields.

One data plot was recorded for Wetland C. The data sheet detailing the vegetative, hydrologic, and soil characteristics of this location are included in Appendix A.

Wetland D

Wetland D is located along the eastern edge of the field delineated area. This wetland begins north of O'Brien Road, passes through a culvert underneath the roadway, and continues south. Tributary b of Hotel Creek is located within the delineated limits of Wetland D. This Tributary is a RPW. The northern limits of Wetland D are also recognized as a significant natural community called silver maple-ash swamp. The majority of Wetland D is forested; however, scattered emergent pockets can be seen from the aerial photography, a couple of which were observed during the field delineation. Wetland D and Tributary b continue to flow south/southeast outside of the field delineated area.

Three data plots were recorded for Wetland D. The data sheets detailing the vegetative, hydrologic, and soil characteristics of these locations are included in Appendix A.

7.0 Summary and Conclusions

Four wetland areas, that met the Federal definition for wetlands, were identified within the field delineated area. Hydrologic connections were observed in the field for delineated Wetlands A and D. Wetlands B and C will need to be reviewed by the USACE to determine the extent of their jurisdiction over these areas. The NYSDEC has jurisdiction over Wetlands A, B, and D, since these wetlands represent RG-5, RG-6, and RG-7, which are included on the NYSDEC freshwater wetland mapping. It is unlikely that the NYSDEC would take jurisdiction over Wetland C due to its size. Also, during a meeting with NYSDEC personnel on April 24, 2009, it was implied that it would be unlikely that the Department would take jurisdiction over the wetland drainage that serves as the outlet for delineated Wetland B.

A field meeting is planned for August 11, 2009. During this meeting, the field delineated area will be traversed and the USACE and NYSDEC will review the wetland delineation and the extent of their agency's jurisdiction over the delineated wetland areas. At this time, no wetland impacts or impacts to the NYSDEC regulated 100-foot buffer would occur as a result of the proposed soil borrow areas. The proposed locations of the borrow areas in relation to the delineated wetlands are shown on Figure 9.

8.0 Bibliography

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Figures

Figure 1 Site Location Map

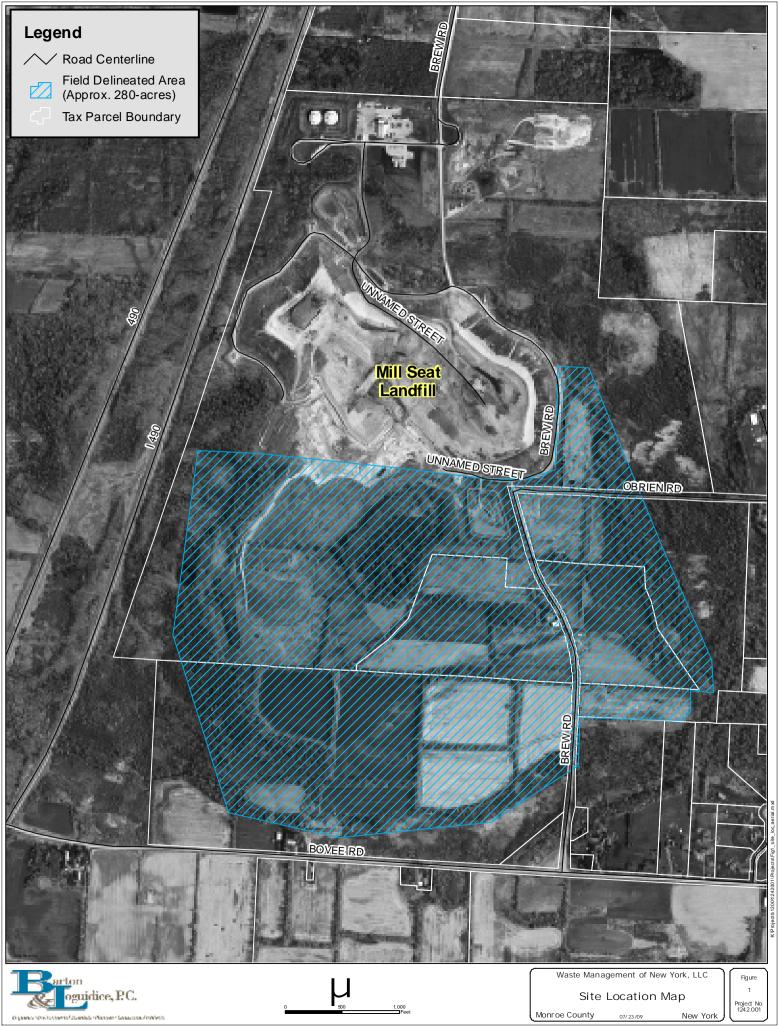


Figure 2 Topographic Site Map

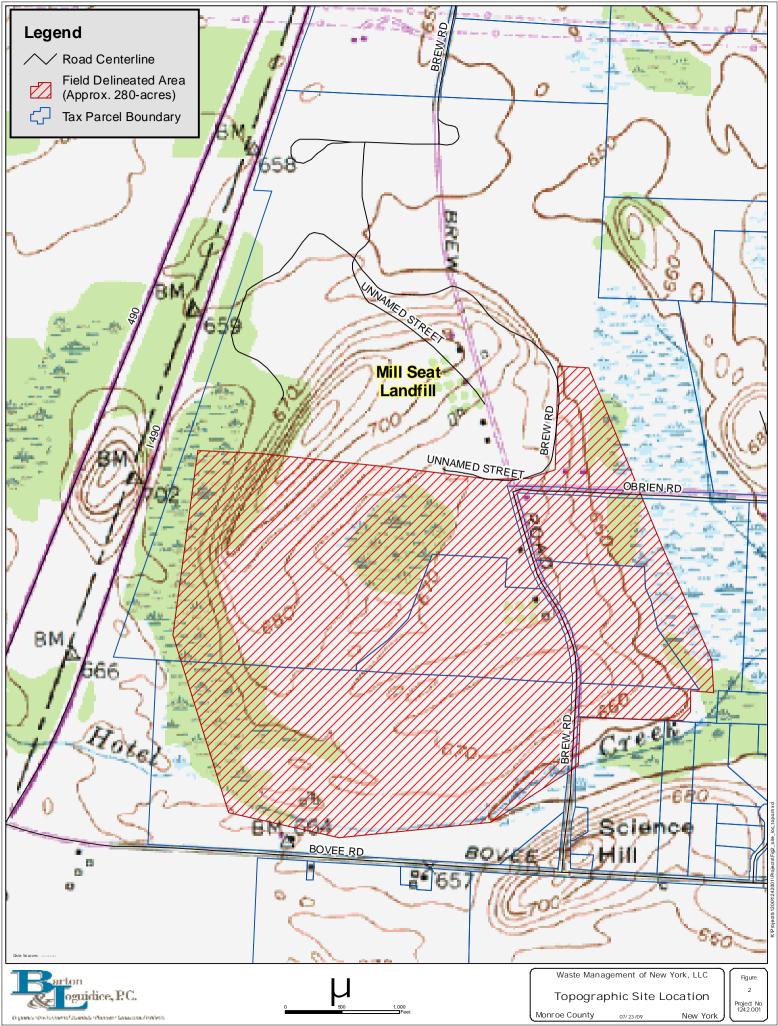


Figure 3 NRCS Mapped Soils

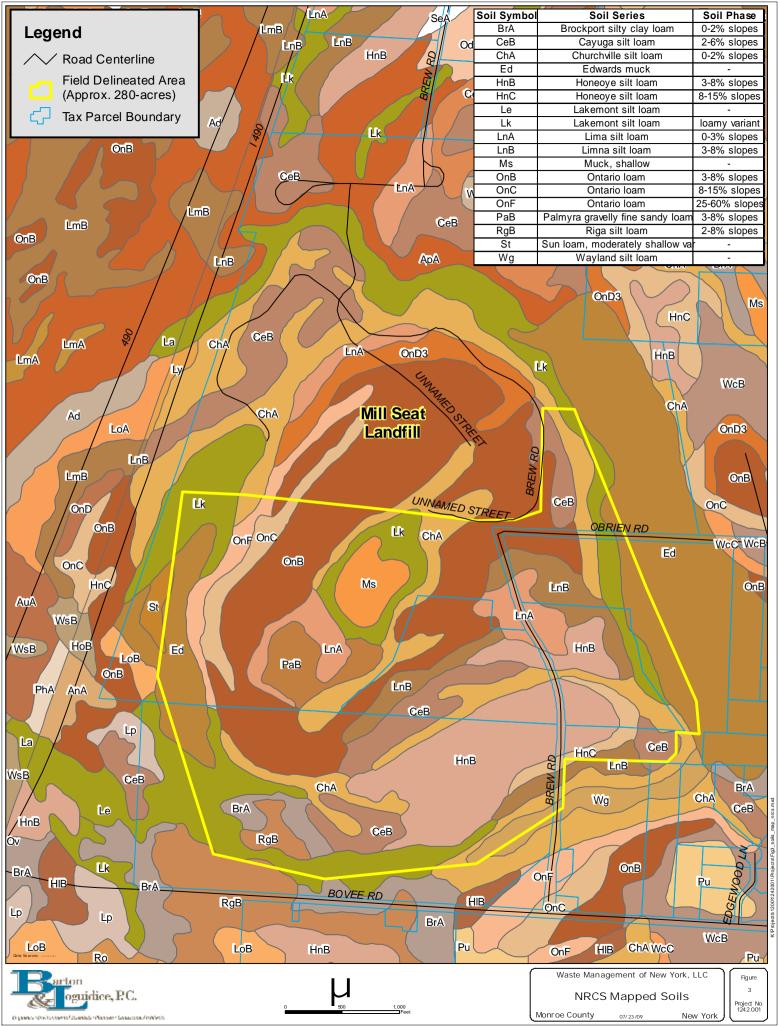


Figure 4 **NWI Wetland Mapping**

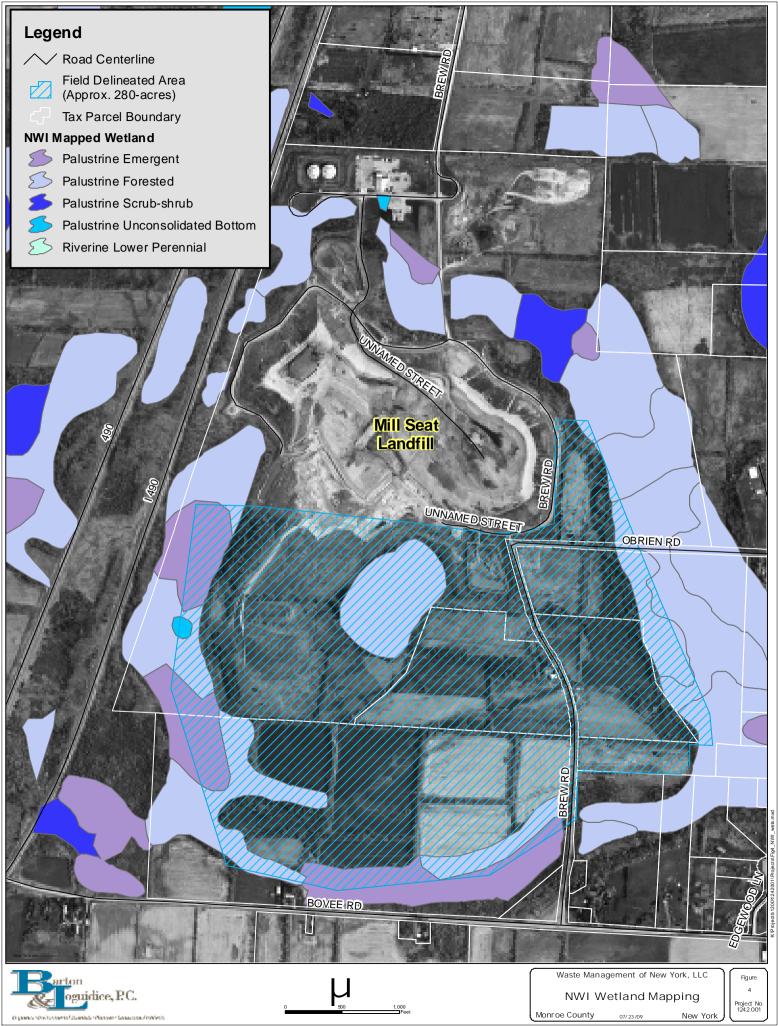


Figure 5 **NYSDEC Wetland Mapping**

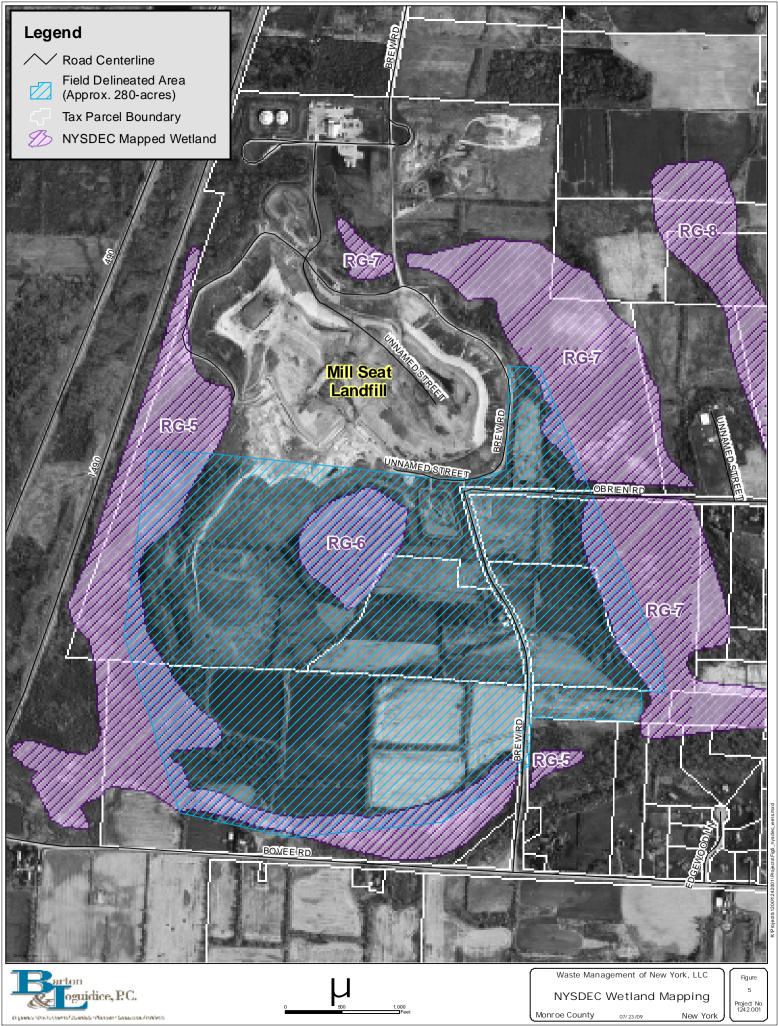


Figure 6 **Delineated Wetland Mapping**

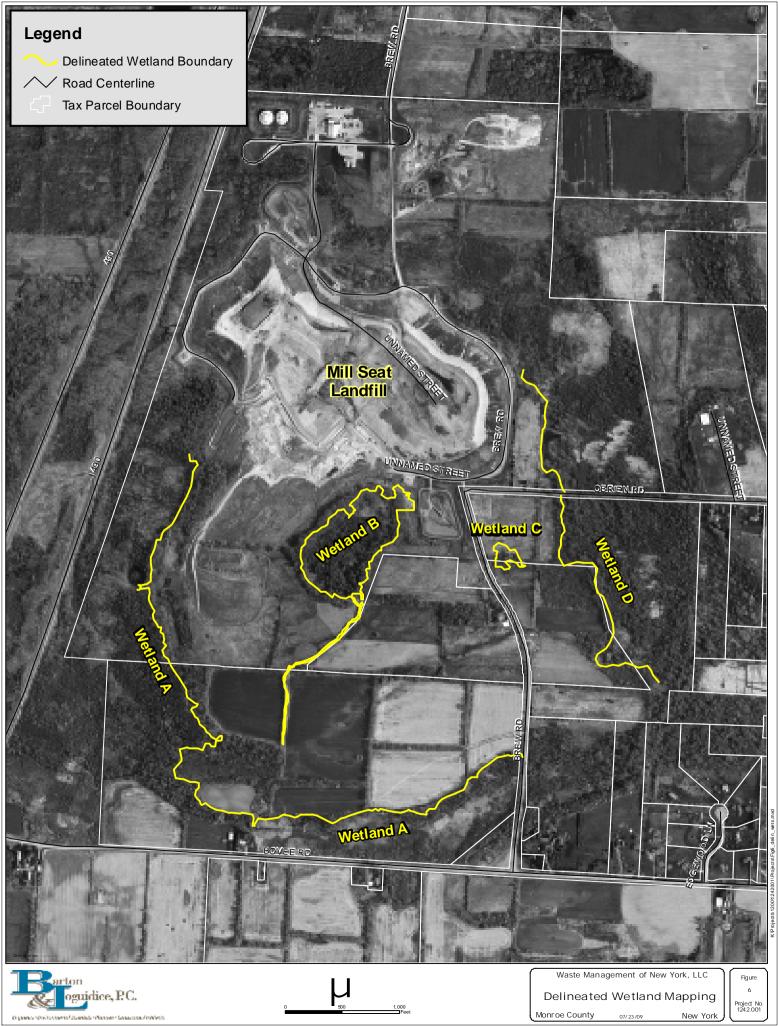


Figure 7

Delineated Wetland Mapping
Data Plot Locations

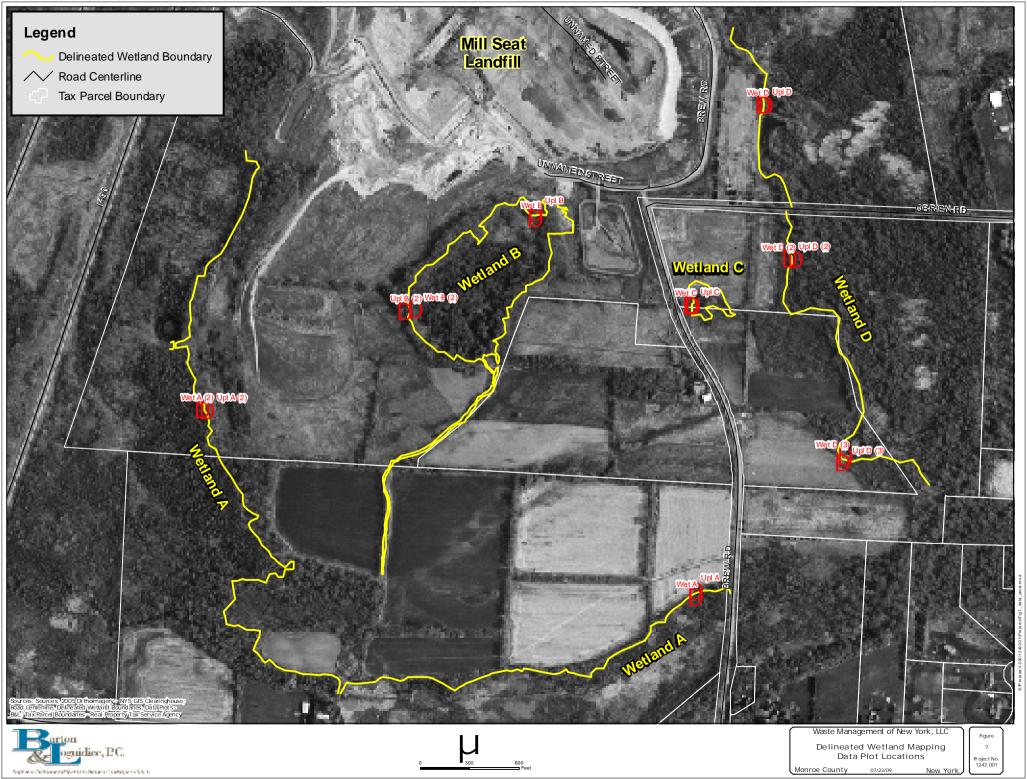


Figure 8 **Site Photograph Locations**

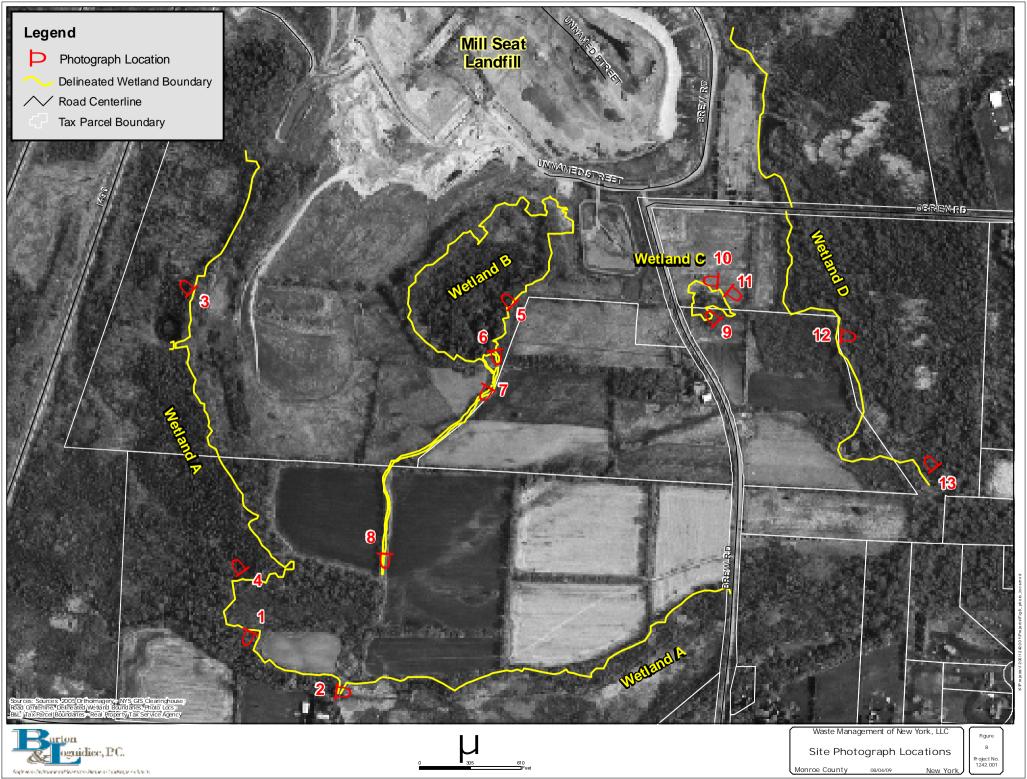
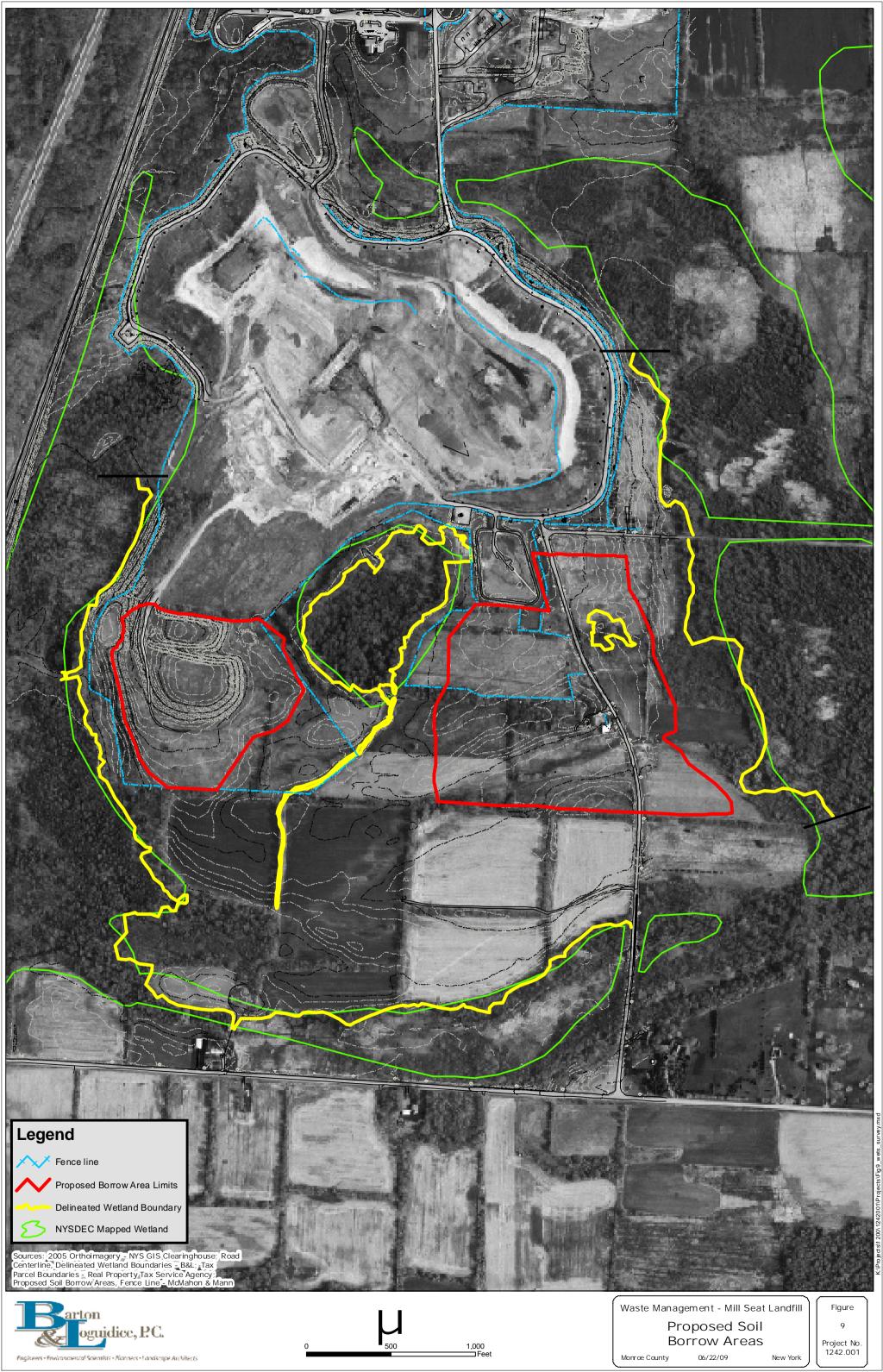


Figure 9 Proposed Soil Borrow Areas



Appendices

Appendix A

Wetland Field Delineation Data Sheets

Project/Site: Mill Seat Lar				Date:	6/8/2009		
Applicant/Owner: Waste Mana	agement		I	County:	Monroe		
Investigator: JED			—— I	State:	New York	i	
<u> </u>			\longrightarrow				
Do normal circumstances exist	t on the cite?	Yes	No	Community ID:	emergent		
Is the site significantly disturbe		Yes	No	Transect ID:	gg-13 (3w)		
is the area a potential problem		No	Plot ID:	Wet D (3)			
(if needed, explain on re		Yes	···		7. 4. – (-)		
VEGETATION	<u> </u>						
Dominant Plant Species	Stratum Indicator		Dominant [Plant Species	Stratum	Indicator	
1. Cornus amomum	S FACW	9.					
2. Typha angustifolia	H OBL	- <u>3.</u>		•			
3. Panicum virgatum	H FAC	- 10 11					
		- i —					
4. Ailanthus altissima	SNI	$-\frac{12}{46}$					
5.		$ \frac{13}{4}$					
6.		_ 14					
7.		_ 15	<u>5.</u>				
8.		16	3.				
Percent of Dominant Species t (excluding FAC-)	that are OBL, FACW, or FA 3 out of 4 = 75%	4C					
Remarks: dominance d	of hydrophytic vegetation e	xhibited					
HYDROLOGY							
Recorded D	ata (Describe in Remarks)):	Wetland H	ydrology Indicators:			
	Stream, Lake, or Tide G			Indicators:			
1	Aerial Photographs		×	C_Inundated			
· _	Other	1	X	<u>. </u>	per 12 Inches		
X_No Recorde	d Data Available			Water Marks			
				Drift Lines			
Field Observations:				Sediment Depo			
Don'th of Curtons	111-1 O.É	7 X	Drainage Patterns in Wetlands				
Depth of Surface	Water: 0.5	_(in.)	Second	ary Indicators: Oxidized Root (Channale in Lir		
Depth to Free Wa	ater in Pit: 1.0	(in.)		Water-Stained	•	per 12	
Берино пост	ateriirit	-(1167					
Depth to Saturate	ed Soil: 0.0	(in.)	Local Soil Survey Data FAC-Neutral Test				
	, d Oom	-("/		Other (Explain i			
<u> </u>							
Remarks:							
II DVOTOLOGIC II	ndicators present						

Map Unit Nan	ne			:	Drainage	e Class:	,	
(Series and P	hase): F	InC: Honeoye silt l	oam & ChA: Church	nville silt loam	_	SW poorly draine	d	
·	_		•		Field Ob	servations		
Taxonomy (S	ubgroup):				Confirm	Mapped Type?	Yes	No
Profile Descri	ption:							
Depth		Matrix Color	Mottle Color	Mottle		Texture, Concre	etions,	
(Inches)	<u>Horizon</u>	(Munsell Moist)	(Munsell Moist)	<u>Abundance</u>	Abundance/Contrast		<u>tc.</u>	
0-5"	A	10 YR 3/3				sand loam		
5-12+"	B	10 YR 4/2	10 YR 3/4	FFF		sand		
				_				
				<u></u>				
				_				
Hydric Soil Inc	dicators:							
_		osol		Concretions				
-		ic Epipedon		High Organic Content in Surface Layer Sandy Soils				
. .		idic Odor		Organic Streaking in Sandy Soils				
_		ic Moisture Regim	e	Listed on Loc	-			
-		lucing Conditions yed or Low-Chrom	a Colors	Listed on Nat Other (Explai	-			
	X Gle	yea or Low-Chilom		- Ottlei (Explai	ii iii rieiiiai			
Damadas								
Remarks:	bu salata a a	.il avitavia maat						
	nyunc so	il criteria met						
WETLAND D	ETERMINA	ATION						
Hydrophytic V	/egetation I	Present? Yes	No	1 2 11			(Circ	cle)
1 ' ' '			N _a				•	•

Hydrophytic Vegetation Present?	Yes	No	·	(Circle)
Wetland Hydrology Present? Hydric Soils Present?	Yes Yes	No No	Is this Sampling Point Within a Wetland?	Yes No
Remarks: Wetland D is associated with NYSD Wetland D is mostly forested with so The north extent of Wetland D is a second	ome pock	ets of oper	n water and emergent vegetation	

Project/Site: Mill Seat La					Date:	6/8/2009	
Applicant/Owner: Waste Mana	agement				County:	Monroe	
Investigator: JED					State:	New York	
					†		
Do normal circumstances exis			Yes	No	Community ID:	upland herbaced	bus
Is the site significantly disturbed		uation)?	Yes	No	Transect ID:	gg-13 (3u)	
Is the area a potential problem			Yes	No	Plot ID:	Upl D (3)	
(if needed, explain on re	erse)						
VEGETATION							
Dominant Plant Species	<u>Stratum</u>	<u>Indicator</u>	- 	Dominan	nt Plant Species	Stratum I	ndicator
1. Solidago sp.	H			9.			
2. Clematis virginiana	<u> </u>	FAC		10.			
3. Rubus idaeus	<u> </u>	FAC-		11.			
4. Equisetum arvense	H	FAC		12.			
5. Poa pratensis	Н	FACU .		13.			
6.				14.			
4			ì	15.			
7.			ı				
7. 8.				16.			
	that are OBL, F 2 out of 4 =		<u></u>	16.			
8. Percent of Dominant Species (excluding FAC-) Remarks:	2 out of 4 =	50%					
8. Percent of Dominant Species (excluding FAC-) Remarks:		50%					
8. Percent of Dominant Species (excluding FAC-) Remarks:	2 out of 4 =	50%					
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance	2 out of 4 = of hydrophytic Data (Describe	vegetation no	ot exhibite	ed Wetland	Hydrology Indicators	:	
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance	2 out of 4 = of hydrophytic Data (Describe Stream, Lai	vegetation no in Remarks): ke, or Tide Ga	ot exhibite	ed Wetland	ry Indicators:		
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance	2 out of 4 = of hydrophytic Data (Describe Stream, Lai Aerial Photo	vegetation no in Remarks): ke, or Tide Ga	ot exhibite	ed Wetland	ry Indicators: Inundated		,
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D	2 out of 4 = of hydrophytic Oata (Describe Stream, Lal Aerial Photo Other	vegetation no vegetation no in Remarks): ke, or Tide Ga ographs	ot exhibite	ed Wetland	ry Indicators:InundatedSaturated in Up		
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance	2 out of 4 = of hydrophytic Oata (Describe Stream, Lal Aerial Photo Other	vegetation no vegetation no in Remarks): ke, or Tide Ga ographs	ot exhibite	ed Wetland	ry Indicators: Inundated		,
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D	2 out of 4 = of hydrophytic Oata (Describe Stream, Lal Aerial Photo Other	vegetation no vegetation no in Remarks): ke, or Tide Ga ographs	ot exhibite	ed Wetland	Iry Indicators: Inundated Saturated in Up Water Marks Drift Lines Sediment Depo	oper 12 Inches	,
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D X_ No Recorded Field Observations:	2 out of 4 = of hydrophytic Data (Describe Stream, Lat Aerial Photo Other ed Data Availab	in Remarks): ke, or Tide Ga ographs	et exhibite	Wetland Primal	Iny Indicators: Inundated Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Pattel	oper 12 Inches	,
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D X No Recorde	2 out of 4 = of hydrophytic Data (Describe Stream, Lat Aerial Photo Other ed Data Availab	in Remarks): ke, or Tide Ga ographs	ot exhibite	Wetland Primal	In Indicators: Inundated Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Patter	oper 12 Inches	r 12"
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D X_ No Recorded Field Observations:	2 out of 4 = of hydrophytic Data (Describe Stream, Lat Aerial Photo Other ed Data Availab	in Remarks): ke, or Tide Gaographs ble	et exhibite	Wetland Primal	In Indicators: Inundated Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Patter Indicators: Oxidized Root (Water-Stained	oper 12 Inches osits rns in Wetlands Channels in Uppe Leaves	r 12"
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D X_ No Recorded Field Observations: Depth of Surface Depth to Free W	2 out of 4 = of hydrophytic Data (Describe Stream, Lai Aerial Photo Other ed Data Availab Water:	in Remarks): ke, or Tide Gaographs ble 0.0 (>12.0 (auge (in.)	Wetland Primal	In Indicators: Inundated Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Patter Indicators: Oxidized Root (Water-Stained Local Soil Surve	oper 12 Inches osits rns in Wetlands Channels in Uppe Leaves ey Data	r 12"
8. Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D X_ No Recorded Field Observations: Depth of Surface	2 out of 4 = of hydrophytic Data (Describe Stream, Lai Aerial Photo Other ed Data Availab Water:	in Remarks): ke, or Tide Gaographs ble 0.0 (>12.0 (auge	Wetland Primal	In Indicators: Inundated Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Patter Indicators: Oxidized Root (Water-Stained	oper 12 Inches osits rns in Wetlands Channels in Uppe Leaves ey Data est	r 12"

Map Unit Name		Drainage Class:				
(Series and Phase): HnC: Honeo	ye silt loam			very well drained		
_				servations	.,	
Taxonomy (Subgroup):			Contirm	1 Mapped Type?	Yes	No
Taxonomy (Subgroup): Profile Description: Depth Matrix Co (Inches) Horizon (Munsell N	lor Mottle Cold Moist) (Munsell M	or Mottle	Confirm	n Mapped Type? Texture, Concre <u>Structure, e</u> loam		No
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low-	Regime litions	Organic Str Listed on L Listed on N		Soils List ic Soils List	andy Soi	ls
Remarks: hydric soil criteria no	t met					
WETLAND DETERMINATION						
Hydrophytic Vegetation Present?	Yes No				(Circ	ole)
Wetland Hydrology Present?	Yes No	·				
Hydric Soils Present?	Yes No	ls this Sampli	ng Point With	hin a Wetland?	Yes	No
Remarks:			, 		 	
this plot is located at the edge of an there is a significant change in eleva		d plot for wetland D) and the wet	iland plot		

Project/Site: Mill Seat La	ndfill				Date:	11/14/2008
Applicant/Owner: Waste Man	agement				County:	Monroe
nvestigator: JED					State:	New York
						
Do normal circumstances exis	t on the cite?		Yes	No	Community I	D: forested
s the site significantly disturbe		ration)2	Yes	No	Transect ID:	Wet A
s the area a potential problem		allony:	Yes	No	Plot ID:	Wet A (2)
(if needed, explain on re			. 00	110	1 10(18)	110t / (E)
/EGETATION						
Dominant Plant Species	Stratum	Indicator	<u> </u>	Dominan	t Plant Species	Stratum Indica
f. Carex sp.	——			9.		
2. Carpinus caroliniana	S/T	FAC		10.		-
B. Equisetum pratense	H	FACW		11.		
4. Acer rubrum	T	FAC		12.		
5. Solidago sp.	Н Н			13.		• +
				14.		· ————
3. 7.				15.		
^						
8.				16.		
8. Percent of Dominant Species (excluding FAC-)	that are OBL, F 3 out of 3 =		_ _	10.		
Percent of Dominant Species (excluding FAC-) Remarks:	3 out of 3 =	100%		10.		
Percent of Dominant Species (excluding FAC-) Remarks:		100%		10.		
Percent of Dominant Species (excluding FAC-) Remarks: dominance	3 out of 3 =	100%		10.		
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY	3 out of 3 =	100% vegetation ex			Hydrology Indicate	ors:
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak	vegetation ex in Remarks): ke, or Tide Ga	hibited	Wetland	Hydrology Indicatory Indicatory	ors:
Percent of Dominant Species (excluding FAC-) Remarks: dominance	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo	vegetation ex in Remarks): ke, or Tide Ga	hibited	Wetland	ry Indicators:Inundated	
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo Other	vegetation ex in Remarks): ke, or Tide Ga	hibited	Wetland	ry Indicators: Inundated X Saturated in	Upper 12 Inches
Percent of Dominant Species (excluding FAC-) Remarks: dominance	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo Other	vegetation ex in Remarks): ke, or Tide Ga	hibited	Wetland	ry Indicators: Inundated X Saturated in Water Marks	Upper 12 Inches
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo Other	vegetation ex in Remarks): ke, or Tide Ga	hibited	Wetland	ry Indicators: Inundated X Saturated in Water Marks Drift Lines	Upper 12 Inches
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo Other	vegetation ex in Remarks): ke, or Tide Ga	hibited	Wetland	ry Indicators:	Upper 12 Inches
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D X_ No Recorded Field Observations:	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo Other ed Data Availab	vegetation ex in Remarks): ke, or Tide Ga ographs	hibited	Wetland Prima	ry Indicators: Inundated X Saturated in Water Marks Drift Lines Sediment De	Upper 12 Inches
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo Other ed Data Availab	vegetation ex in Remarks): ke, or Tide Ga ographs	hibited	Wetland Prima	ry Indicators: Inundated X Saturated in Water Marks Drift Lines Sediment De Drainage Pa	Upper 12 Inches eposits tterns in Wetlands
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D X_ No Recorded Field Observations: Depth of Surface	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo Other ed Data Availab Water:	vegetation ex in Remarks): ke, or Tide Ga ographs	hibited auge	Wetland Prima	ry Indicators: Inundated X Saturated in Water Marks Drift Lines Sediment De Drainage Pa	Upper 12 Inches sposits tterns in Wetlands ot Channels in Upper 12"
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded DX_ No Recorded Field Observations:	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo Other ed Data Availab Water:	vegetation ex in Remarks): ke, or Tide Ga ographs	hibited	Wetland Prima	ry Indicators:	Upper 12 Inches eposits tterns in Wetlands ot Channels in Upper 12"
Percent of Dominant Species (excluding FAC-) Remarks: dominance HYDROLOGY Recorded D X_ No Recorded Field Observations: Depth of Surface	3 out of 3 = of hydrophytic v Data (Describe i Stream, Lak Aerial Photo Other ed Data Availab Water:	vegetation ex in Remarks): ke, or Tide Ga ographs ole 0.0 (hibited auge	Wetland Prima	ry Indicators:	Upper 12 Inches eposits tterns in Wetlands of Channels in Upper 12" ed Leaves urvey Data

Map Unit Nan	ne				Drainage	e Class:		
(Series and P	hase):	Ed: Edwards Mu	ck			very poorly draine	ed	
					Field Ob	servations		
Taxonomy (S	ubgroup):			·	Confirm	Mapped Type?	Yes	No
Profile Descri	ption:					•		
Depth		Matrix Color	Mottle Color	Mottle		Texture, Concre	etions.	
(Inches)	<u>Horizon</u>	(Munsell Moist)	(Munsell Mois		/Contrast	Structure, e		
0-10"	Α	10 YR 2/1	-	-		sandy clay lo		
10+"	B	10 YR 5/1	10 YR 5/8	B CMD	<u> </u>	sandy clay lo		
						, ,		
Hydric Soil In	dicators:							
,								
	Hist	osol		Concretions				
-	 Hist	ic Epipedon	_	—— High Organic	Content in	Surface Layer Sa	andy Soi	ils
-	Sulf	idic Odor		Organic Streaking in Sandy Soils				
-	Aqu	ic Moisture Regim	e	Listed on Local Hydric Soils List				
]	X Red	lucing Conditions	_	Listed on Nat	ational Hydric Soils List			
_	X Gle	yed or Low-Chrom	a Colors	Other (Explai	n in Rema	rks)		
Remarks:								
	hydric so	il criteria met						
WETLAND D	ETERMINA	ATION						
Hydrophytic \	/egetation i	Present? Yes	No				(Cire	cle)
Wetland Hydi	=						1	•
Marketa Onlin F		Van	NI-	المسالمة المسالمة	Daint Mil	Olean Mada	Vaa	Ma

Hydrophytic Vegetation Present?	Yes	No		(Circle)		
Wetland Hydrology Present? Hydric Soils Present?	Yes Yes	No No	Is this Sampling Point Within a Wetland?	Yes	No	
Remarks: Wetland A is associated with NYSD Wetland A is associated with Hotel of Wetland A is a forested wetland thro closer to Brew Road	Creek and	d its on-site	tributary			

Dunion (City)	- alf:11				I Data:	11/14/0000	
Project/Site: Mill Seat Lar					Date:	11/14/2008 Monroe	
Applicant/Owner: Waste Mana Investigator: JED	agement				County: State:	Monroe New York	
investigator. JED					State	INGAN LOUV	
					1		
Do normal circumstances exist			Yes	No	Community ID:		
Is the site significantly disturbe		uation)?	Yes	No	Transect ID:	Wet A	
Is the area a potential problem			Yes	No	Plot ID:	Upl A (2)	
(if needed, explain on re	erse)				<u> </u>		
VEGETATION							
Dominant Plant Species	Stratum	Indicator	T	Dominan	t Plant Species	<u>Stratum</u>	Indicator
1. Acer rubrum	Т	FAC		9.			
2. Acer saccharum	T	FACU-		10.			
3. Ostrya virginiana	S/T	FACW		11.			
4.				12.			
5.				13.	_		
6.				14.			
7.				15.			
8.				16.			
To the set of the set							
Percent of Dominant Species t (excluding FAC-)	that are OBL, I = 2 out of 3		3				
l -			_	,			
Remarks:	of budranhutia	···acatation av	hihitad				
uominance (of hydrophytic	vegetation ex	libitea				
		· 					
HYDROLOGY							
Decayled D	/Daga-iba	in Damarka).		1 Motland	Livelyalamy Indiantara		
Hecorded b	ata (Describe l Stream, Lal	ın нетағка): ke, or Tide Ga	מחותם		Hydrology Indicators ry Indicators:	i :	
-	Aerial Photo		ıuge	Unitial	Inundated		
-	Other	99. SPC		-	Saturated in Up	per 12 Inches	
X No Recorde	d Data Availab	ole			Water Marks	•	
					Drift Lines		
Field Observations:	·	·		T _	Sediment Depo		
	141-1	20 /	# = A		Drainage Patte	rns in Wetland	ls
Depth of Surface	water:	0.0	(in.)	Secon	idary Indicators:	Channala in Li	onor 10"
Depth to Free Wa	ster in Pit·	>12.0 ((in.)	-	 Oxidized Root (X Water-Stained 		oper 12
Dopin to Fice Tr.	aterini it.		(111.)	-	Local Soil Surv		
Depth to Saturate	ed Soil:	>12.0 ((in.)		FAC-Neutral Te	•	
'	-	,	,		Other (Explain		
Remarks:							
H	riteria not met						
, =	1101101101111111						

Map Unit Nar	me			Drainage	e Class:			
(Series and F	Phase):	Ed: Edwards Mu	ck		very poorly drained			
				Field Observations				
Taxonomy (S	Subgroup):			Confirm	Mapped Type? Yes / I	vo.		
				<u> </u>				
Profile Descr	iption:							
Depth		Matrix Color	Mottle Color	Mottle	Texture, Concretions,			
(Inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Abundance/Contrast	Structure, etc.			
0-9"	Α	10 YR 4/2	-	-	loam			
9+"	В	10 YR 4/2	10 YR 3/4	CFF	clay loam			
Hydric Soil In	ndicators:							
l Trydno con m	idioatoro.							
	Hist	osol		Concretions				
	Hist	ic Epipedon		High Organic Content in Surface Layer Sandy Soils				
		idic Odor		Organic Streaking in Sandy Soils				
		ic Moisture Regim	e	Listed on Local Hydric Soils List				
		lucing Conditions		Listed on National Hydri				
		yed or Low-Chrom	a Colors	Other (Explain in Remarks)				
				•				
Remarks:								
l iomano.	hydric so	il criteria met						
	nyano oo	ii omona mor						
L								
WETLAND D	DETERMINA	ATION						

Hydrophytic Vegetation Present?	Yes	No		(Circle)		
Wetland Hydrology Present? Hydric Soils Present?	Yes Yes	No No	Is this Sampling Point Within a Wetland?	Yes	No	
Remarks:			····			

(1987 COE Wetlands Delineation Manual)

Project/Site: Mill Seat Lan	ıdfill				Date:	11/10/2008		
Applicant/Owner: Waste Mana	gement			-	County:	Monroe		
Investigator: JED					State:	New York		
					 			
Do normal circumstances exist Is the site significantly disturber Is the area a potential problem (if needed, explain on re	d (atypical situ area?	uation)?	Yes Yes	No	Community I Transect ID: Plot ID:	D: scrub-shrub B-42 (1w) Wet B		
VEGETATION								
Dominant Plant Species	Stratum	Indicator		Dominan	t Plant Species	Stratum India	cator	
1. Aster sp.	Н	_		9.				
2. Juncus effusus	Н	FACW+		10.				
3. Phalaris arundinacea	Н	FACW+	- 1	11.				
4. Acer rubrum	S/T	FAC	- 1	12.				
5. Acer saccharinum	Т	FACW	1	13.		·		
6. Carex sp.	Н	-		14.				
7. Cornus amomum	S	FACW		15.				
8. Fraxinus pennsylvanica	S/T	FACW		16.				
Percent of Dominant Species the (excluding FAC-) Remarks:	nat are OBL, I 6 out of 6 =		c 		-			
II	f hydrophytic	vegetation ex	chibited	i				
HYDROLOGY								
Recorded Da	ata (Describe	in Remarks):		Wetland	Hydrology Indicate	nre.		
		ke, or Tide G	auge		ry Indicators:	5.0.		
	Aerial Phot				Inundated			
	Other				X Saturated in Upper 12 Inches			
X No Recorded	d Data Availat	ole		_	Water Marks			
E: LLOI					Drift Lines			
Field Observations:				-	Sediment De	eposแร tterns in Wetlands		
Depth of Surface	Water:	0.0	(in.)	Secon	ndary Indicators:	tterns in vvetiands		
			· · · · · ·		•	ot Channels in Upper 12	2"	
Depth to Free Wa	ter in Pit:	7.0	(in.)		Water-Stains			
D	-1 O-21-	0.0	r \	_	Local Soil St	•		
Depth to Saturate	a 2011:	3.0	(in.)		FAC-Neutral Other (Expla	i est in in Remarks)		

Remarks:

hydrologic indicators observed

Wetland B

SOILS

Map Unit Nar	ne			-	Drainage	e Class:		
(Series and P	hase):	ChA: Churchville	silt loam, 0-2% slo	pes	-	SW poorly		
						servations		
Taxonomy (S	ubgroup):				Confirm	Mapped Type?	Yes	No
Profile Descri	iption:							
Depth		Matrix Color	Mottle Color	Mottle		Texture, Concre	tions,	
(Inches)	<u>Horizon</u>	(Munsell Moist)	(Munsell Moist)	<u>Abundance</u>	/Contrast	Structure, et	<u>c.</u>	
0-7"	A	10 YR 2/1				silt loam		
7-12+"	B	10 YR 4/1	10 YR 5/6	MMD		sandy clay loa	am	
				-				
Hydric Soil In	dicators:							
	Hist	osoi		Concretions				
	Hist	ic Epipedon		High Organic	Content in	Surface Layer Sa	ındy Soil	s
	Sulf	idic Odor		Organic Strea	ıking in Sa	ndy Soils		
		ic Moisture Regime	e	_Listed on Loca	•			
_		lucing Conditions		Listed on Nati	-			
	X Gle	yed or Low-Chroma	a Colors	_Other (Explair	n in Remai	rks)		
Remarks:								
	hydric so	il criteria met						
							., .	

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No		(Circ	ole)
Wetland Hydrology Present? Hydric Soils Present?	Yes Yes	No No	Is this Sampling Point Within a Wetland?	Yes	No
Remarks:					

Wetland B is associated with NYSDEC mapped wetland RG-6 this wetland drains south via a drainage channel flow from the nearby sediment pond is received into Wetland B

Wetland B is located in a depressional area and receives the majority of its water from precipitation

Project/Site: Mill Seat Lar				Date	,	11/10/2008	
Applicant/Owner: Waste Mana	gement			Coun	ty:	Monroe	
Investigator: JED				State	: _	New York	
Do normal circumstances exist					nunity ID:		meadow
Is the site significantly disturbe		uation)?			ect ID:	B-42 (1u)	
Is the area a potential problem (if needed, explain on re			Yes N	No Plot I	D: 	Upl B	
VEGETATION							
Dominant Plant Species	Stratum	Indicator	<u> </u>	Dominant Plant Spe	cies	Stratum	Indicator
1. Aster sp.	<u>H</u>		9.				<u>-</u>
2. Rhamnus cathartica	Н	UPL	10.				
3. Coptis trifolia	H	FACW	<u>11.</u>				
4. Acer rubrum	S/T	FAC	12.				
5. Solidago canadensis	Н	FACU	13.				
6. 7.			14.				
			15.				
			. —				
7. 8.			16.				
	hat are OBL, F 2 out of 2 =		16.				
8. Percent of Dominant Species the species that the spec		: 50%	16.				
8. Percent of Dominant Species the species that the spec	2 out of 2 =	: 50%	16.				
8. Percent of Dominant Species the species that (excluding FAC-) Remarks: dominance of the species that t	2 out of 2 = of hydrophytic ata (Describe	vegetation no in Remarks):	t exhibited	Vetland Hydrology		5;	
8. Percent of Dominant Species the species that (excluding FAC-) Remarks: dominance of the species that t	2 out of 2 = of hydrophytic ata (Describe Stream, Lak	vegetation noting the results of the	t exhibited	Primary Indicator	s:	5:	
8. Percent of Dominant Species the species that (excluding FAC-) Remarks: dominance of the species that t	2 out of 2 = of hydrophytic ata (Describe Stream, Lak Aerial Photo	vegetation noting the results of the	t exhibited	Primary Indicator	s: lated		
8. Percent of Dominant Species the (excluding FAC-) Remarks: dominance of the control of the	2 out of 2 = of hydrophytic ata (Describe Stream, Lat Aerial Photo Other	vegetation no vegetation no in Remarks): ke, or Tide Ga ographs	t exhibited	Primary Indicator Inunc X Satur	s: lated ated in U	s: pper 12 Inches	3
8. Percent of Dominant Species the species that (excluding FAC-) Remarks: dominance of the species that t	2 out of 2 = of hydrophytic ata (Describe Stream, Lat Aerial Photo Other	vegetation no vegetation no in Remarks): ke, or Tide Ga ographs	t exhibited	Primary Indicator Inunc X Satur	s: lated ated in U r Marks		3
8. Percent of Dominant Species the (excluding FAC-) Remarks: dominance of the control of the	2 out of 2 = of hydrophytic ata (Describe Stream, Lat Aerial Photo Other	vegetation no vegetation no in Remarks): ke, or Tide Ga ographs	t exhibited	Primary Indicator Inunc X Satur Wate	s: lated ated in U r Marks	pper 12 Inches	6
8. Percent of Dominant Species the (excluding FAC-) Remarks: dominance of the control of the	2 out of 2 = of hydrophytic ata (Describe Stream, Lal Aerial Photo Other d Data Availab	in Remarks): ke, or Tide Gaographs	t exhibited	Primary Indicator Inunc X Satur Wate Drift Sedir Drair	s: lated rated in U r Marks Lines ment Dep lage Patte	pper 12 Inches	
8. Percent of Dominant Species the (excluding FAC-) Remarks: dominance of the dominance of the control of th	2 out of 2 = of hydrophytic ata (Describe Stream, Lal Aerial Photo Other d Data Availab	in Remarks): ke, or Tide Gaographs	t exhibited	Primary Indicator Inunc X Satur Wate Drift Sedir Drair Secondary Indicator	s: dated rated in U r Marks Lines ment Dep rage Patte	pper 12 Inches osits erns in Wetland	ds
8. Percent of Dominant Species the (excluding FAC-) Remarks: dominance of the dominance of the control of th	2 out of 2 = of hydrophytic ata (Describe Stream, Lat Aerial Photo Other d Data Availab Water:	in Remarks): ke, or Tide Gaographs ole	t exhibited vauge	Primary Indicator Inunc X Satur Wate Drift Sedir Drair Secondary Indicator	s: dated rated in U r Marks Lines ment Dep lage Patte ators: zed Root	pper 12 Inches osits erns in Wetland Channels in U	ds
8. Percent of Dominant Species the (excluding FAC-) Remarks: dominance of the control of the	2 out of 2 = of hydrophytic ata (Describe Stream, Lat Aerial Photo Other d Data Availab Water:	in Remarks): ke, or Tide Gaographs ole	t exhibited	Primary Indicator Inunc X Satur Wate Drift Sedir Drair Secondary Indicator Wate	rs: Idated rated in U or Marks Lines ment Dep lage Patte ators: zed Root	pper 12 Inches osits erns in Wetland Channels in U Leaves	ds
8. Percent of Dominant Species the (excluding FAC-) Remarks: dominance of the dominance of the control of th	2 out of 2 = of hydrophytic ata (Describe Stream, Lak Aerial Photo Other d Data Availab Water:	in Remarks): ke, or Tide Gaographs ole 0.0 (>12.0 (t exhibited vauge	Primary Indicator Inunc X Satur Wate Drift Sedir Drair Secondary Indice Oxidi Wate Loca	s: dated rated in U r Marks Lines ment Dep lage Patte ators: zed Root	pper 12 Inches osits erns in Wetland Channels in U I Leaves vey Data	ds

-								
Map Unit Nar	ne			Drainag	e Class:			
(Series and F		ChA: Churchville	silt loam, 0-2% slop	oes	SW poorly			
,	,				oservations			
Taxonomy (S	ubgroup):			Confirm	n Mapped Type? Yes	No		
Profile Descri	iption:							
Depth	, ,,,,,,	Matrix Color	Mottle Color	Mottle	Texture, Concretions,			
(Inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Abundance/Contrast	Structure, etc.			
0-7"	A	10 YR 3/1	-	- Individual Contract	silt loam			
7-12+"	В	10 YR 5/2	10 YR 6/4	CMF	sandy loam			
7-12-		10 111 0/2	10 111 0/4		oundy loan			
				·				
				·				
								
Hydric Soil In	dicators:							
	Hist	osol		Concretions				
	——— Hist	ic Epipedon		- High Organic Content i	n Surface Layer Sandy Soil	s		
		idic Odor		. Organic Streaking in Sa				
		ic Moisture Regim	e	Listed on Local Hydric	=			
		lucing Conditions	·	Listed on National Hyd				
	X Gle	yed or Low-Chrom	a Colors	Other (Explain in Rema	arks)			
Remarks:								
	hydric so	il criteria met						
WETLAND D	DETERMINA	ATION						
<u> </u>		2.77						

Hydrophytic Vegetation Present?	Yes	No		(Circ	ele)
Wetland Hydrology Present? Hydric Soils Present?	Yes Yes	No No	ls this Sampling Point Within a Wetland?	Yes	No
Remarks:					
			•		,

Indicator
,
er 12"
I_
•

Map Unit Name (Series and Phase):	Churchville Silt Lo	oam 0-2%	Drainage	e Class: Somewhat poorly		
(001100 0.1.0.1 1.1	Ondiana.	Julii o L.		servations		
Taxonomy (Subgroup):				n Mapped Type?	Yes	No
Profile Description:				-		
Depth	Matrix Color	Mottle Color	Mottle	Texture, Concre		
(Inches) Horizon		(Munsell Moist)		Structure, e		
O-7A	10 YR 3/2	10YR 3/6	MMD	Silt Loam		
<u>7-12+</u> B	10 YR 5/2	10YR 5/8	MLP	Silt Loam	<u> </u>	
	···		· · ·			
						1
			<u> </u>			
His Sul Aqu Rec	stosol stic Epipedon Ifidic Odor uic Moisture Regime ducing Conditions eyed or Low-Chroma		Concretions High Organic Content in Organic Streaking in Sar Listed on Local Hydric S Listed on National Hydric Other (Explain in Remar	indy Soils Soils List ic Soils List	andy Soil	s
Hydrophytic Vegetation	Present? Yes	No			(Circ	do)
Wetland Hydrology Pres					(Onto	le)
Hydric Soils Present?	Yes		Is this Sampling Point With	nin a Wetland?	Yes	No
Hyune dons i resent:	100	140	is this camping i ont with	III a yvetiaita:	169	INO
Remarks: Wetland A is associated This wetland is also ass	sociated with Hotel C	Creek	à-5 ads south and then east, ar			
			id A - a culvert provided for			

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Mill Seat Lar					Date:	11/13/2008	
Applicant/Owner: Waste Mana	agement				County:	Monroe	
Investigator: TJP					State:	New York	
Do normal circumstances exist	t on the site?		Ye	s No	Community ID:	herbaceous	
Is the site significantly disturbe		uation)?	Yes	s No	Transect ID:	4	
ls the area a potential problem			Ye	s No	Plot ID:	UPL A	
(if needed, explain on re	everse)						
VEGETATION							
Dominant Plant Species	Stratum	<u>Indicator</u>	Т	Dominant	Plant Species	Stratum	Indicator
Fraxinus pennsylvanica	T	FACW		9.			-
2. Aster sp.	Н			10.			
3. Lonicera tatarica	S	UPL		11.	_		
4. Crataegus sp.	s	-		12.			
5. Ramnus cathartica	s	UPL		13.			
6				14.			
7.	·			15.			
8.				16.			
Percent of Dominant Species t		FACW, or FA	С				
(excluding FAC-) 1 OF 3 = 33	70						
Remarks:							
	·- ·· · · · · · · · · · · · · · · · · ·						
HYDROLOGY							
X Recorded D	ata (Describe	in Remarks):		Wetland F	lydrology Indicators		
	Stream, Lal	ke, or Tide Ga	auge		Indicators:		
	X Aerial Phot	ographs	_		Inundated		
	Other			<u></u>	X Saturated in Up	per 12 Inches	
No Recorde	ed Data Availat	ole		l	Water Marks		
Proto Observations,				⊣ –	Drift Lines	- ** -	
Field Observations:				<u> </u>	Sediment Depo Drainage Patte		la.
Depth of Surface	Water:	- ((in.)	Second	Dramage Patte lary Indicators:	MS III VVELIANO	5
Dopin or our acc	water.		(111.7		Oxidized Root	Channels in U	oper 12"
Depth to Free Wa	ater in Pit:	15.0	(in.)		Water-Stained		-p+
·	•		` '		Local Soil Surv	ey Data	
Depth to Saturate	ed Soil:	11.0	(in.)		EAC-Neutral Te	est	

Remarks:

Other (Explain in Remarks)

Map Unit Nar		Churchville Silt L	_	Drainage Class: Somewhat poorly			
(00)100 01101		Oliaiolitimo o	outil o mis	· · · · · · · · · · · · · · · · · · ·	oservations		
Taxonomy (S	Subgroup):				n Mapped Type?	Yes	No
Profile Descri	iption:						
Depth		Matrix Color	Mottle Color	Mottle	Texture, Concre		
(Inches)	<u>Horizon</u>	(Munsell Moist)	(Munsell Mois	t) <u>Abundance/Contrast</u>	Structure, e		
0-8	A	10 YR 4/2			Silt Loam		
8-16+	. <u>B</u>	10 YR 5/2	10YR 5/6	FFF	Silt Loam		
	·						
Hydric Soil In	idicators:						
•							
	Histo	osol		Concretions			
	Histi	ic Epipedon	_	High Organic Content ir	າ Surface Layer Sa	andy Soil	ls
I	Sulfi	idic Odor		Organic Streaking in Sa	andy Soils		
I		ic Moisture Regime	e	Listed on Local Hydric S			
	Red	ucing Conditions		Listed on National Hydr	ic Soils List		
	X Gley	yed or Low-Chroma	a Colors	Other (Explain in Rema	rks)		
Remarks:							
Hemans.							
WETLAND D)ETERMINA	TION					
I feederande die 1			N1_			/Cira	-1_1
Hydrophytic \	-					(Circ	ie)
Wetland Hyd				1 Abit Occupios Deini Mila		V	A1_
Hydric Soils f	resent?	Yes	s No	Is this Sampling Point Wit	nin a wetiano?	Yes	No
Remarks:							
Upland plot fo	ior Motland	A					
		A with NYSDEC ma	pped wetland P	(G-5			
		······································			•		
1							

	Landfill				Date:	11/13/2008	
Applicant/Owner: Waste Mana	agement				County:	Monroe	
Investigator: TJP					State:	New York	
			·		<u> </u>		
Do normal circumstances exis	t on the site?		Yes	No	Community ID:	Emergent	
Is the site significantly disturbe		ration\?	Yes	No	Transect ID:	Lineigen	
is the area a potential problem		ideion, i	Yes	No	Plot ID:	WET B (2)	
(if needed, explain on re					<u> </u>		
VEGETATION							
Dominant Plant Species	Stratum	Indicator	$\overline{}$	Dominan	nt Plant Species	Stratum	Indicator
Fraxinus pennsylvanica	T	FACW		9.	78 1. Samuel, at part, 12 222.		***************************************
2. Aster sp.	<u>'</u>	-		10.			
3. Lonicera tatarica	s	UPL		11.			
4. Juncus effusus	<u></u> Н	FACW+		12.			
5. Fraxinus pennsylvanica	s	FACW		13.			
6. Quercus bicolor		FACW+		14.			
7. Quercus bicolor	s	FACW+	l	15.			
8.	 ~	173		16.			
Percent of Dominant Species t (excluding FAC-) 5 OF 6 = 83		FACW, or HAG)				
(excluding FAC+) 5 OF 0 = 00	1%						
Remarks:							
Remarks:							
Remarks:							
Remarks: HYDROLOGY							
	ıata (Describe i	in Remarks):		I Wetland	Hydrology Indicators	:	
HYDROLOGY X Recorded D	Stream, Lak	ke, or Tide Ga	iuge		ry Indicators:	:	
HYDROLOGY X Recorded D	Stream, Lak	ke, or Tide Ga	luge		ry Indicators:Inundated		
HYDROLOGY X Recorded D	Stream, Lak X Aerial Photo Other	ke, or Tide Ga ographs	auge		ry Indicators: Inundated X Saturated in Up		
HYDROLOGY X Recorded D	Stream, Lak	ke, or Tide Ga ographs	auge		ry Indicators: Inundated X Saturated in Up Water Marks		
HYDROLOGY X Recorded D	Stream, Lak X Aerial Photo Other	ke, or Tide Ga ographs	auge		ry Indicators: Inundated X Saturated in Up Water Marks Drift Lines	oper 12 Inches	
HYDROLOGY X Recorded D	Stream, Lak X Aerial Photo Other	ke, or Tide Ga ographs	auge		ry Indicators: Inundated X Saturated in Up Water Marks	oper 12 Inches	
HYDROLOGY X Recorded D	Stream, Lak X Aerial Photo Other ed Data Availab	ke, or Tide Ga ographs ble	auge	Prima	ry Indicators: Inundated X Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Patter	oper 12 Inches osits rns in Wetland	s
X Recorded D X Recorded D No Recorded Field Observations: Depth of Surface	Stream, Lak X Aerial Photo Other ed Data Availab Water:	ke, or Tide Ga ographs ble ((in.)	Prima	ry Indicators: Inundated X Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Patte ndary Indicators: Oxidized Root 6	oper 12 Inches osits rns in Wetland Channels in Up	s
HYDROLOGY X Recorded D No Recorded Field Observations:	Stream, Lak X Aerial Photo Other ed Data Availab Water:	ke, or Tide Ga ographs ble (Prima	ry Indicators: Inundated X Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Patte Indicators: Oxidized Root (Water-Stained	oper 12 Inches osits rns in Wetland Channels in Up Leaves	s
MYDROLOGY X Recorded D No Recorded Field Observations: Depth of Surface Depth to Free W	Stream, Lak X Aerial Photo Other ed Data Availab Water: /ater in Pit:	ke, or Tide Ga ographs ole (9.0((in.) (in.)	Prima	ry Indicators: Inundated X Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Patte Indicators: Oxidized Root (Water-Stained Local Soil Surv	oper 12 Inches osits rns in Wetland Channels in Up Leaves ey Data	s
X Recorded D X Recorded D No Recorded Field Observations: Depth of Surface	Stream, Lak X Aerial Photo Other ed Data Availab Water: /ater in Pit:	ke, or Tide Ga ographs ole (9.0((in.)	Prima	ry Indicators: Inundated X Saturated in Up Water Marks Drift Lines Sediment Depo Drainage Patte Indicators: Oxidized Root (Water-Stained	oper 12 Inches osits rns in Wetland Channels in Up Leaves ey Data est	s

Map Unit Name (Series and Phase):	Lakemont silt loa	oil variant - Lk	Drainage Class: Poorly Field Observations		
Taxonomy (Subgroup):			Confirm	m Mapped Type? Y	∕es No
Profile Description: Depth (Inches) Horizon 0-6 A	Matrix Color (Munsell Moist) 10 YR 2/1	Mottle Color (Munsell Moist	Mottle Abundance/Contrast -	Texture, Concretion Structure, etc. Silt Loam	ns,
6-12+ B	10 YR 5/2	10YR 5/6	MMD	Sandy Clay Loan	n
His Su Aq Re	stosol stic Epipedon ulfidic Odor quic Moisture Regime educing Conditions leyed or Low-Chroma		Concretions High Organic Content ir Organic Streaking in Sa Listed on Local Hydric S X Listed on National Hydr Other (Explain in Rema	andy Soils Soils List ric Soils List	ly Soils
WETLAND DETERMIN	NATION				
Hydrophytic Vegetation Wetland Hydrology Pre Hydric Soils Present?		. No	ls this Sampling Point Wit	:hin a Wetland?	(Circle)
Wetland B is associate	ed with NYSDEC map	pped wetland R	nd drains south via a drainag RG-6 mmediately to the east of the		

Applicant/Owner: Waste Mana							
ipplically Children Tracto mane	agement				County:	Monroe	
Investigator: TJP					State:	New York	
Do normal circumstances exist			Yes	No	Community ID		
Is the site significantly disturbe		uation)?	Yes	No	Transect ID:	4	
is the area a potential problem (if needed, explain on re			Yes	No	Plot ID:	UPL B (2)	
VEGETATION	2401007						
Dominant Plant Species	Stratum	Indicator		Domina	ant Plant Species	Stratum	Indicator
Fraxinus pennsylvanica	T	FACW		9.	ant I tarn openio	<u>Ondiann</u>	Hidioacor
2. Aster sp.	— і	<u> </u>		10.			
3. Ramnus cathartica	S	UPL		11.			
4. Solidago sp.	— н			12.			
5. Quercus bicolor		FACW+		13.			
6				14.			
7.				15.			
8.			I.	16.		 -	
Demont Charles			 _				
Percent of Dominant Species t (excluding FAC-) 2 OF 3 = 66		-ACW, or FA	C				
	-70						
Remarks:							,
						•	
		YW-					
HYDROLOGY							
				F			
X Recorded D					d Hydrology Indicator	rs:	
_	Stream, Lai	ke, or Tide Ga ographs	auge	Film	ary Indicators: Inundated		
_	Other	ograprio		-		Jpper 12 Inches	
No Recorde	ed Data Availab	ole			Water Marks		
,					Drift Lines		
Field Observations:] .	Sediment Der		
Depth of Surface	Matari	_	(in.)	Sec	Drainage Pati ondary Indicators:	terns in Wetlands	ı
Deptil of Gariago	; water.	-	(111.)			t Channels in Upr	oer 12"
Depth to Free Wa	ater in Pit:	>12.0	(in.)		Water-Staine		
·	•				Local Soil Sui		
Depth to Saturate	ed Soil:	>12.0	(in.)		FAC-Neutral		
,							
	· ·				Other (Explai	n in Remarks)	

Map Unit Name (Series and Phase):	Churchville Silt L	oam 0-2%	Drainage	e Class: Somewhat poorly		
(Genes and Friase).	Charchvine Ont L	oam o-276		servations		
Taxonomy (Subgroup):				Mapped Type?	Yes	No
Profile Description:					·	
Depth	Matrix Color	Mottle Color	Mottle	Texture, Concre	etions,	
(Inches) Horizon	(Munsell Moist)	(Munsell Moist)	Abundance/Contrast	Structure, e	•	
<u>0-11</u> A	10 YR 2/2		_ -	Sand Loar		
8-16+ B	10 YR 5/2			Silt Loam		
· · · · · · · · · · · · · · · · · · ·						
Hydric Soil Indicators:			_Concretions			
	ic Epipedon		High Organic Content in	Surface Layer S	andy Soils	3
	idic Odor		Organic Streaking in Sa	•		
	ic Moisture Regime	·	_ Listed on Local Hydric S			
	lucing Conditions		Listed on National Hydri			
Gley	yed or Low-Chroma	a Colors	Other (Explain in Remar	rks)		
Remarks:						
WETLAND DETERMINA	ATION					
Hydrophytic Vegetation I	•	No			(Circl	e)
Wetland Hydrology Pres	ent? Yes	No				
Hydric Soils Present?	Yes	No	ls this Sampling Point With	nin a Wetland?	Yes	No
Remarks:						
Upland data point for We Wetland B is associated		pped wetland RG-	6			

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COF Wetlands Delineation Manual)

Drainat/Cita	8.4:01 c	Coot Londfill		Dec	to. 11/1.	MAAAA	
Project/Site		Seat Landfill	£ N1\/	Dar		1/2008 nroe	
Applicant/Owner		anagement c nes Saxton	OI IN Y	Coun		w York	
					•		
Do Normal Circumstances			Yes No	Commu	-	WL.	
s the site significantly distu		ituation)?	Yes No	Transec	t ID:	1	
s the area a potential Prob			Yes No	Plot ID:		Wet D (2	
(If needed, explain on re	verse)						
	•						
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Dominant Plant S	pecies	Stratum	Indicator	
1 Fraxinus pennsylvanica	Tree	FACW	9		, ,		
2 Acer saccharinum	Tree	FACW	10		. '		
3 Acer rubrum	Tree	FAC	11				
4 Toxicodendron radicans	Vine	FAC	12				
5 Lindera benzoin	Shrub	FACW-	13				
6 Quercus bicolor	Tree	FACW+					
7							
8							
			į				
Percent of Dominant Species that (excluding FAC -) Remarks:	are OBL, FACW or I	FAC	100%				
(excluding FAC -)	are OBL, FACW or I	FAC	100%				
(excluding FAC -)	are OBL, FACW or I	FAC	100%				
(excluding FAC -) Remarks: HYDROLOGY		FAC		·			
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Ro	emarks)		Wetland Hydrolog	· -			
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re	emarks) n, Lake, or Tide Gau		Wetland Hydrolog Primary Indic	ators			
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Recorded Data (Describe in Acrial	emarks)		Wetland Hydrolog Primary Indic	ators nundated	r 12 Inches		
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Recorded	emarks) n, Lake, or Tide Gau		Wetland Hydrolog Primary Indic Ir X S	ators nundated aturated in Uppe	r 12 Inches		
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Recorded	emarks) n, Lake, or Tide Gau		Wetland Hydrolog Primary Indic Ir X S V	ators nundated aturated in Uppe Vater Marks	r 12 Inches		
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Recorded	emarks) n, Lake, or Tide Gau		Wetland Hydrolog Primary Indic In X S	ators nundated saturated in Uppe Vater Marks Vrift Lines			
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Recorded Data (Describe in Recorded Data (Describe in Recorded Data Available Available	emarks) n, Lake, or Tide Gau		Wetland Hydrolog Primary Indic Ir X S V C	ators nundated saturated in Uppe Vater Marks brift Lines sediment Deposit	s		
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Recorded Data (Describe in Recorded Data (Describe in Recorded Data Available Available	emarks) n, Lake, or Tide Gau		Wetland Hydrolog Primary Indic Ir X S	ators nundated saturated in Uppe Vater Marks orift Lines Sediment Deposits Oratinage Patterns	s in Wetlands		
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam Aerial Other C No Recorded Data Available Field Observations:	emarks) n, Lake, or Tide Gau Photographs	ge	Wetland Hydrolog Primary Indic Ir X S	ators nundated caturated in Uppe Vater Marks orift Lines dediment Deposite Orainage Patterns dicators (2 or mo	s in Wetlands re required)	n 10 la -t	
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Recorded Data (Describe in Recorded Data (Describe in Recorded Data Available Available	emarks) n, Lake, or Tide Gau		Wetland Hydrolog Primary Indic X S V C S Secondary In	ators nundated saturated in Uppe Vater Marks Prift Lines sediment Deposite Prainage Patterns dicators (2 or mo	s in Wetlands re required) annels in Uppe	r 12 Inches	
HYDROLOGY Recorded Data (Describe in Recorded Data (Describe in Recorded Data Available X No Recorded Data Available Field Observations: Depth of Surface Water:	emarks) n, Lake, or Tide Gau Photographs	ge (in.)	Wetland Hydrolog Primary Indic Ir X S V C S Secondary In X V	ators nundated faturated in Uppe Vater Marks brift Lines fediment Deposits Drainage Patterns dicators (2 or mo Dxidized Root Cha	s in Wetlands re required) annels in Uppe aves	er 12 Inches	
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam Aerial Other X_ No Recorded Data Available Field Observations:	emarks) n, Lake, or Tide Gau Photographs	ge	Wetland Hydrolog Primary Indic X S V C S Secondary In	ators nundated faturated in Uppe Vater Marks Orift Lines Gediment Deposite Orainage Patterns dicators (2 or mo Oxidized Root Cha Vater-Stained Lea ocal Soil Survey	s in Wetlands re required) annels in Uppe aves Data	r 12 Inches	
HYDROLOGY Recorded Data (Describe in Recorded Data (Describe in Recorded Data Available X No Recorded Data Available Field Observations: Depth of Surface Water:	emarks) n, Lake, or Tide Gau Photographs	ge (in.)	Wetland Hydrolog Primary Indic X S V C S Secondary In	ators nundated faturated in Uppe Vater Marks brift Lines fediment Deposits Drainage Patterns dicators (2 or mo Dxidized Root Cha	s in Wetlands ire required) annels in Uppe aves Data	r 12 Inches	

Map Unit N (Series and Taxonomy			Lakemont	Drainage Class: Field Observations Confirm mapped type? Yes No				
Profile Des Depth (inches) 0-5 5+	Horizon A B	Matrix Color (Munsell moist) 10YR5/1 10YR6/1	Mottle Colors (Munsell Moist) 7.5YR5/6 10YR6/8	Mottle Abundance/Contrast common, fine distinct many, large prominent	Texture, Concretions, Structure, etc. crumb, mucky silt loam msbk, heavy silt loam			
- - - -	Hydric Soil Indicators: - Histosol - Goncretions - High Organic Content in Surface Layer in Sandy Soils - Sulfidic Odor - Organic Streaking in Sandy Soils - Aquic Moisture Regime - Listed on Local Hydric Soils List - Reducing Conditions - Listed on National Hydric Soils List - X Gleyed or Low Chroma Colors - Other (Explain in Remarks) Remarks:							
Hydrophyt Wetland H	c Vegetation F ydrology Prese s Present?	Present? ent?	Yes N Yes N	0	Vithin a Wetland? Yes No			

Project/Site	_	Seat Landfill		Date		1/2008
Applicant/Owner		anagement c	of NY	County		nroe
Investigator		mes Saxton			State: New Yo	
Do Normal Circumstances e			Yes No	Communi	•	WL
Is the site significantly distur		ituation)?	Yes No	Transect I	iD:	
Is the area a potential Proble			Yes No	Plot ID:		Upl D (2
(If needed, explain on rev	/erse)					
VEGETATION						
Dominant Plant Species	Stratum	Indicator	Dominant Plant Spe	ecies	Stratum	Indicator
1 Acer saccharum	Tree	FACU	9	70.00		***************************************
2 Prunus serotina	Tree	FACU	10			
3 Fraxinus pennsylvanica	Tree	FACW	11			-
4 Lonicera tatarica	Shrub	FACU	12			
5 Rubus idaeus	Shrub	FAC-	13			
6			14			
7			15			· —
8			16			·
		_				
			<u> </u>			
Percent of Dominant Species that a	are OBL, FACW or	FAC				
Percent of Dominant Species that a	are OBL, FACW or	FAC	20%			
•	are OBL, FACW or	FAC	20%			
(excluding FAC -)	are OBL, FACW or	FAC	20%			
(excluding FAC -)	are OBL, FACW or	FAC	20%			
(excluding FAC -)	are OBL, FACW or	FAC	20%			
(excluding FAC -)	are OBL, FACW or	FAC	20%			
(excluding FAC -)	are OBL, FACW or	FAC	20%			
(excluding FAC -)	are OBL, FACW or	FAC	20%			
(excluding FAC -) Remarks:		FAC	20%	Indicators		
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re						
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in ReSteam.	emarks)		Wetland Hydrology Primary Indicat Inu	tors Indated		
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in ReSteam.	emarks) ı, Lake, or Tide Gau		Wetland Hydrology Primary Indicat Inu	tors	12 Inches	
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam Aerial I	emarks) ı, Lake, or Tide Gau		Wetland Hydrology Primary Indicat Inu Sat	tors Indated	I2 Inches	
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam Aerial I	emarks) ı, Lake, or Tide Gau		Wetland Hydrology Primary Indicat Inu Sat Wa	tors Indated turated in Upper 1	12 Inches	
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam Aerial I	emarks) ı, Lake, or Tide Gau		Wetland Hydrology Primary Indicat Inu Sat Wa	tors undated turated in Upper 1 ater Marks	I2 Inches	
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam Aerial I	emarks) ı, Lake, or Tide Gau		Wetland Hydrology Primary Indicat Inu Sat Wa Drit	ors indated turated in Upper 1 ater Marks ft Lines		
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam Aerial I Other X No Recorded Data Available	emarks) ı, Lake, or Tide Gau		Wetland Hydrology Primary Indicat Inu Sat Wa Drit	ors undated turated in Upper 1 ater Marks ft Lines diment Deposits	n Wetlands	
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam Aerial I Other X No Recorded Data Available	emarks) ı, Lake, or Tide Gau		Wetland Hydrology Primary Indicat Inu Sat Wa Drit Sec Dra	ors undated turated in Upper 1 ater Marks ft Lines diment Deposits ainage Patterns in	n Wetlands e required)	r 12 Inche
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam, Aerial I Other X No Recorded Data Available Field Observations: Depth of Surface Water:	emarks) , Lake, or Tide Gau Photographs	uge	Wetland Hydrology Primary Indicat Inu Sat Wa Drit Sec Dra Secondary Indi	iors Indated Iturated in Upper 1 Inter Marks If Lines Idiment Deposits Iniage Patterns in Icators (2 or more	n Wetlands e required) nels in Uppe	r 12 Inche
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam, Aerial I Other X_ No Recorded Data Available Field Observations:	emarks) , Lake, or Tide Gau Photographs	uge	Wetland Hydrology Primary Indicat Inu Sat Wa Drit Sec Dra Secondary Indi	ors Indated Iturated in Upper 1 Iter Marks If Lines Idiment Deposits Ininage Patterns in Icators (2 or more Idized Root Chan	n Wetlands e required) inels in Uppe es	r 12 Inche
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam, Aerial I Other X No Recorded Data Available Field Observations: Depth of Surface Water:	emarks) , Lake, or Tide Gau Photographs 0	uge	Wetland Hydrology Primary Indicat Inu Sat Wa Drit Sec Dra Secondary Indi	ors Indated Iturated in Upper 1 Inter Marks If Lines Idiment Deposits Initiation (2 or more Idized Root Chan Inter-Stained Leave	n Wetlands e required) inels in Uppe es	r 12 Inche
(excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Re Steam, Aerial I Other X No Recorded Data Available Field Observations: Depth of Surface Water:	emarks) , Lake, or Tide Gau Photographs 0	uge	Wetland Hydrology Primary Indicat Inu Sat Wa Drit Sec Dra Secondary Indi Cox Had	ors undated turated in Upper 1 ater Marks ft Lines diment Deposits ainage Patterns in icators (2 or more idized Root Chan ater-Stained Leave cal Soil Survey Da	n Wetlands e required) nels in Uppe es ata	r 12 Inche

Map Unit Name (Series and Phase):			Lakemont		Drainage Class:	
Taxonom	Taxonomy (subgroup):		dollic endoaqualfs	Field Obser Confirm ma		Yes No
Profile De	scription					
Depth		Matrix Color	Mottle Colors	Mottle	Texture, Co	oncretions,
(inches)	Horizon	(Munsell moist)	(Munsell Moist)	Abundance/Contrast	Structure,	etc.
0-4	Α	10YR5/2	None		crumb, silt	loam
				few fine		
4+	В	10YR4/4	10YR5/6	faint	msbk, silt l	oam
						
Hydric So	il Indicators:					
	Histosol		<u></u>	Concretions		
	Histic Epipe		_	_High Organic Content in S	-	in Sandy Soils
	_Sulfidic Odo			Organic Streaking in Sand	-	
,	Aquic Moist		_	_Listed on Local Hydric So		
	Reducing Conditions		_	_Listed on National Hydric		
,	Gleyed or Lo	ow Chroma Colors	_	Other (Explain in Remarks	5)	
Remarks:					· · · · · ·	

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes	No No Is this Sampling Point Within a Wetland? Yes No	
Remarks:			
		<u> </u>	

Applicant/Owner Waste Management of NY County Monroe New York New Y	Project/Site	Mill :	Seat Landfill		Date	: 11/14	1/2008	
Investigator	Applicant/Owner	Waste Ma	anagement o	f NY	County	: Mo	nroe	
Is the site significantly disturbed (Alypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse) VEGETATION Dominant Plant Species Stratum Indicator Factor Factor Shrub FACW 10 3 Cornus racemosa Shrub FAC 4 Aster spp. Herb FAC-OBL 5 Vills riparia 6 Eupatoriadelphus maculatus Herb FACW 11 7 Toxicodendron radicans Vine FAC 8 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Cother X No Recorded Data Available Depth of Surface Water: Depth of Surface Water: Depth of Free Water in Pit: Beth Staturated Soil: Beth Staturat	Investigator						York	
Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse) VEGETATION Dominant Plant Species Stratum Indicator 1 Fraxinus pennsylvanica 1 Fraxinus pennsylvanica 2 Comus stolonifera 3 Comus racemesa 3 Shrub FAC 4 Aster spp. Herb FAC-OBL 5 Vitis riparia 4 Vine FACW 6 Eupatoriadelphus maculatus 6 Eupatoriadelphus maculatus 7 Toxicodendron radicans 9 Vine FACW 11	Do Normal Circumstances exis	st on the site?	?	Yes⊩No				
Is the area a potential Problem Area? (If needed, explain on reverse) VEGETATION Dominant Plant Species Stratum Indicator 1 Fraxinus pennsylvanica 2 Cornus stolonifera 3 Cornus stolonifera 3 Cornus racemesa 4 Aster spp. Herb FAC-OBL 5 Vitis riparia 6 Eupatoriadelphus maculatus Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Cyline Aerial Photographs Other X No Recorded Data Available Depth of Surface Water: Depth of Surface Water in Pit: Depth to Saturated Soil: B Stratum Indicator 9 Dominant Plant Species Stratum Indicator 9 100 10 10 10 11 11 12 13 14 15 16 16 17 18 18 19 10 10 10 10 10 10 10 10 10 10 10 10 10	Is the site significantly disturbe	d (Atypical Si	ituation)?	Yes No			1	
VEGETATION Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator			•	Yes No	Plot ID:		Wet C	
Dominant Plant Species Stratum Indicator Faxinus pennsylvanica Tree FACW 9 10 3 3 3 3 3 3 3 3 3	(If needed, explain on rever	se)		One (Athere a.				
Dominant Plant Species Stratum Indicator Faxinus pennsylvanica Tree FACW 9 10 3 3 3 3 3 3 3 3 3								
Dominant Plant Species Stratum Indicator Faxinus pennsylvanica Tree FACW 9 10 3 3 3 3 3 3 3 3 3		•						
1 Fraxinus pennsylvanica	VEGETATION							
2 Cornus stolonifera	Dominant Plant Species	Stratum	Indicator	Dominant Plant Spe	cies	Stratum	Indicator	
3 Cornus racemosa	1 Fraxinus pennsylvanica	Tree	FACW	9		_		
Scrius racemosa	2 Cornus stolonifera	Shrub	FACW+	10				
4 Aster spp. Herb FAC-OBL 5 Vitis riparia Vine FACW 6 Eupatoriadelphus maculatus Herb FACW 7 Toxicodendron radicans Vine FAC 115 16 16 16 16 16 16 16 16 16 16 16 16 16	3 Cornus racemosa	Shrub	FAC	11				
S Vitis riparia Vine FACW 6 Eupatoriadelphus maculatus 14 FACW 7 Toxicodendron radicans 8 Vine FAC 15	4 Aster spp.	<u>Herb</u>	FAC-OBL	12				
### FACW 14 14 14 15 16 16 16 16 16 16 16	5 Vitis riparia	Vine	FACW	13				
7 Toxicodendron radicans 8 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Steam, Lake, or Tide Gauge Aerial Photographs Other X No Recorded Data Available X No Recorded Data Available Depth of Surface Water: Depth of Free Water in Pit: Depth to Saturated Soil: 8 (in.) 100% Wetland Hydrology Indicators Primary Indicators Primary Indicators A Water Marks Dirit Lines Sediment Deposits Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	6 Eupatoriadelphus maculatus	Herb	FACW	14				
The content of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 100%	7 Toxicodendron radicans	Vine	FAC	15				
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Steam, Lake, or Tide GaugeAerial PhotographsOtherOther X No Recorded Data Available Depth of Surface Water: Depth of Surface Water: Depth of Free Water in Pit: Depth to Saturated Soil: B (in.) Metland Hydrology Indicators Primary Indicators Primary Indicators A saturated in Upper 12 Inches Sediment Deposits Decondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Depth to Saturated Soil: B (in.) Other (Explain in Remarks)	8			16			,	
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Steam, Lake, or Tide Gauge Aerial Photographs Other X No Recorded Data Available Field Observations: Depth of Surface Water: Depth of Free Water in Pit: Depth to Saturated Soil: Brimary Indicators Inundated X Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)							1.00	
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Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Depth of Free Water in Pit: Depth to Saturated Soil: B (in.) Drift Lines Sediment Deposits Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	HYDROLOGY Recorded Data (Describe in Rema	ike, or Tide Gau	rde	Wetland Hydrology Primary Indicate	ors ndated			
Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Depth of Free Water in Pit: Depth to Saturated Soil: 8 (in.) Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	HYDROLOGY Recorded Data (Describe in RemaSteam, LaAerial Pho	ike, or Tide Gau	ıge	Wetland Hydrology Primary Indicate	ors ndated	12 Inches		
Field Observations: Depth of Surface Water: Depth of Free Water in Pit: Depth to Saturated Soil: Depth of Surface Water: Depth of Free Water in Pit: Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	HYDROLOGY Recorded Data (Describe in Rema Steam, La Aerial Pho	ike, or Tide Gau	ıge	Wetland Hydrology Primary Indicate	ors ndated urated in Upper ⁻	12 Inches		
Depth of Surface Water: Depth of Surface Water: Depth of Free Water in Pit: Depth to Saturated Soil: Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	HYDROLOGY Recorded Data (Describe in Rema Steam, La Aerial Pho	ike, or Tide Gau	ıge	Wetland Hydrology Primary Indicate Inui X Sat	ors ndated urated in Upper ⁻ ter Marks	12 Inches		
Depth of Surface Water: Depth of Surface Water: Depth of Free Water in Pit: Depth to Saturated Soil: Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	HYDROLOGY Recorded Data (Describe in Rema Steam, La Aerial Pho	ike, or Tide Gau	uge	Wetland Hydrology Primary Indicate Inui X Sat — Wa	ors ndated urated in Upper ⁻ ter Marks 't Lines	12 Inches		
Depth of Surface Water: O (in.) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Depth to Saturated Soil: 8 (in.) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	HYDROLOGY Recorded Data (Describe in RemaSteam, LaAerial PhoOther X_ No Recorded Data Available	ike, or Tide Gau	rde	Wetland Hydrology Primary Indicate Inui X Sat Wa Drif	ors ndated urated in Upper ⁻ ter Marks it Lines diment Deposits			
Depth of Free Water in Pit: 8 (in.) Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	HYDROLOGY Recorded Data (Describe in RemaSteam, LaAerial PhoOther X_ No Recorded Data Available	ike, or Tide Gau	ıge	Wetland Hydrology Primary Indicate Inui X Sat Wa Drif Sec	ors ndated urated in Upper ⁻ ter Marks it Lines diment Deposits inage Patterns ir	n Wetlands		
Depth to Saturated Soil: 8 (in.) FAC-Neutral Test Other (Explain in Remarks)	HYDROLOGY Recorded Data (Describe in Rema Steam, La Aerial Pho Other X No Recorded Data Available Field Observations:	ake, or Tide Gau otographs		Wetland Hydrology Primary Indicate Inui X Sat Wa Drif Sec Dra Secondary Indic	ors Indated Indated in Upper Iter Marks It Lines Itiment Deposits Inage Patterns incators (2 or more	n Wetlands required)	er 12 Inches	
Depth to Saturated Soil: 8 (in.) Other (Explain in Remarks)	HYDROLOGY Recorded Data (Describe in Rema Steam, La Aerial Pho Other X No Recorded Data Available Field Observations:	ake, or Tide Gau otographs		Wetland Hydrology Primary Indicate Inui X Sat Wa Drif Sec Dra Secondary Indic	ors Indated Indated in Upper I Iter Marks It Lines Iliment Deposits Inage Patterns in Inated Root Chan	n Wetlands e required) nels in Uppe	er 12 Inches	
	HYDROLOGY Recorded Data (Describe in Rema Steam, La Aerial Pho Other X No Recorded Data Available Field Observations: Depth of Surface Water:	ake, or Tide Gau otographs	(in.)	Wetland Hydrology Primary Indicate X Sat Wa Drif Sec Dra Secondary Indic	ors Indated Indated in Upper I Iter Marks It Lines Idiment Deposits Inage Patterns in Iterators (2 or more Idized Root Chan Iter-Stained Leav	n Wetlands required) nels in Uppe es	er 12 Inches	
Pomerke	HYDROLOGY Recorded Data (Describe in Rema Steam, La Aerial Pho Other X No Recorded Data Available Field Observations: Depth of Surface Water:	ake, or Tide Gau otographs	(in.)	Wetland Hydrology Primary Indicate Inui X Sat Wa Drif Sec Dra Secondary Indic	ors Indated Indated in Upper I Iter Marks It Lines Idiment Deposits Inage Patterns in Iterators (2 or more Idized Root Chan Iter-Stained Leav Iterators (2 or your parter)	n Wetlands required) nels in Uppe es	er 12 Inches	
intinging.	HYDROLOGY Recorded Data (Describe in Rema Steam, La Aerial Pho Other X No Recorded Data Available Field Observations: Depth of Surface Water: Depth of Free Water in Pit:	ake, or Tide Gau otographs 0 8	(in.) (in.)	Wetland Hydrology Primary Indicate Inur X Sat Wa Drif Sec Dra Secondary Indicate Oxi Loc	ors Indated Indated Indated in Upper I Iter Marks It Lines Idiment Deposits Inage Patterns in Iterators (2 or more Idized Root Chan Iter-Stained Leav Iteral Test	n Wetlands required) nels in Uppe es ata	er 12 Inches	
	HYDROLOGY Recorded Data (Describe in Rema Steam, La Aerial Pho Other X No Recorded Data Available Field Observations: Depth of Surface Water: Depth of Free Water in Pit:	ake, or Tide Gau otographs 0 8	(in.) (in.)	Wetland Hydrology Primary Indicate Inur X Sat Wa Drif Sec Dra Secondary Indicate Oxi Loc	ors Indated Indated Indated in Upper I Iter Marks It Lines Idiment Deposits Inage Patterns in Iterators (2 or more Idized Root Chan Iter-Stained Leav Iteral Test	n Wetlands required) nels in Uppe es ata	er 12 Inches	

Map Unit N	lame				*	
(Series and	d Phase):	Lima silt lo	am, 0-3 and 3-8 % sl	lopes Drainage C	Class:	moderately well
,	· -			rvations		
Taxonomy	(subgroup): Oxyaquic hapludalfs Confirm mapped type? Yes					Yes No
Profile Des	cription					
Depth		Matrix Color	Mottle Colors	Mottle	Texture, Co	ncretions,
(inches)	Horizon	(Munsell moist)	(Munsell Moist)	Abundance/Contrast	Structure, e	tc.
0-8	Ар	10YR4/2	none		blocky, silt le	oam
				common fine		· · · · · · · · · · · · · · · · · · ·
8 +	В	10TR 5/2	10TR5/6	prominent	msbk, sil loa	am
					<u> </u>	
				·		
Hydric Soil	Indicators:					-
	Histosol			Concretions		
-	– Histic Epipe	don		High Organic Content in	Surface Layer i	n Sandy Soils
_	Sulfidic Odo		_	Organic Streaking in San	_	•
_	– Aquic Moiste	ure Regime		Listed on Local Hydric Sc	oils List	
-	 Reducing Co 	onditions	_	- Listed on National Hydric	Soils List	
5		ow Chroma Colors	_	Other (Explain in Remark		
-	-			•		
Remarks:						

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No Yes No	Is this Sampling Point Within a Wetland?	Yes. No
Remarks:			
			·

Project/Site	Mill !	Seat Landfill		Date:	: 11/14	/2008
Applicant/Owner	Waste Ma	anagement c	f NY	. County:	Mo	nroe
Investigator	Jan	nes Saxton		States	New	York
Do Normal Circumstances exists the site significantly disturbed	d (Atypical Si		Yes No Yes No			JB 1
Is the area a potential Problem (If needed, explain on revers			Yes No	No. Plot ID:		Upl C
VEGETATION						
Dominant Plant Species	Stratum	Indicator	Dominant Plant	Species	Stratum	Indicator
1 Fraxinus pennsylvanica	Tree	FACW	9			
2 Lonicera tatarica	Shrub	FACU	10			
3 Cornus stolonifera	Shrub	FACW+	11		_	
4						
5			13		_	
6			14			
7			15			
8			16			
•						
					···	· ····
HYDROLOGY	·····					
Recorded Data (Describe in Rema	rks)		Wetland Hydro	logy Indicators		
Steam, La	ike, or Tide Gau	ge	Primary Ind	dicators		
Aerial Pho	tographs		i	Inundated		
Other				Saturated in Upper 1	2 inches	
X No Recorded Data Available				_Water Marks		
				Drift Lines .		
				Sediment Deposits		
Field Observations:				_Drainage Patterns in	Wetlands	
			Secondary	Indicators (2 or more		
Depth of Surface Water:	0	(in.)		Oxidized Root Chani		r 12 Inches
				Water-Stained Leave		
Depth of Free Water in Pit:	>16	(in.)	I _	_Local Soil Survey Da	ıta	
Depth to Saturated Soil:	14	(in.)		_FAC-Neutral Test _Other (Explain in Re	marks)	
Remarks:			•			

Map Unit N		Lir	na (0-3 and 3-8%)	Drainage C	ilass:	Moderately well
·	y (subgroup): _	"	syaquic Hapludalfs	Field Obse	_	Yes No
Profile Des	scription	Matrix Color	Mottle Colors	Mottle	Texture, Co	oncretions,
(inches)	Horizon	(Munsell moist)	(Munsell Moist)	Abundance/Contrast	Structure, e	etc.
0-7	Ар	10YR4/2	none		wsbk, silt k	oam
7+	В	10YR4/3	10YR5/6	few, fine distinct	msbk, silt k	oam
Hydric Soi	I Indicators:					
_	_Histosol		_	Concretions		
-	Histic Epipe		_	_ High Organic Content in S	•	in Sandy Soils
-	_Sulfidic Odo Aquic Moist		_	Organic Streaking in San- Listed on Local Hydric Sc	•	
-	Reducing Co		_	Listed on National Hydric		
-		ow Chroma Colors	- -	Other (Explain in Remark		
Remarks:						

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes	No	ls this Sampling Point Within a Wetland?	Yes	No
Remarks:					

Is the area a potential Problem Area? (If needed, explain on reverse) VEGETATION Dominant Plant Species Stratum Indicator 1 Populus deltoides Tree FAC 2 Comus stolonifera Shrub FACW+ 3 Phalaris arundinacea Herb FACW+ 4 Leersia oryzoides Herb OBL 5 Oncolea sensibilis Herb FACW+ 6 Juncus effusus Herb FACW+ 7 8 15 16 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 100% Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Steam, Lake, or Tide Gauge Aerial Photographs Other X No Recorded Data Available Wet ID: Wet D Dominant Plant Species Stratum Indicator 9 9 10 10 10 10 10 11 11 12 12 15 16 16 16 100%	Variable and I Company				Date:	11/14/	2008
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the site significantly disturbed (Atypical Situation)? Is the potential Problem Area? If needed, explain on reverse) VEGETATION Dominant Plant Species Stratum Indicator 1 Populus delicides Tree FAC 2 Comus stolonifiera 3 Phalaris arundinacea Herb FACW+ 10 3 Phalaris arundinacea Herb FACW+ 11 4 Leersia oryzoides Herb FACW+ 15 5 Onoclea sensibilis Herb FACW+ 16 8 16 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) Remarks: Wetiand Hydrology Indicators Primary Indicators A Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inche X Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test	Applicant/Owner				County: Monroe		
Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse) WEGETATION Dominant Plant Species Stratum Indicator Populus deltoides Tree FAC FACW+ Tree Tree FACW+ Tree FACW+ Tree Tree FACW+ Tree Tree Tree FACW+ Tree Tr	nvestigator				State: New York		
Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse) VEGETATION Dominant Plant Species Stratum Indicator Populus delitoides Tree FAC Packet Packe	Oo Normal Circumstances	exist on the site?	Yes No	Community	y ID:	J	
VEGETATION Dominant Plant Species	Is the site significantly disturbed (Atypical Situation)?			Yes No		D: _	1
VEGETATION Dominant Plant Species Stratum Indicator 1 Populus delicides Tree FAC 2 Corrus stotonifera Shrub FACW+ 10 3 Phalaris arundinacea Herb PACW+ 11 4 Leersia oryzoides Herb OBL 12 5 Oncolea sensibilis Herb FACW+ 13 6 Juncus effusus Herb FACW+ 15 16 Juncus effusus Herb FACW+ 15 8	Is the area a potential Problem Area?			Yes No	Plot ID:	_	Wet D
Dominant Plant Species Stratum Indicator 1 Populus deltoides Tree FAC 9 2 Cornus stolonifera Shrub FACW+ 10 3 Phalaris arundinacea Herb FACW+ 11 4 Leersia oryzoides Herb OBL 12 5 Oncolea sensibilis Herb FACW+ 14 7 Secure of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 15 8 Secure of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 100% Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 100% Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Seturated in Upper 12 Inches Sediment Deposits Orith Lines Sediment Deposits Depth of Surface Water: 0 (in.) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test	(If needed, explain on re	verse)		·			
Dominant Plant Species Stratum Indicator 1 Populus deltoides Tree FAC 9 2 Cornus stolonifera Shrub FACW+ 10 3 Phalaris arundinacea Herb FACW+ 11 4 Leersia oryzoides Herb OBL 12 5 Oncolea sensibilis Herb FACW+ 14 7 Secure of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 15 8 Secure of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 100% Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 100% Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Seturated in Upper 12 Inches Sediment Deposits Orith Lines Sediment Deposits Depth of Surface Water: 0 (in.) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test							
Dominant Plant Species Stratum Indicator 1 Populus deltoides Tree FAC 9 2 Cornus stolonifera Shrub FACW+ 10 3 Phalaris arundinacea Herb FACW+ 11 4 Leersia oryzoides Herb OBL 12 5 Oncolea sensibilis Herb FACW+ 14 7 Secure of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 15 8 Secure of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 100% Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) 100% Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Seturated in Upper 12 Inches Sediment Deposits Orith Lines Sediment Deposits Depth of Surface Water: 0 (in.) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test							
1 Populus deltoides		Church and	1 - 11 4 - 4	Description Plant Con	•	Ol frame	1- 1i
2 Cornus stolonifera 3 Phalaris arundinacea Herb FACW+ 4 Leersia oryzoides 5 Onoclea sensibilis Herb FACW+ 6 Juncus effusus Herb FACW+ 7 8 8 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Aerial Photographs Other X No Recorded Data Available X No Recorded Data Available Till 13 15 16 16 10 100% Wetland Hydrology Indicators Primary Indicators Primary Indicators Inundated X Saturated in Upper 12 Inches X Saturated in Upper 12 Inches Sediment Deposits Sediment Deposits Field Observations: Depth of Surface Water: Depth of Free Water in Plt: Depth of Free Wat	•				cies	Stratum	Indicator
Phalaris arundinacea							
4 Leersia oryzoides Herb OBL 12 13 13 15 16 15 16 16 16 16 16 16 16 16 16 16 16 16 16							
5 Onoclea sensibilis						•	
FACW+ 14 15 8 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Steam, Lake, or Tide Gauge Aerial Photographs Other X No Recorded Data Available X No Recorded Data Available Depth of Surface Water: Depth of Free Water in Pit: Recorded 100% Wetland Hydrology Indicators Primary Indicators Inundated X Saturated in Upper 12 Inches Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inche X Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test				<u> </u>			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Steam, Lake, or Tide GaugeAerial PhotographsOther X No Recorded Data Available X No Recorded Data Available Depth of Surface Water: Depth of Surface Water: Depth of Free Water in Pit: Depth of Surface Water: Depth of Free Water in Pit: D				i ———		. ——	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Steam, Lake, or Tide Gauge Aerial Photographs Other X No Recorded Data Available X No Recorded Data Available Depth of Surface Water: Depth of Surface Water: Depth of Free Water in Pit: Depth of Surface Water: Depth of Free Water in Pit: Depth of Free Water in Pit: Depth of Free Water in Pit: Depth of Surface Water: Depth of Free Water in Pit: Depth of Free Water	_			1 -			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC -) Remarks: HYDROLOGY Recorded Data (Describe in Remarks) Steam, Lake, or Tide Gauge Aerial Photographs Other X No Recorded Data Available Field Observations: Depth of Surface Water: Depth of Free Water in Pit: Depth of Surface Water: Description: Depth of Free Water in Pit: Depth of Free Water in Pit: Depth of Free Water in Pit: Depth of Surface Water: Depth of Free Water in Pit: Depth of Free Water	· · · · · · · · · · · · · · · · · · ·						
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Recorded Data (Describe in Remarks) Steam, Lake, or Tide Gauge Aerial Photographs Other X No Recorded Data Available Water Marks Drift Lines Sediment Deposits Depth of Surface Water: Depth of Free Water in Pit: Wetland Hydrology Indicators Primary Indicators Inundated X Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12 Inche X Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test							
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(Series and Phase):			Lakemont			somewhat poorly
Taxonorr	ny (subgroup): _	<u>U</u>	dollic endoaqualfs	Field Obse Confirm m	ervations napped type?	Yes No
Profile De	escription	Matrix Color	Mottle Colors	Mottle	Texture, Cond	cretions,
(inches)	Horizon	(Munsell moist)	(Munsell Moist)	Abundance/Contrast	Structure, etc	
0-4	A	10YR5/1	7.5YR5/8	many, fine distinct	crumb, muck	y siit loam
4+	В	10YR6/1	10YR6/8	prominent	msbk, heavy	silt loam
					-	······································
					-	
	-				<u> </u>	
						
Hydric So	oil Indicators: Histosol Histic Epipe	edon		Concretions High Organic Content in	Surface Layer in	Sandy Soils
	Sulfidic Odo	or	_	Organic Streaking in Sar	ndy Soils	Outray 4.1.
	- Aquic Moiste		_	Listed on Local Hydric So Listed on National Hydric		
•		ow Chroma Colors	_	Other (Explain in Remark		
Remarks:						
110.,,,,,,,						
				5		
WETLAN	ND DETERM	IINATION				
Wetland I	ytic Vegetation I	sent?	Yes No Yes No	o	M	P TREAT CHANGE TO THE ACT
Hydric Sc	oils Present?	89923.	Yes No	ls this Sampling Point	: Within a Wetlan	nd? Yes No
Remarks:	;:	•				

Applicant/Owner		Mill Seat Landfill				11/14/2008	
nvestigator				County:		roe	
				State:	New	York	
Do Normal Circumstances e	exist on the site?	?	Yes No	Community	/ ID:	J	
Is the site significantly disturbed (Atypical Situation)?			Yes No	Transect IE		1	
s the area a potential Proble		,	Yes No	Plot ID:		Upl D	
(if needed, explain on rev			tombilen				
(1)			· .				
/EGETATION							
Dominant Plant Species	Stratum	Indicator	Dominant Plant Spe	cies	Stratum	Indicator	
1 Dipsacus sylvestris	Herb	NI	9				
2 Solidago canadensis	Herb	FACU	1.40			111	
3 Phalaris arundinacea	Herb	FACW+	4.4				
4 Lonicera tatarica	Shrub	FACU					
5			13				
6		-					
7			4.5				
8			16				
HYDROLOGY							
Recorded Data (Describe in Re	•		Wetland Hydrology				
Recorded Data (Describe in Re	, Lake, or Tide Gau	ige	Primary Indicate	ors			
Recorded Data (Describe in Re Steam Aerial	•	ıge	Primary Indicate	ors ndated			
Recorded Data (Describe in Re Steam Aerial I Other	, Lake, or Tide Gau	ıge	Primary IndicateInuiSat	ors ndated urated in Upper 12	? Inches		
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Map Unit N	lame					
(Series an	d Phase):		Lakemont	Drainage C	lass:	somewhat poorly
Taxonomy	/ (subgroup):	Ud	dollic endoaqualfs	Field Obser Confirm ma		Yes No
Profile Des	scription					
Depth (inches)	Horizon	Matrix Color (Munsell moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Cor Structure, et	
0-5		10YR5/2	None		crumb, silt lo	am
5-9	Α	10YR4/2	10YR5/6	few fine faint	wsbk, silt loa	m
9+	<u>B</u>	10YR4/3	10YR6/6	common, fine faint	msbk, heavy	silt loam
						
·						
Hydric Soil	Indicators:					
	Histosol			Concretions		
_	_ _Histic Epipe	don	_	 _ High Organic Content in S	Surface Layer in	Sandy Soils
_	_Sulfidic Odo			_Organic Streaking in Sand	-	
-	_Aquic Moist			Listed on Local Hydric So		
-	_Reducing Co	onditions ow Chroma Colors	_	Listed on National Hydric Other (Explain in Remarks		
-	_Gleyed or Lo	ow Chroma Colors	_	_Other (Explain in Hemarks	5)	
Remarks:	Area appear	rs to have received	fill many years ago.	Soils exhibited a thin (5-8 in	nch thick) vene	er of mixed soil
						

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes	No No. Is this Sampling Point Within a Wetland? Yes No.
• •		ears ago. Soils exhibited a thin (5-8 inch thick) veneer of mixed soil land determination for this location.

Appendix B Site Photographs

Mill Seat Landfill - Proposed Soil Borrow Areas Wetland Delineation Site Photographs - Wetland A



Photo 1: View of a shrubby section of Wetland A, adjacent to Hotel Creek. Facing south.

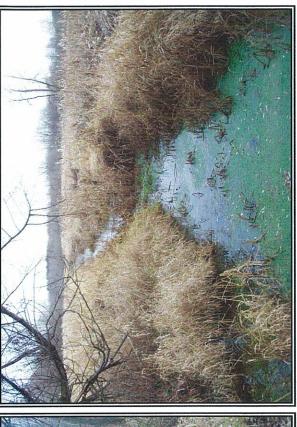


Photo 2: Facing east, looking at Hotel Creek/Wetland A from the field access culvert.



Photo 3: Forested portion of wetland A, located along the western portion of the field delineated area.

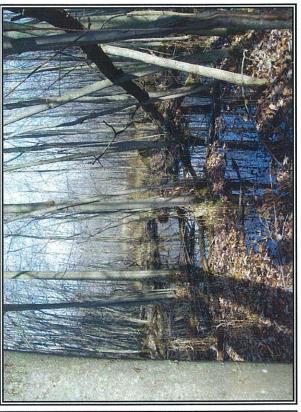


Photo 4: View of inundated forested portion of Wetland A. Facing northwest toward middle of Wetland A.

Mill Seat Landfill - Proposed Soil Borrow Areas Wetland Delineation Site Photographs - Wetland B



Photo 5: Looking into the middle of Wetland B. The majority of Wetland B is a similar cover type.



Photo 6: Facing south, this shows the outlet culvert of Wetland B. The drainage of Wetland B starts here.



Photo 7: View, facing south, of the wetland drainage that outlets water from Wetland B.



Photo 8: This view shows the pair of ceramic culverts located at the southern end of Wetland B's drainage.

Mill Seat Landfill - Proposed Soil Borrow Areas Wetland Delineation Site Photographs - Wetland C



Photo 9: Shows the shurbby cover type that dominates Wetland C.



Photo 10: Facing west, the wet meadow area of Wetland C is shown in the mid-ground.

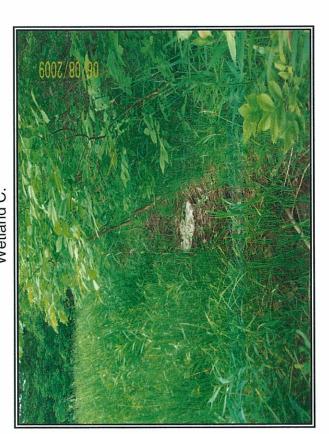


Photo 11: Shallow ditch that runs alongside Wetland C, but does not empty into another wetland or water. This ditch disappears at the treeline, which can be seen in the background. Facing southeast.

Mill Seat Landfill - Proposed Soil Borrow Areas Wetland Delineation Site Photographs - Wetland D



Photo 12: Representative view of Wetland D. This photo shows the thick understory observed within Wetland D. This picture shows Wetland D south of O'Brien Road.

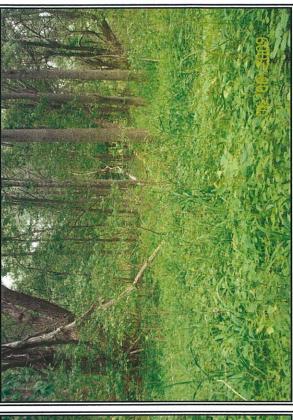


Photo 13: Facing northwest, the vegetative cover types of Wetland D are shown. This picture shows Wetland D south of O'Brien Road.

Mahar Property at the Mill Seat Landfill Facility Waste Management of New York, LLC

Town of Riga Monroe County, New York

Wetland Delineation Report

December 2011



Mahar Property at the Mill Seat Landfill Facility Waste Management of New York, LLC

Town of Riga Monroe County, New York

Wetland Delineation Report

December 2011

Prepared For:

Waste Management of New York, LLC 303 Brew Road Bergen, New York 14416

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Figure 1: Site Location Map

Figure 2: Topographic Location Maps

Figure 3: Soils Mapping

Figure 4: Mapped Wetland and Water Resources

Figure 5: Delineated Wetland Resources

Figure 6: Data Plot Locations

Figure 7: Photograph Locations

Appendices

Appendix A – Wetland Field Delineation Datasheets

Appendix B – Site Photographs

1.0 Introduction

This report describes the wetland resources located on the approximately 207 acre Mahar Property. The Mahar Property was recently acquired by Waste Management of New York, LLC (WMNY), the operator of the adjacent Mill Seat Landfill Facility. The 385-acre Mill Seat Landfill is located in the Town of Riga, Monroe County, New York (site location map, Figure 1), and is currently owned by Monroe County. The Mahar Property is located south of the current landfill, along the south side of Bovee Road.

A wetland delineation was completed by Barton & Loguidice, P.C. (B&L) on October 4 and 7, 2011, to map the existing freshwater wetland and water resources on the Mahar Property. The locations and sizes of these regulated areas are important to consider during future site planning. The wetlands located on the Mahar Property were delineated using the Routine Delineation Method set forth in the 1987 *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (USACE, 2009). These methods were used to identify wetlands located on the Mahar Property that are subject to federal jurisdiction by the U.S. Army Corps of Engineers (USACE).

This report contains a description of the Mahar Property including the site ecology, the methods used to determine the wetland boundaries, agency resource information obtained for the site, and the results of the wetland field delineation. Wetland delineation field data sheets and photographs of the wetland resources located on the Mahar Property are found in Appendices A and B at the end of this report.

2.0 Site Description

2.1 Location

The Town of Riga is located in the southwest corner of Monroe County, along the County boundary between Monroe and Genesee Counties, and adjacent to the Town of Bergen. The Mill Seat Landfill is located off State Route 33A (Chili Avenue), bisecting Brew Road into two sections: a north section and a south section. The west side of the Mill Seat Landfill property abuts the right-of-way boundary for Interstate 490. The approximately 207 acre Mahar Property borders the south side of Bovee Road, located south of the landfill facility.

2.2 Site Use

Aside from the landfill facility, land use surrounding the Mahar Property is predominantly agricultural. WMNY leases sections of its property to individuals for crop production and haying. Many of these leased agricultural lands are located north of Bovee Road and west of Brew Road (Figure 1). Within the general area, residential properties are mainly scattered along the north side of Bovee Road, though there are two (2) residential parcels that form outparcels along the north side of the Mahar Property. During the wetland field delineation, numerous active agricultural fields, planted with corn or alfalfa, were observed within the Mahar Property limits. Areas that were not observed to be in agricultural production during the site visit were associated with wetland areas or areas of steep topography, as evident in Figure 2. The lands located within the Mahar Property are included in agricultural district MONR002, created in 1974.

2.3 Surface Water

The Mahar Property and surrounding lands are located within the Upper Genesee Drainage Basin, recognized under Title 6, Chapter 10, Article B, Part 821 in the New York Codes, Rules, and Regulations (NYCRR). One (1) stream is mapped by the New York State Department of Environmental Conservation (NYSDEC) near (within 1,500 feet) the Mahar Property. Hotel Creek, designated by NYSDEC as waterway Ont. 117-19-9, flows eastward just north of Bovee Road and crosses Brew Road approximately 900 feet north of the Mahar Property. Hotel Creek is a tributary of Black Creek, which is the nineteenth tributary to the Genesee River. Hotel Creek originates as hillside runoff in the Town of Bergen in Genesee County and then flows east across the county boundary between Monroe and Genesee, south of the Mill Seat Landfill and north of the Mahar Property. Eventually, Hotel Creek discharges into Black Creek within the Town of Riga, just north of Robertson Road.

Hotel Creek was observed in the field during a previous wetland delineation of WMNY and Monroe County properties located south of the landfill facility and north of Bovee Road. Wetlands adjacent to Hotel Creek were mapped in the field during this delineation effort (B&L, 2009).

3.0 Agency Resource Information

Prior to undertaking the field wetland delineation, a desktop information search was completed to review the mapped soils, mapped wetlands, and site topography associated with the property. This information review included the USA topographic mapping service, soils information from the Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database, National Wetland Inventory (NWI) mapping (Churchville area coverage), and NYSDEC freshwater wetland mapping (Monroe County coverage).

3.1 Topographic Mapping

Topographic mapping for the Mahar Property is illustrated by Figure 2. Three (3) drumlins intersect the Mahar property: Science Hill along the north-central boundary, Blue Hill along the east property boundary, and Pinnacle Hill along the southeast/south-central portion of the property. Two (2) low-lying and presumably wetland areas are also shown at the southeast and southwest corners of the property. The central portion of the property is gently sloping towards the southeast and southwest. The USA topographic mapping service, provided by ESRI through ArcGIS Online, provides scanned images of United States Geological Survey (USGS) topographic maps. The Mahar Property is included on the USGS' 7.5 minute Churchville quadrangle. The highest point on the Mahar Property is located along the south edge of the property at the top of Pinnacle Hill, an elevation of 760 feet above mean sea level. The lowest topographic point on the Property is located near the northeast corner of the property, at an elevation of 650 feet above mean sea level.

3.2 Soils Information

The NRCS SSURGO Database was reviewed to determine the types of soils mapped within the limits of the field delineated area. Figure 3 displays the soil symbols, series, and phases of these mapped soil types. Table 1 lists the mapping unit and drainage classification information that corresponds to each soil symbol mapped within the Mahar Property.

Table 1 Soil Survey Information							
Soil Symbol	Drainage Classification	Acreage Within Project Limits					
АрА	Appleton loam, 0-3% slopes	Somewhat poorly	0.04				
BcB	Benson channery loam, 0-8% slopes	Somewhat excessively	0.39				
BrA	Brockport silty clay loam, 0-2% slopes	Somewhat poorly	16.38				
Ca (Cd)	Canandaigua silt loam	Very poorly	25.95				
ChA	Churchville silt loam, 0-2% slopes	Somewhat poorly	16.91				
Ed	Edwards muck	Very poorly	3.91				
Fw	Freshwater marsh		4.10				
HIA	Hilton loam, 0-3% slopes	Moderately well	2.02				
HIB	Hilton loam, 3-8% slopes	Moderately well	7.81				
HnB	Honeoye silt loam, 3-8% slopes	Well	20.79				
HoB Honeoye silt loam, limestone substratum, 3-8% slopes		Moderately well	3.48				
LnA	Lima silt loam, 0-3% slopes	Moderately well	4.69				
LnB	Lima silt Ioam, 3-8% slopes	Moderately well	6.29				
LoB	Lima and Cazenovia silt loams, limestone substratum, 0-6% slopes	Moderately well	19.49				
OfB	Ontario fine sandy loam, 3-8% slopes	Well	0.52				
OfC	Ontario fine sandy loam, 8-15% slopes	Well	0.85				

Table 1 Soil Survey Information								
Soil Symbol	Mapping Unit	Drainage Classification	Acreage Within Project Limits					
OnB	Ontario loam, 15-25% slopes, eroded	Well	6.54					
OnC	Ontario loam, 3-8% slopes	Well	10.79					
OnD3	Ontario loam, 8-15% slopes	Well	9.57					
OnF	Ontario Ioam, 25-60% slopes	Well	4.29					
Pu	Pits and quarries		8.03					
RgB	Riga silt loam, 2-8% slopes	Moderately well	15.60					
St	Sun loam, moderately shallow variant	Poorly	5.84					
WcB	Wampsville cobbly loam, 3-8% slopes	Well	9.70					
WcC	Wampsville cobbly loam, 8-15% slopes	Well	3.21					

Local Hydric Soil Unit (NYS) - Bold

Hydric Inclusions - Italicized

The hydric soil units and areas of hydric inclusions that are mapped within the Mahar Property correspond well with the areas of inundation and other wetland characteristics that were observed during the field delineation.

3.3 New York State Department of Environmental Conservation Freshwater Wetlands Mapping

Figure 4 shows that NYSDEC regulated wetland RG-33 is the sole state mapped wetland located on the Mahar Property. As Figure 4 illustrates, RG-33 is located within a forested area in the southeast corner of the Mahar Property, located between Blue Hill and Pinnacle Hill. RG-33 is recognized as a Class 3 wetland and reported by the NYSDEC as being 100.5 acres in size. Additional NYSDEC mapped wetlands are located north of Bovee Road on lands owned by WMNY. A delineation of those wetlands was completed in 2009.

3.4 National Wetland Inventory Mapping

Figure 4 also depicts the National Wetlands Inventory wetlands mapped within and adjacent to the Mahar Property. There are two (2) NWI wetland polygons mapped on the Property. These mapped polygons represent the following wetland types: palustrine emergent and palustrine forested/scrub-shrub. The locations of these mapped wetlands concur with the mapped location of NYSDEC freshwater wetland RG-33 (discussed in section 3.3) and the freshwater wetlands delineated in the field (discussed in section 6). Additional NWI wetland polygons are mapped north of Bovee Road on lands owned by WMNY. Those wetlands were previously delineated in 2008 and 2009.

3.5 Results of Background Information Review

A preliminary review of background information conducted prior to the wetland field investigation indicated a high likelihood for potential federally-regulated wetlands to be located on the Mahar Property. This determination was based on the identification of mapped NYSDEC and NWI wetlands and the presence of hydric soils mapped at various locations within the Property. A field-based wetland delineation was conducted to confirm these preliminary findings and identify the limits of all existing wetland locations.

4.0 Site Ecology

4.1 General Cover Types

Most of the Mahar Property is currently associated with agricultural practices. Most of the cover types observed within the project limits were croplands (corn) or hay fields (alfalfa) bordered by hedgerows. The southeast and southwest corners of the property and a portion of the property center are not actively farmed and are instead dominated by deciduous forest and shrubland. A single residence is located within the Mahar Property; two other residences are located on adjacent parcels.

4.2 Habitat Types

The distribution of plant and animal species corresponds with the different ecoregions mapped within the project area. The project is located within the Great Lakes Plain (Zone B), Erie-Ontario Plain Ecological Zone of New York State (NYSDEC, 2008). Characteristics of this zone are provided in Table 2.

Table 2 – Characteristics of the Great Lakes Plain and Erie-Ontario Plain Ecological Zones					
Topography	This zone is similar to a plateau with horizontal rock formations – basically a flat plain with minimal rise above adjacent land				
Elevation	The majority of this ecological zone is under 800 feet in elevation				
Soils	Generally limy and situated on glacial till over undulating to rolling terrain – soils tend to be medium to fine textured				
Vegetation	This zone is located in the elm-red maple northern hardwood natural vegetation zone. Only about 1/5 of the land is forested (the average Town in this Zone is 15% wooded)				
Land Use	Manufacturing is the primary source of income with agriculture as a secondary source. Vegetable, grain, and fruit farms are the major agricultural activities.				

Table 2 – Characteristics of the Great Lakes Plain and Erie-Ontario Plain Ecological Zones					
Mean July Temperature 70 – 75 degrees Fahrenheit					
Mean January Temperature	20 – 25 degrees Fahrenheit				
Mean Annual Snowfall	60 – 80 inches				
Growing Season 160 – 180 days in length					

4.3 Wetland Cover Types

General wetland cover types identified within the field delineated area include emergent, scrub-shrub, and forested. A brief description of each of these wetland cover types is presented below:

Emergent: Erect, rooted, herbaceous hydrophytic plants characterize emergent wetlands. This vegetation can be observed throughout most of the growing season. These wetlands typically have standing water above the soil surface for a portion of the year and often include fringe communities on open water edges.

Scrub-Shrub: This wetland cover type is primarily found in areas that were formerly open or otherwise cleared. Scrub-shrub wetlands are often found in areas of shallow standing water. Woody vegetation that is less than 20 feet in height define these wetlands. Within the project area, scrub-shrub wetlands were observed bordering emergent wetlands or noted as localized pockets within larger forested wetland areas.

Forested: Forested wetlands are dominated by woody vegetation taller than 20 feet, where soil is at least periodically saturated or inundated. Forested wetlands within the delineated wetland area commonly included deciduous trees with an understory of hydrophytic herbaceous vegetation. The density of the understory was observed to vary by location.

5.0 Wetland Delineation Methodology

The background data described in Section 3.0 was reviewed prior to undertaking the wetland field investigation. The Routine Wetlands Determination Method with Onsite Inspection (Environmental Laboratory, 1987) and Northeast/Northcentral Regional Supplement to the 1987 Corps of Engineers' Manual were used to identify wetlands located within the project area that are subject to jurisdiction by the U.S. Army Corps of Engineers (USACE).

B&L performed data collection and delineation of the wetland boundaries on October 4 and 7, 2011. Observations of vegetative communities, soils, and hydrological characteristics were documented and used to determine the extent of wetland boundaries in the field.

The boundaries of all delineated wetlands are collectively mapped on Figure 5.

All of the data collected in the field were recorded on field data sheets (located in Appendix A). The upland and wetland data plot locations associated with each delineated wetland are pictured on Figure 6.

The first step of the wetland field delineation was to determine whether normal conditions were present at each identified wetland location. Each site was then examined for evidence of natural or human induced alteration of vegetation, soils, or hydrology. These investigations were followed by analyzing the surrounding area and determining the location of the wetland/upland interface. Selected points were sampled for vegetation, hydrology, and soils to help determine the location of this boundary.

5.1 Vegetation

The presence of wetland vegetation was determined by evaluating the indicator statuses of dominant plant species in each vegetative stratum (i.e., herbaceous layer, shrub/sapling layer, tree layer, and woody vine layer). Dominant plant species were determined using percent aerial coverage estimates. The plant species that immediately exceeded 50% of the total dominance measure for a given stratum (when ranked in descending order of abundance and cumulatively totaled), plus any additional species comprising 20% or more of the total dominance measure for that stratum, were considered to be the dominant vegetative species for the data plot.

The wetland indicator statuses (obligate - OBL, facultative wetland - FACW, facultative - FAC, facultative upland - FACU, or upland - UPL) for all dominant plant species identified in the sample plots were determined from the *National List of Plant Species That Occur in Wetlands: 1988 National Summary* (U.S. Fish and Wildlife Service, 1988).

The USACE's Regional Supplement uses a sequence of four tests to establish the presence or absence of a dominance of hydrophytic vegetation. The four tests are done in a sequence on an if/then logic test basis. Proceeding to the next indicator level should only be completed if the preceding indicator did not determine a dominance of hydrophytic vegetation at the sampling location. Indicator 1 is the rapid test for hydrophytic vegetation. This indicator is applied if all dominant species across all vegetation strata are rated OBL or FACW. Indicator 2 is the dominance test. Vegetation is considered to be hydrophytic if more than 50% of the dominant plant species across all strata are rated OBL, FACW, or FAC. The dominance test uses the 50/20 rule to determine the dominant species within a vegetative plot.

The third indicator of hydrophytic vegetation is linked to the prevalence index. This prevalence index ranges from 1 to 5. In order for a sample area to contain hydrophytic vegetation the plot must have a prevalence index of 3 or less. The prevalence index is a weighted-average of wetland indicator statuses of all plant species in the sampling plot. The wetland indicator status of each species is assigned a value according to the following scale: OBL-1, FACW-2, FAC-3, FACU-4, and UPL-5. These assigned values are multiplied by the absolute percent cover of all species with that particular indicator status. The product of each indicator value is then summed and divided by the total percent cover, resulting in the prevalence index for that vegetation plot. The equation is as follows:

Prevalence Index = Aobl+2*Afacw+3*Afac+4*Afacu+5*Aupl
Aobl+Afacw+Afac+Afacu+Aupl

where A(x) is the absolute percent cover

Indicator four consists of morphological adaptations. Certain plant species exhibit morphological changes in order to survive in areas that are saturated or flooded for prolonged periods of time. Some common vegetative morphological adaptations in the northeast consist of adventitious roots, hypertrophied lenticels, multi-stemmed trunks, and shallow root systems.

Plant community data recorded from each sample plot are included on the wetland delineation field data sheets found in Appendix A.

5.2 Hydrology

The presence of primary hydrologic indicators (such as surface (indicator A1), saturation (indicator A3), or a high water table (indicator A2)) or secondary hydrologic indicators (such as drainage patterns (indicator B10), geomorphic position (indicator D2), or FAC-neutral test (indicator D5)) was determined through visual observations at the data plot locations and surrounding areas. Soil saturation was determined by sampling the soils at each plot to a minimal depth of 10-inches, if possible. These soil test holes were observed in order to record the depth to which water rose in the hole. Hydrologic data gathered in the field at each sample plot is included on the wetland delineation field data sheets found in Appendix A.

5.3 Soils

The presence of hydric soil indicators was determined by extruding soil samples with a soil auger up to a minimal depth of 10-inches, if possible. A Munsell Soil Color Chart (2009 Edition) was used to determine soil color for all encountered horizons within the soil profile, including different layers within the same horizon, if encountered. Soil profiles were compared to hydric soil indicators for the USDA Subregion Land Resource Region (LRR) R – Northeastern Forests, included within the Northcentral and Northeast Regional Supplement (USACE, 2009). Soil color information and other observations made at each sample plot are included on the wetland delineation field data sheets found in Appendix A.

A wetland determination was made at each sample plot after characterizing the vegetation, hydrologic indicators, and soil characteristics. If the hydrophytic vegetation, hydrology, and hydric soil criteria were met, the area was determined to be a wetland. If the criterion for one or more of the threewetland indicators was not met, the area was determined to not be a wetland.

5.4 Mapping

The boundaries of each wetland location were surveyed in the field using a handheld Global Positioning System (GPS). Two hand-held Trimble GeoXH models with sub-foot and decimeter accuracy, respectively, were used to gather each point location and map each wetland boundary on the Mahar Property. The wetland boundaries were later added to the Geographic Information System (GIS) base mapping for the site. Representative photographs taken at wetland locations throughout the Property are included in Appendix B.

6.0 Results

6.1 Wetland Labeling

As part of this wetland delineation field effort, a total of five (5) wetland areas were identified and delineated within the limits of the Mahar property (see wetland delineation map Figure 5).

Identified wetland areas were individually labeled alphabetically from A to E. Vegetative, soil, and hydrologic characteristics of each delineated wetland can be viewed on the corresponding field data sheets located in Appendix A. No mapped or unmapped streams or other Waters of the U.S., aside from the wetland locations, were observed on the Property.

6.2 <u>Delineated Wetlands</u>

Delineated wetlands A, B, C, and E were determined in the field to be 'isolated' wetlands, meaning that these areas are not hydrologically, biologically, or chemically connected to a Traditionally Navigable Water (TNW), as defined by the USACE. Wetlands B, C, and E represented wooded depressional areas in the landscape that were seasonally inundated. These areas were surrounded by upland forest; the slight rise in topography from the wetland to the surrounding areas is evident in the site photographs provided in Appendix B. Figure 7 is a reference guide for the site photographs; the locations and view points for each photograph are included on this figure.

Wetland A was located at a low spot along Bovee Road. Stormwater runoff from the roadway collected in this area; however, no culverts were observed at this location that hydrologically connected Wetland A with any

wetlands or waters north of Bovee Road. Because hydrological, chemical or biological connections between Wetlands A, B, C, or E to any TNWs could not be established in the field, it is likely that these areas are not under federal jurisdiction by the U.S. Army Corps of Engineers. A Jurisdictional Determination, which would include field verification by agency personnel, would need to be requested from the USACE to confirm this determination.

Wetland D, which represented NYSDEC mapped wetland RG-33, drains southeast from the Mahar property and then east where it flows into a NYSDEC mapped stream, Ont. 117-19-4-P11-1-2-a. Wetland D represents the headwater wetlands of tributary a of tributary 2 to Mill Creek (also known as Blue Pond Inlet). Wetland D is a state and federally regulated wetland and would require authorization from the USACE for discharges within it, or a permit from USACE and NYSDEC if development activities were proposed in or within 100 feet of it.

Wetland and upland data plots were performed and recorded for each delineated wetland. The locations of these data plots are included on Figure 6. Information regarding soil characteristics, hydrology, and vegetation at each data plot can be viewed on the field data sheets located in Appendix A. Figure 5 shows the delineated boundaries of all five (5) wetlands located during the field investigation. The characteristics of these wetlands are further detailed in Table 3. Data recorded at each wetland plot location is displayed in this Table to provide a summary of the characteristics of each delineated wetland.

Table 3 – Wetland Data Plot Information and Wetland Jurisdictional Criteria								
Resource ID	Plot ID	Cover Type(s)	Dominant Vegetation	Vegetative Indicator(s) ¹	Hydrologic Indicator(s) ²	Soil Indicators(s) ³		
Wetland A	Plot 1	Scrub- shrub	Narrow-leaved cattail, pussy willow, riverbank grape	Rapid test	A2, A3, D2	F3		
Wetland B	Plot 1	Forested	Poison ivy, silver maple, green ash	Dominance test	B1, B9, D2	F3		
Wetland C	Plot 1	Forested	Red maple, silver maple, poison ivy, false nettle	Dominance test	B1, B9, D2	F3		
Wetland D Plot 1 Forested green ash, poison ivy		Dominance test	C9, D2	F3				
Wetland D	Plot 2	Forested	Red maple, green ash, silver maple	Dominance test	B1, B9, C9, D2	F3		
Wetland D	Wetland D Plot 3 Forested Red maple, green ash		Dominance test	A3, B9	F3, S3			
Wetland D	Vetland D Plot 4 Scrub- shrub, emergent Silky dogwood, cattail hybrid, NY aster, rice cut grass		Rapid test	А3	F3			
Wetland D	Wetland D Plot 5 Scrub- Scrub- shrub Red maple, silky dogwood, green ash, Canada goldenrod		Dominance test	А3	F3			
Wetland D	Plot 6	Scrub- shrub	Green ash, silky dogwood, lance leaved goldenrod	Dominance test	A3, B9	A11, F3		
Wetland E	Plot 1	Forested	Silver maple, green ash	Rapid test	B1, B9, D2	F3		

¹ Refer to Hydrophytic Vegetation Indicators in the *Interim Regional Supplement*

² Refer to Wetland Hydrology Indicators in the *Interim Regional Supplement*³ Refer to Hydric Soil Indicators in the *Interim Regional Supplement*

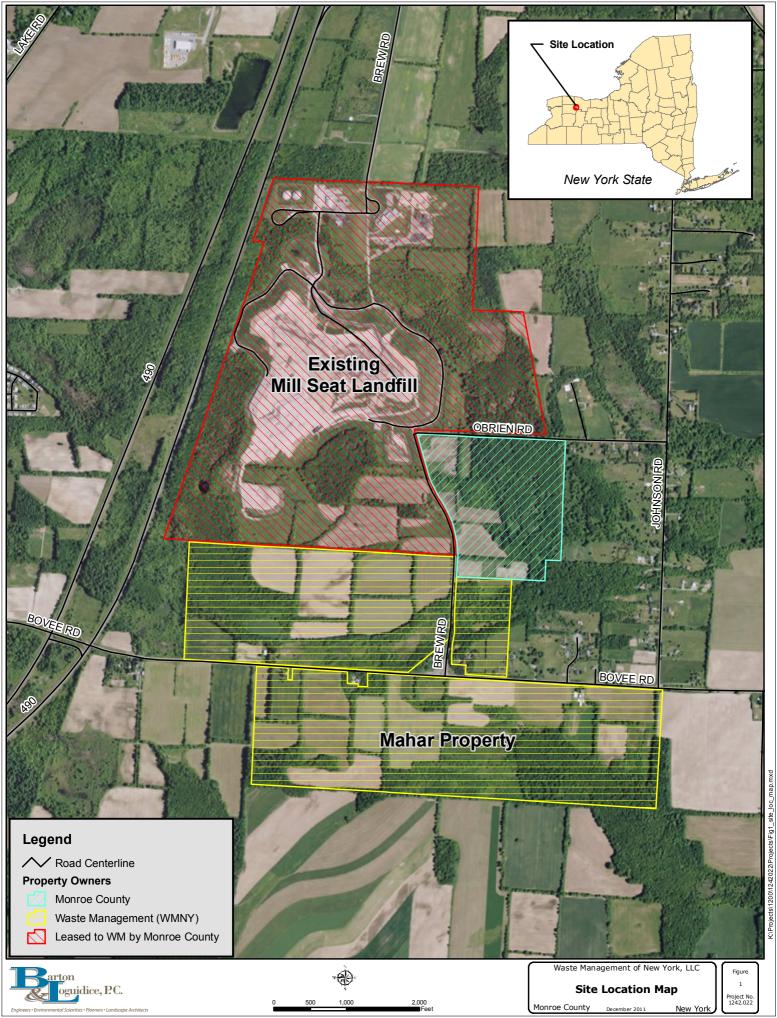
7.0 Summary and Conclusions

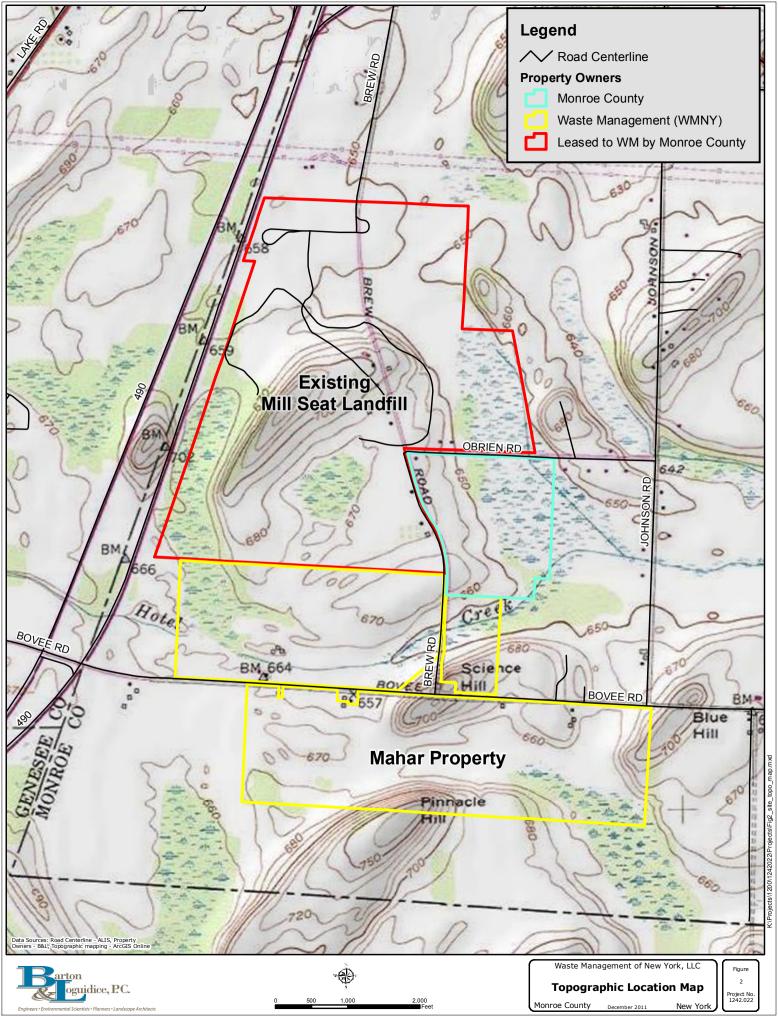
This wetland delineation was completed to determine the locations of freshwater wetlands and waters on the Mahar Property. Information from various desktop resources were reviewed prior to the field investigation and used to focus on particular areas of the Property. Five (5) wetlands were identified on the Mahar Property.

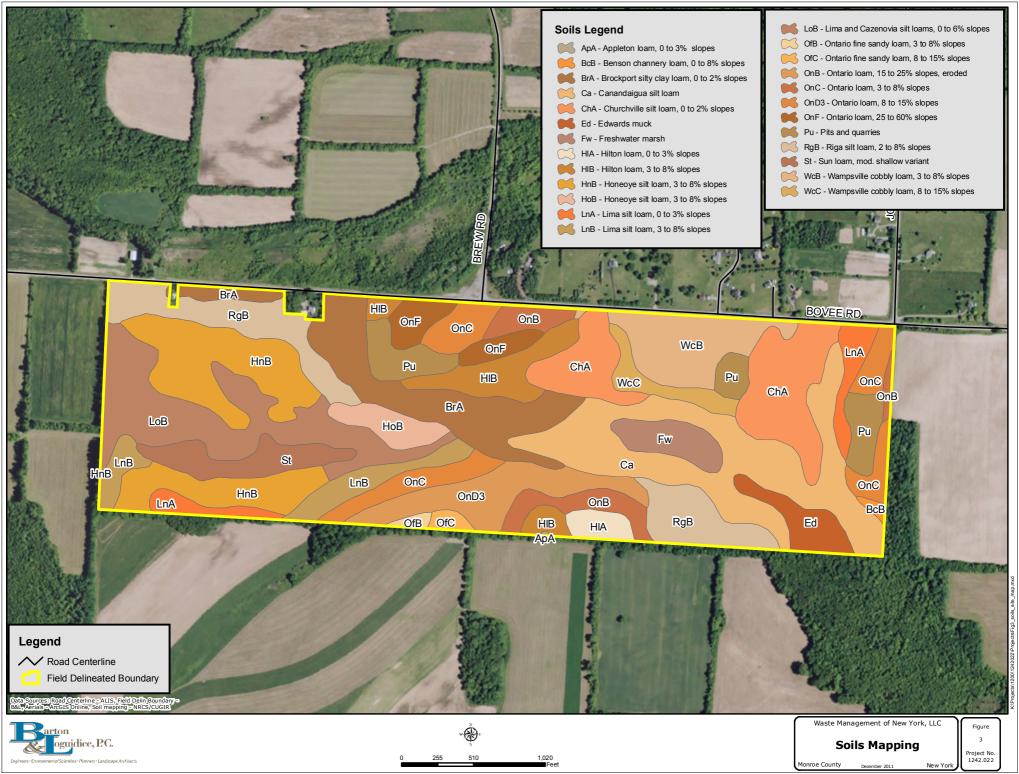
Based on the characteristics of Wetland D, this wetland is assumed to meet state and federal jurisdiction criteria. Any proposed impacts to this wetland in the future would require a review by the NYSDEC and the USACE in association with Article 24 of the New York State Environmental Conservation Law and Sections 401 and 404 of the Clean Water Act. Based on NYSDEC Freshwater Wetland Mapping, Wetland D is under the jurisdiction of the NYSDEC. The wetland and its 100-foot adjacent area are regulated by the NYSDEC. Any impacts to this wetland or the adjacent area would require coordination with the NYSDEC. Because hydrological, chemical, or biological connections were not observed in the field for Wetlands A, B, C, and E, these resources are assumed to be isolated, and therefore may not meet criteria for federal jurisdiction. A review by the USACE is required to confirm the preliminary isolated determination and their jurisdiction over Wetland D. An Approved Jurisdictional Determination can be requested from the USACE prior to a permit request.

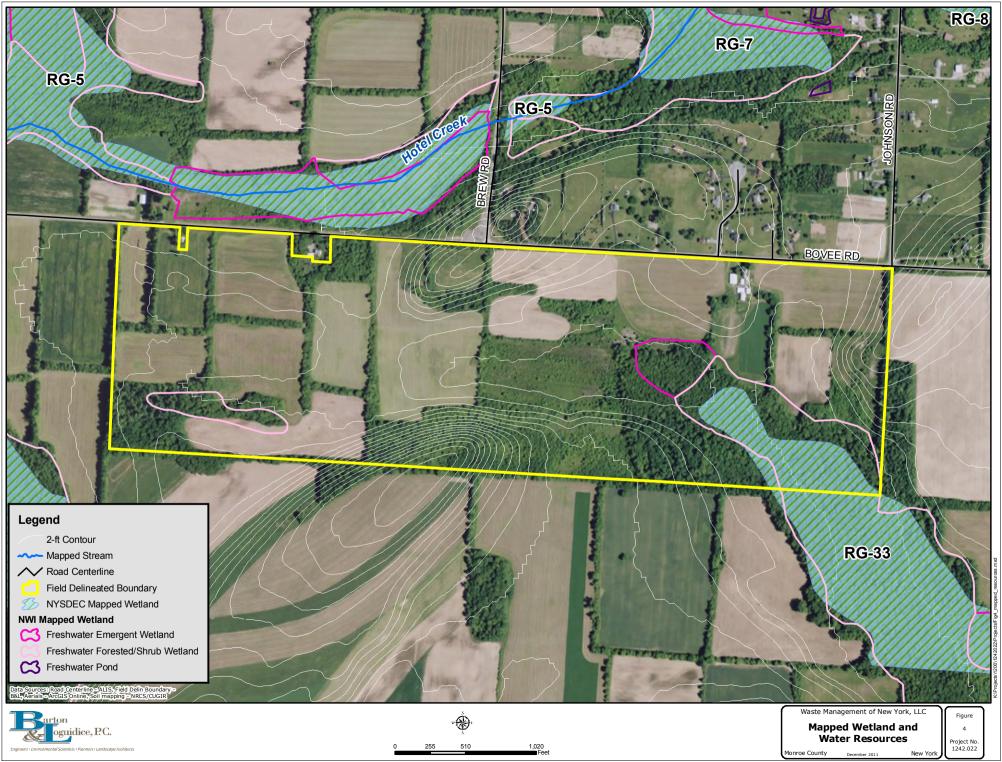
8.0 Bibliography

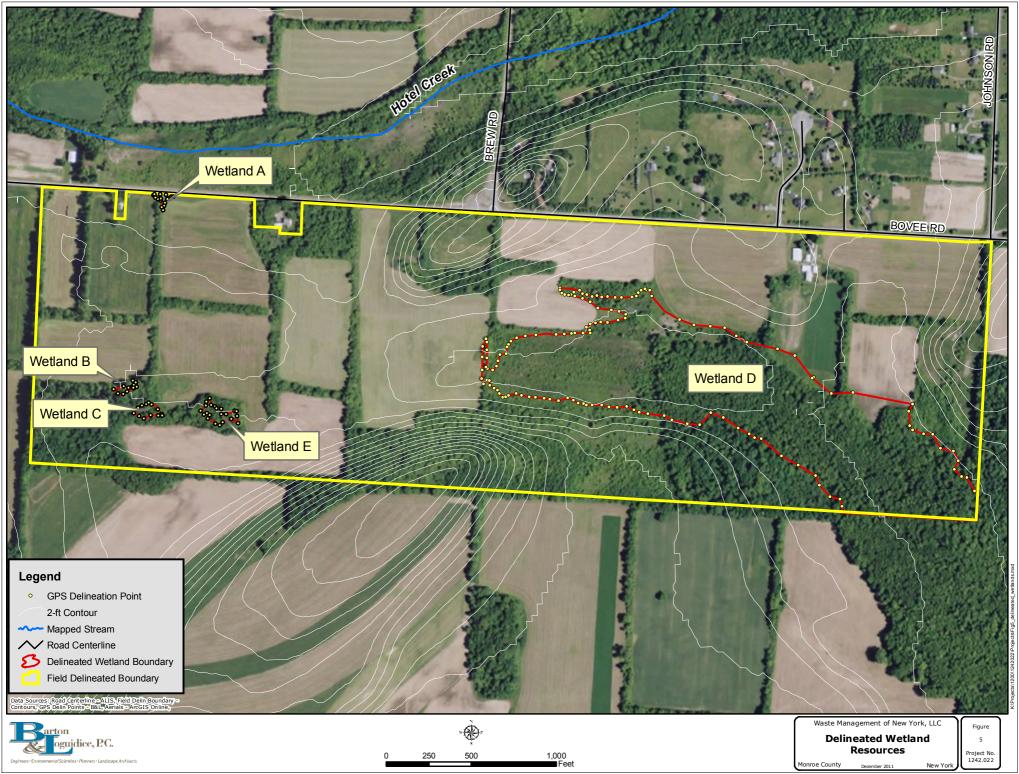
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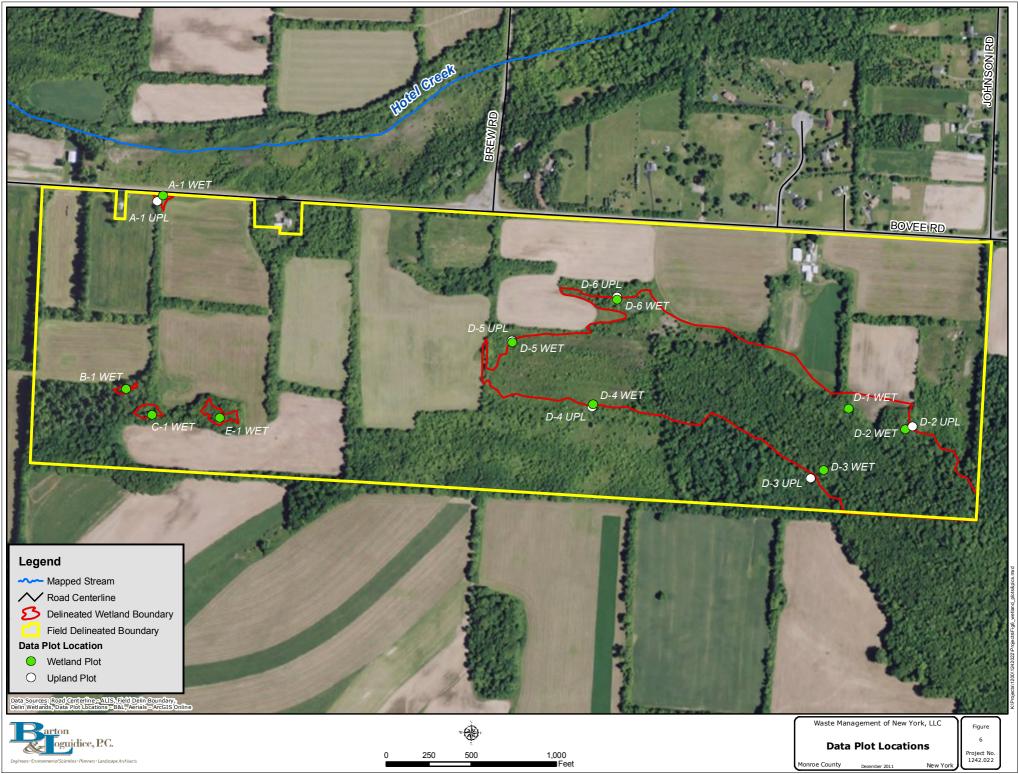


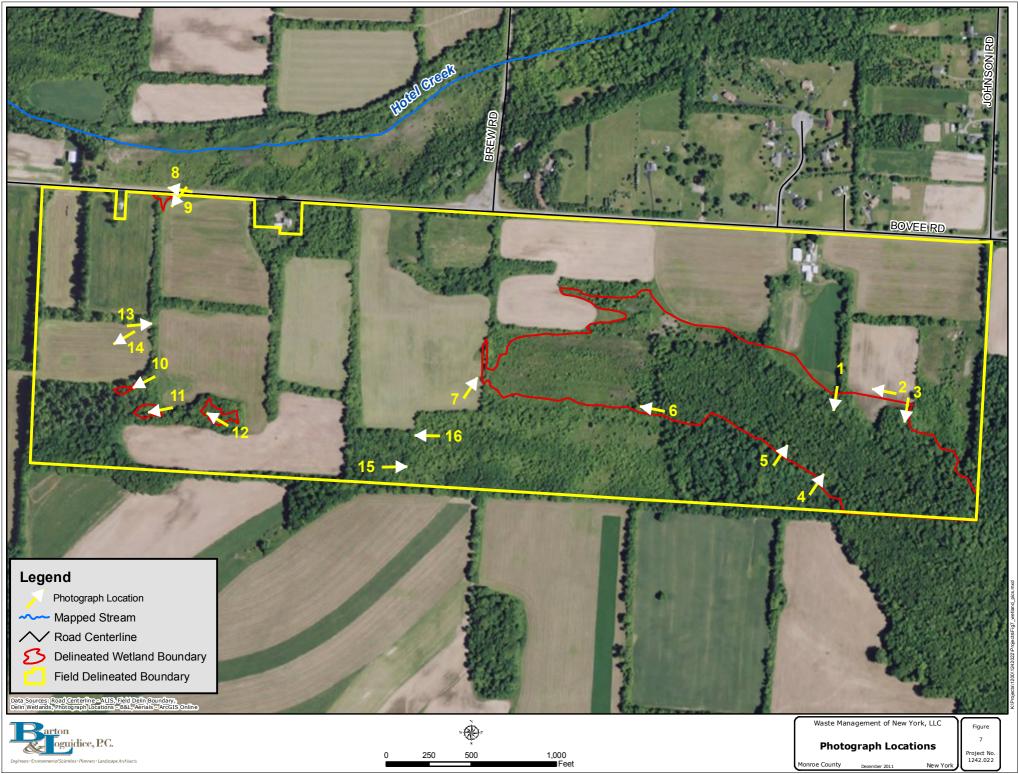












Appendix A

Wetland Field Delineation Datasheets

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mahar Property	City/County: Monroe County Sampling Date: 10/04/11			
Applicant/Owner: Waste Management of New York, LLC	State: New York Sampling Point: A-1 Wet			
Investigator(s): _Johanna E. Duffy, Barton & Loguidice, PC	Section, Township, Range: _Town of Riga			
Landform (hillslope, terrace, etc.)::	Local relief (concave, convex, none): Concave			
Slope (%): <u>0-2%</u> Lat: <u>43° 2' 46.888" N</u>	Long: _77° 56' 10.637" W Datum: _UTM NAD 83			
	NWI classification: PSS1			
Are climatic/hydrologic conditions on the site typical for this time of				
Are Vegetation, Soil, or Hydrology signific				
Are Vegetation, Soil, or Hydrology Natura				
	ng sampling point locations, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes X No				
Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No			
· — —				
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland A			
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks (B6)			
Surface Water (A1) Water-Stai	ned Leaves (B9) Drainage Patterns (B10)			
X High Water Table (A2) Aquatic Fa				
X Saturation (A3) Marl Depos				
 :	Culfide Odor (C1) Crayfish Burrows (C8)			
	hizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) f Reduced Iron (C4) Stunted or Stressed Plants (D1)			
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)			
	Surface (C7) Shallow Aquitard (D3)			
	ain in Remarks) Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)			
Field Observations:				
Surface Water Present? Yes No _X Depth (in	·			
Water Table Present Yes X No Depth (in Saturation Present Yes X No Depth (in				
Saturation Present Yes X No Depth (in (includes capillary fringe)	ches): 0 – surface Wetland Hydrology Present? Yes X No			
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:			
Aerial photo review completed prior to site investigation				
Remarks:				

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of	f plants.			Sampling Point: A1-Wet	
Tree Stratum (Plot Size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.	70 0010.	Оросиост	- Ctatus	Number of Dominant Species	
2.				That Are OBL, FACW, or FAC: (A)	
3.				Total Number of Dominant	
4.				Species Across All Strata: (B)	
5.				Percent of Dominant Species (B)	
6.				That Are OBL, FACW, or FAC: (A/B	
				That Are OBE, FACW, OF FAC.	<i>'</i>
7.		= Total Cove	er	Prevalence Index Worksheet:	_
Sapling/Shrub Stratum (Plot Size: 15 feet)				Total % Cover of: Multiply by:	
Salix discolor	20	Yes	FACW	OBL speciesx 1 =	
2.				FACW species x 2 =	
3.				FAC species x 3 =	
4.				FACU speciesx 4 =	
5.					
6.				UPL species	
7.				(A)(B)	
50% = 10, 20% = 5	20	= Total Cove	<u> </u>	Prevalence Index = B/A =	
<u> </u>	20	= 10tal Cove	3 1	Prevalence maex = B/A =	
Herb Stratum (Plot Size: 10 feet)			0.01		
1. Typha angustifolia	55	Yes	OBL	Hydrophytic Vegetation Indicators:	
2. Doellingeria umbellata	10	No	FACW	X Rapid Test for Hydrophytic Vegetation	
3. Symphyotrichum novi-belgii	15	No	FACW	Dominance Test is >50%	
4.				Prevalence Index is =3.01</td <td></td>	
5.				Morphological Adaptations ¹ (Provide supporting	
6.				Data in Remarks or on a separate sheet)	
7.				Problematic Hydrophytic Vegetation ¹ (Explain)	
8.				¹ Indicators of hydric soil and wetland hydrology must	
9.				Be present, unless disturbed or problematic.	
10.				Definitions of Vegetation Strata:	
11.					
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter	
13.				at breast height (DBH), regardless of height.	
14.				Sapling/shrub – Woody plants less than 3 in. DBH	
50% = 40, 20% = 16	80	= Total Cove	er	and greater than 3.28 ft (1 m) tall.	
Woody Vine Stratum: (Plot Size: 15 feet)				Herb – All herbaceous (non-woody) plants, regardless	
1. Vitis riparia	3	Yes	FACW	of size, and woody plants less than 3.28 ft tall.	
2.				Woody vines – All woody vines greater than 3.28 ft in	
3.				height.	
4.					
5.				Hydrophytic	
6.				Vegetation	
7.				Present? Yes X No	
50% = 1.5, 20% = 0.6	100 <u>X</u> 100				
Remarks: (Include photo numbers here or on a se	3	= Total Cove	<u> </u>		\dashv
Remarks. (include prioto numbers here of on a so	eparate sneet	.)			
Photos 8 and 9					

SOIL Sampling Point: A1- wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Danth Matrix			Redo	Redox Features							
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-5	10 YR 4/2	100	-	-	-	-	Silty clay loam				
5-12+	10 YR 4/2	85	10 YR 5/6	15	С	М	Clay loam				
¹ Type: C=C	oncentration, D=Depletion	n, RM=R	educed Matrix, CS= Cov	ered or C	oated Sar	nd Grains.	² Locatio	n: PL=Pore Lining, M=Matrix.			
Hydric Soils	Indicators:						Indicators	for Problematic Hydric Soils ³ :			
Histosol	(A1)		Polyvalue Below	Surface (S8) (LRR	R,	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)			
Histic E	pipedon (A2)		MLRA 149B)	,			·	Prairie Redox (A16) (LRR K, L, 4)			
Black H	istic (A3)		Thin Dark Surfac	e (S9) (L l	RR R, ML	RA 149B)		Mucky Peat or Peat (S3) (LRR K, L, R)			
Hydroge	en Sulfide (A4)		Loamy Mucky Mi	neral (F1)	(LRR K,	L)	Dark S	Surface (S7) (LRR K, L)			
Stratifie	d Layers (A5)		Loamy Gleyed M	latrix (F2)			Polyva	Polyvalue Below Surface (S8) (BLRR K, L)			
Deplete	d Below Dark Surface (A	(11)	X Depleted Matrix ((F3)			Thin Dark Surface (S9) (LRR K, L)				
Thick D	ark Surface (A12)		Redox DarkSurfa	ace (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)				
Sandy N	Mucky Mineral (S1)		Depleted Dark St	urface (F7	7)		Piedm	ont Floodplain Soils (F19) (MLRA 149B)			
Sandy (Gleyed Matrix (S4)		Redox Depression	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	Redox (S5)						Red Parent Material (TF2)				
	Matrix (S6)						Very Shallow Dark Surface (TF12)				
Dark Su	ırface (S7) (LRR R, MLR	RA 149B)					Other	(Explain in Remarks)			
³ Indicators of	hydrophytic vegetation	and wetla	nd hydrology must be pr	esent, un	less distur	bed or pro	blematic.				
Restrictive L	ayer (if observed):										
Type:											
Depth (i	nches):						Hydric Soi	I Present? Yes X No			
Remarks:											
T to marrier											
BrA – potenti	al for hydric inclusions										
İ											

Project/Site: Mahar Property	City/County: Monroe County Sampling Date: _10/04/11
Applicant/Owner: Waste Management of New York, LLC	State: New York Sampling Point: A-1 Upl
Investigator(s): Johanna E. Duffy, Barton & Loguidice, PC	
Landform (hillslope, terrace, etc.)::	-
	Long: 77° 56' 9.825" W Datum: UTM NAD 83
	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of	
	antly disturbed? Are "Normal Circumstances" present? Yes? X No
Are Vegetation, Soil, or Hydrology Natural	y problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	X Is the Sampled Area
Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes No
	X If yes, optional Wetland Site ID:
Welland Hydrology Fresent: Tes No _	11 yes, optional wetland site ib.
Remarks: (Explain alternative procedures here or in a separate rep	ort.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stair	ed Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fau	ina (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Depos	its (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen S	ulfide Odor (C1) Crayfish Burrows (C8)
	nizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)
	Surface (C7) Shallow Aquitard (D3)
	ain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X _ Depth (inc	hes): 0
Water Table Present Yes No _X _ Depth (inc	hes): >12.0
Saturation Present Yes No _X _ Depth (inc	hes): >12.0 Wetland Hydrology Present? Yes No _X_
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Aerial photo review completed prior to site investigation	
Remarks:	

l.		of size, and woody plants less than 3.28 ft tall.				
2		Woody vines – All woody vines greater than 3.28 ft in				
3.		height.				
4.						
5.		Hydrophytic				
S.		Vegetation				
7.		Present? Yes No _X				
	= Total Cover					
JS Army Corps of Engineers		Northcentral and Northeast Region – Interim Version				

SOIL Sampling Point: A1- upl

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
	Matrix		1						
Depth (inches)	Color (moist)	%	Color (moist)	x Feature %	Type ¹	Loc ²	Texture	Remarks	
0-7	10 YR 4/2	100	-	-	- Type	-	Clay loam	Komano	
	10 YR 4/2	95	10 YR 4/4	5	С	М			
7-12+	10 1K 4/2	95	10 TK 4/4	3	<u> </u>	IVI	Clay loam		
1- 0.0				<u> </u>			2,		
	oncentration, D=Deplet	ion, RM=Red	uced Matrix, CS= Co	vered or C	coated Sai	nd Grains.		n: PL=Pore Lining, M=Matrix.	
Hydric Soils	Indicators:						Indicators	for Problematic Hydric Soils ³ :	
Histoso	I (A1)	_	Polyvalue Below	Surface	(S8) (LRR	R,	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)	
	pipedon (A2)		MLRA 149B	•			Coast	Prairie Redox (A16) (LRR K, L, 4)	
Black H	istic (A3)	_	Thin Dark Surface	, , ,				Mucky Peat or Peat (S3) (LRR K, L, R)	
Hydroge	en Sulfide (A4)	_	Loamy Mucky M			L)	Dark S	Surface (S7) (LRR K, L)	
Stratifie	d Layers (A5)	_	Loamy Gleyed N	/latrix (F2)			Polyvalue Below Surface (S8) (BLRR K, L)		
Deplete	d Below Dark Surface ((A11)	X Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)		
	ark Surface (A12)	_	Redox DarkSurf				Iron-M	anganese Masses (F12) (LRR K, L, R)	
	Mucky Mineral (S1)	_	Depleted Dark S		7)		Piedmont Floodplain Soils (F19) (MLRA 149B)		
	Gleyed Matrix (S4)	_	Redox Depressi	ons (F8)				Spodic (TA6) (MLRA 144A, 145, 149B)	
	Redox (S5)							arent Material (TF2)	
	Matrix (S6)	_					Very Shallow Dark Surface (TF12)		
Dark Su	ırface (S7) (LRR R, ML	RA 149B) _					Other	(Explain in Remarks)	
³ Indicators of	hydrophytic vegetation	and wetland	hydrology must be p	resent, un	less distu	bed or pro	blematic.		
	_ayer (if observed):								
Type: _							l		
Depth (inches):						Hydric Soi	I Present? Yes X No	
Domorko:									
Remarks:									
BrA – potenti	ial for hydric inclusions								
	·								

Project/Site: Mahar Property					City/County: Monroe County Sampling Date: 10/0				
Applicant/Owner: _Waste Management of New York, LLC							State: New Y	ork Sampling Point: B-1 Wet	
Investigator(s): Johanna E. Duffy, Barton & Loguidice, PC					on, Township,	Range: Tov	vn of Riga		
Landform (hillslope, terrace, etc.)::								e): Concave	
Slope (%): <u>0-2%</u> La									
Soil Map Unit Name:: Sun lo									
Are climatic/hydrologic condi					<u> </u>		=		
Are Vegetation, Soil						Are "Normal	Circumstances"	present? Yes? X No	
Are Vegetation, Soil	, or Hydro	logy _	Naturall	y proble	ematic?	(If needed, e	explain any answ	vers in Remarks.)	
SUMMARY OF FINDIN	IGS – Attach	site m	nap showir	ng sar	npling poir	nt location	s, transects	, important features, etc.	
Hydrophytic Vegetation Pres	ent?	Yes	X No						
Hydric Soil Present?			X No		Is the Samp within a We		Yes	X No	
Wetland Hydrology Present?			X No		_		ite ID: Wetland		
Welland Trydrology i Tesent:		103	<u> </u>		_ 11 yes, option	iai wellana o	ite ib. <u>welland</u>		
Remarks: (Explain alternativ	e procedures he	re or in a	separate rep	ort.)					
HYDROLOGY									
Wetland Hydrology Indicate	ors:						Secondary Ind	icators (minimum of two required)	
Primary Indicators (minimum	of one is require	d; check	all that apply)	<u>L</u>			Surface S	Soil Cracks (B6)	
Surface Water (A1)		X	_ Water-Stain	ed Leav	ves (B9)		Drainage	Patterns (B10)	
High Water Table (A2)			_ Aquatic Fau	ına (B13	3)		Moss Trir	m Lines (B16)	
Saturation (A3)			_ Marl Deposi	its (B15)		Dry-Seas	on Water Table (C2)	
X Water Marks (B1)			_ Hydrogen S	Sulfide C	dor (C1)		Crayfish I	Burrows (C8)	
Sediment Deposits (B2)			Oxidized Rh	nizosphe	eres on Living	Roots (C3)	Saturation	n Visible on Aerial Imagery (C9)	
Drift Deposits (B3)			Presence of					or Stressed Plants (D1)	
Algal Mat or Crust (B4)			_		ion in Tilled So	oils (C6)		hic Position (D2)	
Iron Deposits (B5)			Thin Muck S					Aquitard (D3)	
Inundation Visible on Ae			Other (Expla	ain in R	emarks)			ographic Relief (D4)	
Sparsely Vegetated Cor	icave Surface (B	3)					FAC-Neu	tral Test (D5)	
Field Observations:									
Surface Water Present?	Yes I	۸o <u>X</u>	Depth (inc	hes):	0				
Water Table Present	Yes I	No X	Depth (inc	:hes):	>12.0				
Saturation Present	Yes I	۸o <u>X</u>	Depth (inc	:hes):	>12.0	Wetland H	ydrology Prese	nt? Yes X No	
(includes capillary fringe)									
Describe Recorded Data (st	0 0	•	•	otos, pre	evious inspecti	ons), if availal	ole:		
Aerial photo review complete	ed prior to site in	estigation	on						
Remarks: Seasonal inundation and sa	uration of soils								

VEGETATION – Use scientific names of	plants.			Sampling Point: <u>B1-Wet</u>
Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. Acer saccharinum	45	Yes	FACW	Number of Dominant Species
Fraxinus pennsylvanica	15	Yes	FACW	That Are OBL, FACW, or FAC: 3 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 3 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 100% (A/B)
7.				111at/100 052,171011, 011710.
50% = 30, 20% = 12	60	= Total Cove	er	Prevalence Index Worksheet:
Sapling/Shrub Stratum (Plot Size: feet)				Total % Cover of: Multiply by:
1.				OBL speciesx1 =
2.				FACW species x 2 =
3.				FAC species x 3 =
4.				FACU species x 4 =
5.				UPL speciesx 5 =
6.				Column Totals:(A)(B)
7.				(-/
		= Total Cove	er	Prevalence Index = B/A =
Herb Stratum (Plot Size: 5 feet)				
1. Toxicodendron radicans	5	Yes	FAC	Hydrophytic Vegetation Indicators:
2.				- Rapid Test for Hydrophytic Vegetation
3.				X Dominance Test is >50%
4.				Prevalence Index is =3.01</td
5.				Morphological Adaptations ¹ (Provide supporting
6.				Data in Remarks or on a separate sheet)
7.				Problematic Hydrophytic Vegetation ¹ (Explain)
8.				¹ Indicators of hydric soil and wetland hydrology must
9.				Be present, unless disturbed or problematic.
10.				Definitions of Vegetation Strata:
11.				
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
13.				at breast height (DBH), regardless of height.
14.				Sapling/shrub – Woody plants less than 3 in. DBH
50% = 2.5, 20% = 1	5	= Total Cove	er	and greater than 3.28 ft (1 m) tall.
Woody Vine Stratum: (Plot Size: 15 feet)				Herb – All herbaceous (non-woody) plants, regardless
1.		T T		of size, and woody plants less than 3.28 ft tall.
2.				Woody vines – All woody vines greater than 3.28 ft in
3.				height.
4.				neight.
5.				Hydrophytic
6.				Vegetation
7.				1
1.		Total Cov		Present? Yes X No
Remarks: (Include photo numbers here or on a ser	L parate sheet	= Total Cove	er	
Photo 10		,		

SOIL Sampling Point: <u>B1- wet</u>

Profile Desc	cription: (Describe to	the depth nee	ded to document	the indica	ator or cor	nfirm the a	bsence of ind	licators.)		
Depth	Matrix		Redo	ox Feature	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-2	10 YR 3/1	100	<u> </u>	-	-	-	-	Organic surface layer		
2-8	10 YR 4/1	80	10 YR 5/6	15	С	М	Loam			
			7.5 YR 5/8	5	С	М				
8-10+	10 YR 4/1	78	10 YR 5/6	15	С	М	Silty clay loam	Roots made it difficult to sample further		
			7.5 YR 5/8	5	С	М				
			10 YR 6/1	2	С	М				
¹ Type: C=C	oncentration, D=Deplet	ion, RM=Redu	ced Matrix, CS= Co	overed or C	Coated Sar	nd Grains.	² Location	n: PL=Pore Lining, M=Matrix.		
Hydric Soils	Indicators:			_				or Problematic Hydric Soils ³ :		
Histosol	(A1)		Polyvalue Below	w Surface	(S8) (LRR	R,	2 cm M	uck (A10) (LRR K, L, MLRA 149B)		
	pipedon (A2)		MLRA 149B		•	-		Prairie Redox (A16) (LRR K, L, 4)		
	istic (A3)		Thin Dark Surfa	ce (S9) (L	RR R, ML	RA 149B)		ucky Peat or Peat (S3) (LRR K, L, R)		
Hydroge	en Sulfide (A4)		Loamy Mucky M	/lineral (F1) (LRR K,	L)	Dark Surface (S7) (LRR K, L)			
Stratifie	d Layers (A5)		Loamy Gleyed N	Matrix (F2))		Polyvalue Below Surface (S8) (BLRR K, L)			
Deplete	d Below Dark Surface	(A11) <u>)</u>	C Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)			
Thick D	ark Surface (A12)		Redox DarkSurf	•				Iron-Manganese Masses (F12) (LRR K, L, R)		
	Mucky Mineral (S1)		Depleted Dark S		7)		Piedmont Floodplain Soils (F19) (MLRA 149B)			
	Gleyed Matrix (S4)		Redox Depressi	ions (F8)				·		
	Redox (S5)						Red Parent Material (TF2)			
	Matrix (S6)		_				Very Shallow Dark Surface (TF12)			
Dark Su	ırface (S7) (LRR R, ML	.RA 149B)	_				Other (Explain in Remarks)		
³ Indicators of	hydrophytic vegetation	and wetland h	ydrology must be p	resent, un	nless distur	bed or pro	blematic.			
Restrictive L	ayer (if observed):									
Туре: _										
Depth (i	nches):		_				Hydric Soil	Present? Yes X No		
Remarks:										
St – local hyd	dric soil unit									

Project/Site: Mahar Property	City/County: Monroe County	Sampling Date: 10/04/11
Applicant/Owner: Waste Management of New York, LLC		State: New York Sampling Point: C-1 Wet
Investigator(s): Johanna E. Duffy, Barton & Loguidice, PC	Section, Township, Range: Tow	n of Riga
Landform (hillslope, terrace, etc.)::	Local relief (concave	e, convex, none): Concave
Slope (%): 0-2% Lat: 43° 2' 34.649" N	Long: _77° 56' 12.234" W	Datum: UTM NAD 83
Soil Map Unit Name:: Sun loam, moderately shallow variant		
Are climatic/hydrologic conditions on the site typical for this time of y		
Are Vegetation, Soil, or Hydrology significal		Circumstances" present? Yes? X No
Are Vegetation, Soil, or Hydrology Naturally		xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin		
Hydrophytic Vegetation Present? Yes X No		
Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland?	Yes <u>X</u> No
 -		
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Sit	e ib. Welland C
Remarks: (Explain alternative procedures here or in a separate repo	rt.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	_	Surface Soil Cracks (B6)
Surface Water (A1) X Water-Staine	-	Drainage Patterns (B10)
High Water Table (A2) Aquatic Faur		Moss Trim Lines (B16)
Saturation (A3) Marl Deposit		Dry-Season Water Table (C2)
	ulfide Odor (C1)	Crayfish Burrows (C8)
	zospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck S	-	Shallow Aquitard (D3)
<u> </u>	in in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	-	FAC-Neutral Test (D5)
Field Observations:	-	
Surface Water Present? Yes X No Depth (inch	nes): 4.0	
Water Table Present Yes X No Depth (inch	nes): 0 - surface	
Saturation Present Yes X No Depth (inch	nes): 0 - surface Wetland Hy	drology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photo Aerial photo review completed prior to site investigation	os, previous inspections), if availab	le:
Remarks:		
Seasonal inundation and saturation of soils		
Shallow root zone observed		

	T		I	1	
Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Acer saccharinum	45	Yes	FACW	Number of Dominant Species	
2. Acer rubrum	20	Yes	FAC	-	(A)
3.				Total Number of Dominant	,
4.				7	В)
5.				Percent of Dominant Species	,
6.					A/B)
7.				(, ,
50% = 32.5, 20% = 13	65	= Total Cove	er	Prevalence Index Worksheet:	
Sapling/Shrub Stratum (Plot Size: feet)			_	Total % Cover of: Multiply by:	
1.				OBL speciesx1 =	
2.				FACW speciesx 2 =	
3.				FAC speciesx 3 =	
4.				FACU species x 4 =	
5.				UPL species	
6.					B)
7.				(,	
		= Total Cove	er	Prevalence Index = B/A =	
Herb Stratum (Plot Size: 5 feet)					
Toxicodendron radicans	5	Yes	FAC	Hydrophytic Vegetation Indicators:	
Boehmeria cylindrica	3	Yes	FACW	- Rapid Test for Hydrophytic Vegetation	
3.		103	TAOW	X Dominance Test is >50%	
4.				Prevalence Index is =3.01</td <td></td>	
5.				Morphological Adaptations ¹ (Provide supporting	
6.				Data in Remarks or on a separate sheet)	
7.				Problematic Hydrophytic Vegetation ¹ (Explain)	
8.				¹ Indicators of hydric soil and wetland hydrology must	
9.				Be present, unless disturbed or problematic.	
10.				Definitions of Vegetation Strata:	
11.				Deminions of Vegetation of dua.	
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter	
13.				at breast height (DBH), regardless of height.	
14.				Sapling/shrub – Woody plants less than 3 in. DBH	
50% = 4, 20% = 1.6	8	= Total Cove	l ⊃r	and greater than 3.28 ft (1 m) tall.	
Woody Vine Stratum: (Plot Size: 15 feet)	- i	_ 1 otal 0 ov	<u>51</u>	Herb – All herbaceous (non-woody) plants, regardless	
1.				of size, and woody plants less than 3.28 ft tall.	
2.				Woody vines – All woody vines greater than 3.28 ft in	
3.				height.	
4.				noight.	
5.					
6.				Vegetation	
7.				Present? Yes X No	
		= Total Cove	er		
Remarks: (Include photo numbers here or on a s	eparate sheet		<u> </u>		
Physic 40					
Photo 10					

SOIL Sampling Point: C1- wet

Profile Desc	cription: (Describe to	the depth ne	eded to document t	the indica	tor or co	nfirm the a	bsence of in	dicators.)	
	Matrix	-		ox Feature		I		I	
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-3	10 YR 2/1	100	-	-		-	Loam	7101101110	
3-8	10 YR 3/1	88	10 YR 4/2	12	С	М	Loam		
8-11+	10 YR 5/1	100	-	-	-	-	Fine sand		
0-111	10 110 3/1	100					Tillo Salio		
¹ Type: C=C	oncentration, D=Depleti	on, RM=Redu	iced Matrix, CS= Co	vered or C	Coated Sai	nd Grains.		n: PL=Pore Lining, M=Matrix.	
Hydric Soils	Indicators:						Indicators	for Problematic Hydric Soils ³ :	
Histosol	I (A1)		Polyvalue Below	/ Surface ((S8) (LRR	R,	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)	
Histic E	pipedon (A2)		MLRA 149B	3)			Coast	Prairie Redox (A16) (LRR K, L, 4)	
Black H	istic (A3)	_	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B)	5 cm N	Mucky Peat or Peat (S3) (LRR K, L, R)	
Hydroge	en Sulfide (A4)	_	Loamy Mucky M	lineral (F1) (LRR K,	L)	Dark S	Surface (S7) (LRR K, L)	
Stratifie	d Layers (A5)		Loamy Gleyed N	/latrix (F2)			Polyvalue Below Surface (S8) (BLRR K, L)		
Deplete	d Below Dark Surface (A11)	X Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Thick D	ark Surface (A12)	_	Redox DarkSurf						
	Mucky Mineral (S1)	_	Depleted Dark S		7)				
	Gleyed Matrix (S4)		Redox Depressi	ons (F8)					
	Redox (S5)							arent Material (TF2)	
	Matrix (S6)		<u> </u>					Shallow Dark Surface (TF12)	
Dark Su	ırface (S7) (LRR R, ML	RA 149B)	_				Other	(Explain in Remarks)	
³ Indicators of	hydrophytic vegetation	and wetland	hydrology must be p	resent, un	less distu	bed or pro	blematic.		
Restrictive L	_ayer (if observed):								
Type:									
Depth (i	inches).		<u>—</u>				Hydric Soi	I Present? Yes X No	
Ворит (Tiyano oo	105 <u>X</u> 100	
Remarks:									
St – local hyd	dric soil unit								

Project/Site:	City/County: Monroe Sampling Date: 10/7/11
Applicant/Owner: Waste Management of New York, LLC	State: NY Sampling Point: D-1 WET
Investigator(s): Todd J. Phillips	Section, Township, Range: Town of Riga
Landform (hillslope, terrace, etc.)::	Local relief (concave, convex, none): Concave
Slope (%): <u>0-2</u> Lat:	
Soil Map Unit Name:: Ca-Canandaigua Silt Loam	
Are climatic/hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significan	
Are Vegetation, Soil, or Hydrology Naturally	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
	Is the Sampled Area within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: D-1 WET
welland hydrology Fresent?	ii yes, optional wetiand Site ib b-1 we1
Remarks: (Explain alternative procedures here or in a separate report	t.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
	d Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Faun	
Saturation (A3) Marl Deposits	<u>—</u> ,
	fide Odor (C1) Crayfish Burrows (C8)
	cospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Su	
Inundation Visible on Aerial Imagery (B7) Other (Explai Sparsely Vegetated Concave Surface (B8)	n in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Spaisely vegetated concave Surface (Do)	1 AC-Neutral 1 est (D3)
Field Observations:	
Surface Water Present? Yes No _X _ Depth (inch	es):
Water Table Present Yes No _X _ Depth (inch	es):
Saturation Present Yes No _X Depth (inch	es): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	is, previous inspections), if available:
Remarks: Very tight soils, two secondary indicators present, soil expected to be	saturated during spring and initial plant growth.

VEGETATION – Use scientific names of	f plants.			S	ampling Point: D1-V	<u>VET</u>
Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
Acer rubrum	60	YES	FAC	Number of Dominant Species		
Fraxinus pennsylvanica	20	YES	FACW	That Are OBL, FACW, or FAC:	5	(A)
Populus deltoides	3	NO	FAC	Total Number of Dominant		(7.1)
4.			.,,,,	Species Across All Strata:	5	(B)
5.				Percent of Dominant Species		(-)
6.				That Are OBL, FACW, or FAC:	100	(A/B)
7.				111007110 002, 171011, 01 17101		(,,,,)
	83	= Total Cov	er	Prevalence Index Worksheet:		
Sapling/Shrub Stratum (Plot Size: 15 feet)				Total % Cover of:	Multiply by:	
Fraxinus pennsylvanica	5	YES	FAC			
2.	3	ILO	170	1 · · · · · · · · · · · · · · · · · · ·	x 1 = x 2 =	
3.						
4.				·	x 3 =	
				· · · · · · · · · · · · · · · · · · ·	x 4 =	
5.					x 5 =	
6.				Column Totals:	(A)	(B)
7.		T / 10		-		
Horb Stratum (Dist Cine) First	5	= Total Cov	er	Prevalence Index = B/A =	=	
Herb Stratum (Plot Size: 5 feet) 1. Fraxinus pennsylvanica	3	YES	FAC	Hydrophytic Vegetation Indicators	<u> </u>	
Toxicodendron radicans	3	YES	FAC	Rapid Test for Hydrophytic Ve		
3. Rosa spp.	-	-	-	X Dominance Test is >50%	getation	
				Prevalence Index is #3.0 ¹		
4. 5.				Morphological Adaptations ¹ (F	Provide supporting	
6.				Data in Remarks or on a Problematic Hydrophytic Vege		
7.				¹ Indicators of hydric soil and wetland		
8. 9.				Be present, unless disturbed or prob		
10.				Definitions of Vegetation Strata:	nemanc.	
11.				Deminions of Vegetation Strata.		
12.				Tree - Woody plants 3 in. (7.6 cm) of	or more in diameter	
13.				at breast height (DBH), regardless o		
14.				Sapling/shrub – Woody plants less	-	
14.	6	= Total Cov	l ≙r	and greater than 3.28 ft (1 m) tall.	tilali 3 ili. DBH	
Woody Vine Stratum: (Plot Size: 30 feet)	Ü	= 10(a) 000	CI	Herb – All herbaceous (non-woody)	nlante regardless	
1.				of size, and woody plants less than 3	-	
2.				Woody vines – All woody vines greater		
3.				height.		
4.				g.m		
5.				Hydrophytic		
6.				Vegetation		
7.				Present? Yes X	No	
		= Total Cov	er	1		
Remarks: (Include photo numbers here or on a se	parate sheet	.)				

SOIL Sampling Point: D-1 WET

Profile Desc	cription: (Describe to	the depth r	needed to document	the indica	tor or cor	nfirm the a	bsence of in	dicators.)		
Matrix Redox Features								, I		
Depth (inches)	Color (moist)	%	Color (moist)							
0-7"	10YR 2/1	100					Silt Ioam			
7-11+	10YR 5/3	85	10YR 5/8	15	С	Р	Silty Clay Loam			
				+						
				+						
				+						
1- 0.0							2,			
	oncentration, D=Depleti	on, RM=Re	duced Matrix, CS= Co	vered or C	Coated Sai	nd Grains.		on: PL=Pore Lining, M=Matrix.		
Hydric Soils	indicators:						indicators	for Problematic Hydric Soils ³ :		
Histosol	` '		Polyvalue Below		(S8) (LRR	R,		Muck (A10) (LRR K, L, MLRA 149B)		
	pipedon (A2)		MLRA 149E	,				Prairie Redox (A16) (LRR K, L, 4)		
	istic (A3)		Thin Dark Surfa					Mucky Peat or Peat (S3) (LRR K, L, R)		
	en Sulfide (A4)		Loamy Mucky N			L)	Dark Surface (S7) (LRR K, L)			
	d Layers (A5)		Loamy Gleyed N				Polyvalue Below Surface (S8) (BLRR K, L) This Dark Surface (S9) (LRR K, L)			
-	d Below Dark Surface (A11)	X Depleted Matrix	` '			Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)			
	ark Surface (A12)		Redox DarkSurf Depleted Dark S		<u> </u>					
	Mucky Mineral (S1) Gleyed Matrix (S4)				()		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	Redox (S5)		Redox Depressi	Redox Depressions (F8)				Red Parent Material (TF2)		
	Matrix (S6)							Very Shallow Dark Surface (TF12)		
	rface (S7) (LRR R, ML	RA 149B)		Other (Explain in Remark:				, ,		
	hydrophytic vegetation		 nd hydrology must be r	oresent, un	less distu	bed or pro		(
	ayer (if observed):					•				
Type: _		-								
Depth (i	nches):						Hydric Soi	I Present? Yes <u>X</u> No		
Remarks:										
rtomano.										

Project/Site:	City/County: Monroe Sampling Date: 10/7/11
Applicant/Owner: Waste Management of New York, LLC	State: NY Sampling Point: D-2 WET
Investigator(s): Todd J. Phillips	Section, Township, Range: _Town of Riga
Landform (hillslope, terrace, etc.)::	Local relief (concave, convex, none): Convex
Slope (%): _0-2	Long: Datum: NAD 83
Soil Map Unit Name:: Ca-Canandaigua Silt Loam	NWI classification: PFO1E
Are climatic/hydrologic conditions on the site typical for this time of y	rear? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significa	ntly disturbed? Are "Normal Circumstances" present? Yes? X_No
Are Vegetation, Soil, or Hydrology Naturally	y problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: D-2 WET
Remarks: (Explain alternative procedures here or in a separate repo	ort.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) X Water-Stain	
High Water Table (A2) Aquatic Fau	
Saturation (A3) Marl Deposi	
	ulfide Odor (C1) Crayfish Burrows (C8)
	izospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1) Stunted or Stressed Plants (D2)
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Shallow Assistant (D2)
Iron Deposits (B5) Thin Muck S Inundation Visible on Aerial Imagery (B7) Other (Expla	<u>—</u>
Sparsely Vegetated Concave Surface (B8)	in in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (incl	·
Water Table Present Yes No X Depth (included) Saturation Present Yes No X Depth (included)	
Saturation Present Yes No _X Depth (includes capillary fringe)	welland nydrology Present? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Demostra	
Remarks:	
•	

Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
Acer rubrum	60	YES	FAC	Number of Dominant Species			
Fraxinus pennsylvanica	15	YES	FACW	That Are OBL, FACW, or FAC:	4	(A)	
Populus deltoides	3	NO	FAC	Total Number of Dominant			
4.				Species Across All Strata:	4	(B)	
5.				Percent of Dominant Species			
6.				That Are OBL, FACW, or FAC:	100	(A/B)	
7.							
	78	= Total Cove	er	Prevalence Index Worksheet:			
Sapling/Shrub Stratum (Plot Size: 15 feet)				Total % Cover of:	Multiply by:		
Fraxinus pennsylvanica	10	YES	FAC		_ x 1 =		
Acer saccharinum	5	YES	FACW	·	x 2 =		
3.					x 3 =		
4.					x 4 =		
					<u> </u>		
5.				1 -	_ x 5 =		
6.				Column Totals:	_ (A)	(B)	
7.	45	Tetal Caus		Dravalance ladev D/A			
	15	= Total Cove	er	Prevalence Index = B/A =			
Herb Stratum (Plot Size: 5 feet)			I				
1. Rosa spp.	-	-	-	Hydrophytic Vegetation Indicators:			
2.				Rapid Test for Hydrophytic Veg	etation		
3.				X Dominance Test is >50%			
4.				Prevalence Index is #3.0 ¹			
5.				Morphological Adaptations ¹ (Provide supporting			
6.				Data in Remarks or on a separate sheet)			
7.				Problematic Hydrophytic Veget			
8.				¹ Indicators of hydric soil and wetland	nydrology must		
9.				Be present, unless disturbed or proble	ematic.		
10.				Definitions of Vegetation Strata:			
11.							
12.				Tree - Woody plants 3 in. (7.6 cm) or	more in diameter		
13.				at breast height (DBH), regardless of	height.		
14.				Sapling/shrub – Woody plants less the	nan 3 in. DBH		
	-	= Total Cove	er	and greater than 3.28 ft (1 m) tall.			
Woody Vine Stratum: (Plot Size: 30 feet)				Herb – All herbaceous (non-woody) p	ants, regardless		
1.				of size, and woody plants less than 3.	28 ft tall.		
2.				Woody vines - All woody vines great	er than 3.28 ft in		
3.				height.			
4.							
5.				Hydrophytic			
6.				Vegetation			
7.				Present? Yes X	No		
	-	= Total Cove	er				
Remarks: (Include photo numbers here or on a sep	parate sheet.)					

Sampling Point: <u>D2-WET</u>

SOIL Sampling Point: <u>D-2 WET</u>

Profile Desc	ription: (Describe to	the depth r	eeded to document	the indica	tor or cor	nfirm the a	bsence of in	dicators.)			
Í	 Matrix	· 1		ox Feature		I		, 			
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-8"	10YR 4/1	95	10YR 6/6	5	С	Р	Silt loam				
8-15+	10YR 6/2	85	10YR 5/6	15	С	Р	Silty Clay Loam				
				1							
				+							
				1							
				+							
1- 0.0							2,				
	oncentration, D=Depleti	on, RM=Re	duced Matrix, CS= Co	vered or C	Coated Sai	nd Grains.		n: PL=Pore Lining, M=Matrix.			
Hydric Soils	indicators:						indicators	for Problematic Hydric Soils ³ :			
Histosol	` '	-	Polyvalue Below		(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
	pipedon (A2)		MLRA 149B	,			Coast Prairie Redox (A16) (LRR K, L, 4)				
	istic (A3)	-	Thin Dark Surface								
	en Sulfide (A4)	-	Loamy Mucky M			L)		Surface (S7) (LRR K, L)			
	d Layers (A5)		Loamy Gleyed N					alue Below Surface (S8) (BLRR K, L)			
-	d Below Dark Surface (A11) _	X Depleted Matrix					eark Surface (S9) (LRR K, L)			
	ark Surface (A12)	-	Redox DarkSurf Depleted Dark S		7)			anganese Masses (F12) (LRR K, L, R)			
	Mucky Mineral (S1) Bleyed Matrix (S4)	-		Redox Depressions (F8)				Piedmont Floodplain Soils (F19) (MLRA 1498 Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	Redox (S5)	-	Redox Depressi	0113 (1 0)			Red Parent Material (TF2)				
	Matrix (S6)							Very Shallow Dark Surface (TF12)			
	rface (S7) (LRR R, ML I	RA 149B)					Other (Explain in Remarks)				
	hydrophytic vegetation	-	—— d hvdrologv must be c	oresent. un	ıless distu	bed or pro	· <u></u>	(
	.ayer (if observed):					•					
Type: _ Depth (i							Hydric Soi	I Present? Yes X No			
Deptii (i	nones).						Hydric 30i	Trieseilt: Tes 🔨 NO			
Remarks:											

Project/Site:	City/County: Monroe	Sampling Date: 10/7/11							
Applicant/Owner: Waste Management of New York,	LLC	State: NY Sampling Point: D-2 DRY							
Investigator(s): Todd J. Phillips	Section, Township, Range: To	wn of Riga							
Landform (hillslope, terrace, etc.):: Hillslope	Local relief (conca	ave, convex, none): Concave							
Slope (%): _0-2	Long:	Datum: NAD 83							
Soil Map Unit Name:: Ca-Canandaigua Silt Loam		NWI classification:							
Are climatic/hydrologic conditions on the site typical f	or this time of year? Yes X No	_ (If no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norma	al Circumstances" present? Yes? X No							
Are Vegetation, Soil, or Hydrology _	Naturally problematic? (If needed,	explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site r	map showing sampling point location	ns, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area								
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X							
Wetland Hydrology Present? Yes	No X If yes, optional Wetland S	Site ID: D-2 DRY							
Remarks: (Explain alternative procedures here or in a separate report.)									
HYDROLOGY									
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required; check	call that apply)	Surface Soil Cracks (B6)							
Surface Water (A1)	_ Water-Stained Leaves (B9)	Drainage Patterns (B10)							
High Water Table (A2)	_ Aquatic Fauna (B13)	Moss Trim Lines (B16)							
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)							
Water Marks (B1)	_ Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)							
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)							
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)							
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)							
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	_ Thin Muck Surface (C7) Other (Explain in Remarks)	Shallow Aquitard (D3) Microtopographic Relief (D4)							
Sparsely Vegetated Concave Surface (B8)	_ Other (Explain in Kemarks)	FAC-Neutral Test (D5)							
Field Observations:	Double (South on)								
Surface Water Present? Yes No X	<u> </u>								
Water Table Present Yes No X Saturation Present Yes No X	 ' ` ` ′	Hydrology Present? Yes No X							
(includes capillary fringe)	Deptir (inches).	Hydrology Present? Yes No _X_							
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if availa	able:							
Remarks:									

T O((D)	. 0:	Absolute	Dominant	Indicator					
Tree Stratum (Plo	ot Size: 30 feet)	% Cover	Species?	Status	Dominance Test Worksheet	i:			
I. Acer rubru	m	20	YES	FAC	Number of Dominant Species	3			
2. Prunus pei	nsylvanica	7	YES	FACU	That Are OBL, FACW, or FA			2	(A)
3. Prunus ser	otina	7	YES	UPL	Total Number of Dominant				
4.					Species Across All Strata:			5	(B)
5.					Percent of Dominant Species	5			_ ` ^
6.					That Are OBL, FACW, or FA			40	(A/E
7.								-	_ ` `
•		34	= Total Cov	er	Prevalence Index Workshe	et:			
Sanling/Shruh Str	atum (Plot Size: 15 feet	\			Total % Cover of:		N Acultic	oly by:	
		25	YES	FAC		0			
 Cornus rac Lonicera ta 		5	NO NO	FACU	OBL species		_ x 1 = _		_
		5			FACW species		_ x 2 = _		_
	пенсана	5	NO	FACU	FACILIAN ASSISTA		_ x 3 = _		_
4.						22			_
5.					UPL species	7			_
6.					Column Totals:	77	_ (A) _	264	_ (B)
7.									
		35	= Total Cov	er	Prevalence Index	= B/A =	3.4		
Herb Stratum (Plo	ot Size: 5 feet)		T	T					
1. Rosa spp.		-	-	-	Hydrophytic Vegetation Inc				
Lonicera ta	tarica	5	YES	FACU					
3.					Dominance Test is >50%				
4.					Prevalence Index is #3.0 ¹				
5.					Morphological Adaptations ¹ (Provide supporting				
6.					Data in Remarks or on a separate sheet)				
7.					Problematic Hydrophyt				
8.					¹ Indicators of hydric soil and			gy must	
9.					Be present, unless disturbed		matic.		
10.					Definitions of Vegetation S	trata:			
11.									
12.					Tree - Woody plants 3 in. (7			n diameter	•
13.					at breast height (DBH), regar	dless of h	neight.		
14.					Sapling/shrub – Woody plan		nan 3 in	. DBH	
		5	= Total Cov	er	and greater than 3.28 ft (1 m) tall.			
	ım: (Plot Size: 30 feet)	ı	ı	Herb – All herbaceous (non-	• • • •		•	
 Vitis riparia 	1	3	YES	FACW	of size, and woody plants les				
2.					Woody vines – All woody vin	nes great	er than	3.28 ft in	
3.					height.				
4.					4				
5.					Hydrophytic				
6.					Vegetation				
					Present? Yes		No _>	<u> </u>	
7.		3	= Total Cove	or	I				

SOIL Sampling Point: D-2 DRY

Profile Desc	cription: (Describe to	the depth i	needed to document	the indica	tor or cor	nfirm the a	bsence of in	dicators.)			
	Matrix	- 1	Redo	ox Feature	es	I		1			
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-12"	10YR 3/2	100					Silt loam				
12-15+	10YR 4/3	85	10YR 4/6	15	С	Р	Silty Clay Loam				
				1							
				+							
				+							
				_							
4							2				
	oncentration, D=Deplet	ion, RM=Re	duced Matrix, CS= Co	vered or C	Coated Sar	nd Grains.		n: PL=Pore Lining, M=Matrix.			
Hydric Soils	Indicators:						Indicators	for Problematic Hydric Soils ³ :			
Histosol	(A1)		Polyvalue Below	v Surface ((S8) (LRR	R,	2 cm M	Muck (A10) (LRR K, L, MLRA 149B)			
Histic E	pipedon (A2)		MLRA 149B	3)			Coast Prairie Redox (A16) (LRR K, L, 4)				
Black H	istic (A3)		Thin Dark Surfa	ce (S9) (L	RR R, ML	RA 149B)					
	en Sulfide (A4)		Loamy Mucky M			L)		Surface (S7) (LRR K, L)			
	d Layers (A5)		Loamy Gleyed N					alue Below Surface (S8) (BLRR K, L)			
-	d Below Dark Surface (A11)	Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)				
	ark Surface (A12)		Redox DarkSurf		_,		Iron-Manganese Masses (F12) (LRR K, L, R)				
	Mucky Mineral (S1)		Depleted Dark S		7)		Piedmont Floodplain Soils (F19) (MLRA 149B)				
	Gleyed Matrix (S4)		Redox Depressi	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
-	Redox (S5)							Red Parent Material (TF2)			
	Matrix (S6)	D A 4 40D)	 ;				Very Shallow Dark Surface (TF12)Other (Explain in Remarks)				
	ırface (S7) (LRR R, ML							(Explain in Remarks)			
	hydrophytic vegetation	and wetlar	d hydrology must be p	resent, un	less distur	bed or pro	blematic.				
	ayer (if observed):										
Type: _											
Depth (i	nches):						Hydric Soi	I Present? Yes No _X			
Remarks:							· I				

Project/Site:					_ City/Count	y: Monroe			Sampling Da	te: <u>10/7</u>	7/11
Applicant/Owner: Waste Ma	anagement o	of New Yo	ork, LLC				State	e: NY	Samplin	g Point:	D-3 WET
Investigator(s): Todd J. Phil	lips				Section, To	ownship, Range	e: Town of F	Riga			
Landform (hillslope, terrace,	etc.)::					Local relief	(concave, cor	nvex, none)	: Convex		
Slope (%): <u>0-2</u> La	at:				Long:				Datum: N	AD 83	
Soil Map Unit Name:: Ca-Ca											
Are climatic/hydrologic condi	tions on the	site typic	al for thi	s time of	year? Yes	X No	(If no	o, explain in	Remarks.)		
Are Vegetation, Soil	, or H	Hydrology	·	_ significa	antly disturbed	l? Are "I	Normal Circui	mstances" p	oresent? Ye	s? <u>X</u>	No
Are Vegetation, Soil	, or H	Hydrology		Natural	ly problematio	? (If ne	eded, explain	any answe	ers in Remarks	s.)	
SUMMARY OF FINDIN	NGS – Att	ach sit	e map	showii	ng samplir	ng point loc	ations, tra	ansects,	important f	feature	s, etc.
Hydrophytic Vegetation Pres	ent?	Υe	es X	No	lo ti	ne Sampled Ar	roo				
Hydric Soil Present?		Υe	s X	No _	with	nin a Wetland?	?	Yes	X No		
Wetland Hydrology Present?	,	Υe	s X	No	If ye	es, optional We	etland Site ID:	D-3 WET			
Remarks: (Explain alternativ	e procedure	es here o	r in a sep	oarate rep	port.)						
HYDROLOGY											
Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Ae Sparsely Vegetated Cor Field Observations: Surface Water Present? Water Table Present	erial Imagery ncave Surfac Yes Yes	v (B7) ce (B8) No No	X W Ac	rater-Stair quatic Fau arl Depos ydrogen S xidized RI resence o ecent Iron nin Muck S ther (Expl	ned Leaves (Buna (B13) its (B15) Sulfide Odor (Chizospheres of f Reduced Iro a Reduction in Surface (C7) ain in Remark	C1) n Living Roots n (C4) Tilled Soils (C6	(C3) 6)	Surface So Drainage F Moss Trim Dry-Seaso Crayfish B Saturation Stunted or Geomorph Shallow Ac Microtopog FAC-Neutr	cators (minimu bil Cracks (B6) Patterns (B10) Lines (B16) n Water Table urrows (C8) Visible on Aer Stressed Plan ic Position (D2 quitard (D3) graphic Relief (al Test (D5)	e (C2) rial Image ats (D1) 2) (D4)	
Saturation Present	Yes X	No		Depth (inches):7	"	Wet	land Hydrolo	ogy Presen	t? Yes >	No	
(includes capillary fringe)											
Describe Recorded Data (st	ream gauge	, monitori	ng well,	aerial pho	otos, previous	inspections), if	f available:				
Remarks:											

Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
Acer rubrum	60	YES	FAC	Number of Dominant Species			
2.				That Are OBL, FACW, or FAC:	3	(A)	
3.				Total Number of Dominant	_	<i>-</i>	
4.				Species Across All Strata:	3	(B)	
5.				Percent of Dominant Species			
6.				That Are OBL, FACW, or FAC:	100	(A/B)	
7.	60	= Total Cove	er	Prevalence Index Worksheet:			
Sapling/Shrub Stratum (Plot Size: 15 feet)				<u>Total % Cover of:</u>	Multiply by:		
Fraxinus pennsylvanica	15	YES	FAC		x 1 =		
2. Acer rubrum	3	YES	FAC	·	x 2 =		
3.					x 3 =		
4.					x 4 =		
5.				<u> </u>			
6.					x 5 = (A)		
7.					_ (A)	(D)	
	18	= Total Cove	er	Prevalence Index = B/A =			
Herb Stratum (Plot Size: 5 feet)							
1. Rosa spp.	-	-	-	Hydrophytic Vegetation Indicators:			
2.				Rapid Test for Hydrophytic Veg	etation		
3.				X Dominance Test is >50%			
4.				Prevalence Index is #3.0 ¹			
5.				Morphological Adaptations ¹ (Pro	ovide supporting		
6.				Data in Remarks or on a separate sheet)			
7.				Problematic Hydrophytic Vegeta			
8.				¹ Indicators of hydric soil and wetland h	ydrology must		
9.				Be present, unless disturbed or proble	matic.		
10.				Definitions of Vegetation Strata:			
11.							
12.				Tree - Woody plants 3 in. (7.6 cm) or			
13.				at breast height (DBH), regardless of h	•		
14.				Sapling/shrub – Woody plants less th	nan 3 in. DBH		
	-	= Total Cove	er	and greater than 3.28 ft (1 m) tall.			
Woody Vine Stratum: (Plot Size: 30 feet)				Herb – All herbaceous (non-woody) pl	•		
1.				of size, and woody plants less than 3.2			
2.				Woody vines – All woody vines great	er than 3.28 ft in		
3.				height.			
4.							
5.				Hydrophytic			
6.				Vegetation			
7.		Tetal Caus	_	Present? Yes X	No		
Remarks: (Include photo numbers here or on a se	-	= Total Cove)				
		,					

Sampling Point: <u>D3-WET</u>

SOIL Sampling Point: D-3 WET

Profile Desc	cription: (Describe to	the depth nee	eded to document	the indica	tor or cor	nfirm the a	absence of indicators.)				
Depth	Matrix		Red	ox Feature	s		1				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks				
10-0	10YR 2/1						Fibric peat				
0-5+	10YR 5/1	90	10YR 5/6	10	С	М	Sand				
		+ +									
		1									
				+	 						
		+ +									
		+ +		1							
		+									
		+ +									
		+		+	 						
1_							2				
	oncentration, D=Depleti	ion, RM=Redu	ced Matrix, CS= Co	overed or C	oated Sar	nd Grains.	² Location: PL=Pore Lining, M=Matrix.				
Hydric Soils							Indicators for Problematic Hydric Soils ³ :				
Histosol	` '	_	Polyvalue Belov		S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
	pipedon (A2)		MLRA 149E	,	DD D MI	DA 440D\	Coast Prairie Redox (A16) (LRR K, L, 4) X 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
	istic (A3)		Thin Dark Surfa				Dark Surface (S7) (LRR K, L)				
	en Sulfide (A4) d Layers (A5)	Loamy Mucky N Loamy Gleyed I			L)	Polyvalue Below Surface (S8) (BLRR K, L)					
	d Below Dark Surface (X Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)					
	ark Surface (A12)		Redox DarkSurf				Iron-Manganese Masses (F12) (LRR K, L, R)				
	Mucky Mineral (S1)		— Depleted Dark S		7)		Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy 0	Gleyed Matrix (S4)	_	Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy F	Redox (S5)						Red Parent Material (TF2)				
Striped	Matrix (S6)	_					Very Shallow Dark Surface (TF12)				
Dark Su	ırface (S7) (LRR R, ML	RA 149B)					Other (Explain in Remarks)				
³ Indicators of	hydrophytic vegetation	and wetland	nydrology must be r	oresent, un	less distur	bed or pro	blematic.				
Restrictive L	_ayer (if observed):										
Type:											
Depth (i	inches):		<u> </u>				Hydric Soil Present? Yes X No				
Remarks:											

Project/Site:	City/County: Monroe Samplin	Sampling Date: 10/7/11		
Applicant/Owner: Waste Management of New York, LLC	State: NY Sar	mpling Point: D-3 UPL		
Investigator(s): Todd J. Phillips	Section, Township, Range: Town of Riga			
	Local relief (concave, convex, none): Conca	ave		
Slope (%): _2-8 Lat:	Long: Datum	n: NAD 83		
	NWI classification:	·		
Are climatic/hydrologic conditions on the site typical for this time of				
Are Vegetation, Soil, or Hydrology signification				
Are Vegetation, Soil, or Hydrology Natural				
SUMMARY OF FINDINGS – Attach site map showing		ant features, etc.		
Hydrophytic Vegetation Present? Yes No	x			
Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes No	X		
	X If yes, optional Wetland Site ID: D-3 UPL			
Welland Trydrology Fresent:	ii yes, optional wetiand site ibb-s or t			
Remarks: (Explain alternative procedures here or in a separate rep	ort.)			
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indicators (mi	nimum of two required)		
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks	(B6)		
	ed Leaves (B9) Drainage Patterns (I			
High Water Table (A2) Aquatic Fau				
Saturation (A3) Marl Depos		Dry-Season Water Table (C2)		
Water Marks (B1) Hydrogen S		Crayfish Burrows (C8)		
		Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)		
	Reduced Iron (C4) Stunted or Stressed Reduction in Tilled Soils (C6) Geomorphic Positio	, ,		
	Surface (C7) Shallow Aquitard (D			
	ain in Remarks) Microtopographic R	,		
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (E	, ,		
		-,		
Field Observations:				
Surface Water Present? Yes No X Depth (inc	,			
Water Table Present Yes No X Depth (inc	,			
Saturation Present Yes No X Depth (inc	hes): Wetland Hydrology Present? Yes	s No <u>X</u>		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos previous inspections) if available:			
Describe Necorded Data (Stream gauge, monitoring well, acrial pile	tos, previous inspections), il available.			
Remarks:				
•				

Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
Acer sacchrum	20	YES	FACU	Number of Dominant Species			
Crataegus spp.	-	-	-	That Are OBL, FACW, or FAC:		1	(A)
Prunus serotina	7	No	UPL	Total Number of Dominant	_	<u>'</u>	(A)
4. Malus spp.	-	-	-	Species Across All Strata:		3	(B)
5. Ulmus americana	10	YES	FACW	Percent of Dominant Species			(D)
	10	TES	FACW			22	(A/B)
6.				That Are OBL, FACW, or FAC.		33	(A/D)
7.	37	= Total Cove	l er	Prevalence Index Worksheet:			
Sapling/Shrub Stratum (Plot Size: 15 feet)				<u>Total % Cover of</u> :	<u>N</u>	lultiply by:	
1.				OBL species	0 x	1 =0	
2.						2 = 20	
3.				FAC species		3 = 0	
4.					20 x 4		
5.					12 x 5		
6.					42 (A		(B)
7.				Column rotals.	42 (7	100	(B)
1.		= Total Cove	or .	Prevalence Index = E	t/Δ = 3	. Q	
Herb Stratum (Plot Size: 5 feet)		= 1 Otal Cove	JI	Prevalence Index = B/A = 3.8			
	5	YES	NI	Hydrophytic Vagatation Indica	tore:		
Symphyotrichum porteri	3	TES	INI	Hydrophytic Vegetation Indica		ian	
2.				Rapid Test for Hydrophytic	vegetat	1011	
3.				Dominance Test is >50%			
4.				Prevalence Index is #3.01	1 (0		-
5.				Morphological Adaptations ¹ (Provide supporting			-
6.				Data in Remarks or on a separate sheet)			
7.				Problematic Hydrophytic Vegetation ¹ (Explain)			
8.				¹ Indicators of hydric soil and wet			
9.				Be present, unless disturbed or p		tic.	
10.				Definitions of Vegetation Strat	a:		
11.				T W	>		
12.				Tree - Woody plants 3 in. (7.6 ci			ter
13.				at breast height (DBH), regardles	_		
14.		Tatal Oass		Sapling/shrub – Woody plants I		3 IN. DBH	
W 4 W 20 1 (2) 22 (2)	5	= Total Cove	er	and greater than 3.28 ft (1 m) tal			
Woody Vine Stratum: (Plot Size: 30 feet)				Herb – All herbaceous (non-wood		-	S
1.				of size, and woody plants less th			
2.				Woody vines – All woody vines	greater ti	nan 3.28 II	ın
3.				height.			
4.				The described of			
5.				Hydrophytic			
6.				Vegetation	N	V	
7.		Tatal Oass		Present? Yes	No	<u>X</u>	
Demontos (Includo abete accesto as bases as	-	= Total Cove)	<u> </u>			
Remarks: (Include photo numbers here or on a se	Jai ale Stieet.	J					

Sampling Point: <u>D3-UPL</u>

SOIL Sampling Point: <u>D-3 UPL</u>

Profile Desc	ription: (Describe to	the depth n	eeded to document	the indica	tor or cor	nfirm the a	absence of indicat	tors.)			
Ī	Matrix	· 1		ox Feature		Ī	1	,			
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-4	10YR 3/1	100		7,0	1 . , , , ,		Sandy	. remaine			
0 4	10 11(0/ 1	100					Loam				
4-9	10YR 4/2	100					Sandy				
		1 1			<u> </u>		Loam				
		 		<u> </u>	<u> </u>						
9-14+	10YR 5/3	45	10YR 5/4	40		М		Mixed matrix			
			10YR 4/4	5	С	PL					
		1		 	1						
				+	1						
		† †		+	†						
1TVD9: C=C(oncentration, D=Depleti	ion RM-Re	duced Matrix CS= Co	L wered or C	L Cated Sa	nd Grains	2l ocation: Pl	L=Pore Lining, M=Matrix.			
Hydric Soils		UII, IXIVI—IXO	Juceu Mailix, 00-00	VEIEU OI C	Maieu Oai	lu Grams.		roblematic Hydric Soils ³ :			
•					/						
Histosol	` '	-	Polyvalue Below		(S8) (LRR	R,		(A10) (LRR K, L, MLRA 149B)			
	pipedon (A2)		MLRA 149B	,	55 5 MI	T 4 440D)		ie Redox (A16) (LRR K, L, 4)			
	istic (A3)	-	Thin Dark Surface					y Peat or Peat (S3) (LRR K, L, R)			
	en Sulfide (A4)	-	Loamy Mucky M			L)		ce (S7) (LRR K, L)			
	d Layers (A5) d Below Dark Surface (^111	Loamy Gleyed N X Depleted Matrix					Below Surface (S8) (BLRR K, L) Surface (S9) (LRR K, L)			
	а веюw Dark Surface (ark Surface (А12)	A11) _	Redox DarkSurf					anese Masses (F12) (LRR K, L, R)			
	Mucky Mineral (S1)	-	Depleted Dark S		7)		Piedmont Floodplain Soils (F19) (MLRA 149B)				
	Gleyed Matrix (S4)	-	Redox Depressi		,			dic (TA6) (MLRA 144A, 145, 149B)			
	Redox (S5)	-		_ readx Depressions (1 d)				Material (TF2)			
	Matrix (S6)							ow Dark Surface (TF12)			
	rface (S7) (LRR R, ML	RA 149B)					Other (Explain in Remarks)				
		_						,			
	hydrophytic vegetation	and wetlan	d hydrology must be p	resent, un	less distui	bed or pro	blematic.				
Restrictive L	.ayer (if observed):										
Туре:											
Depth (i	nches):						Hydric Soil Pre	sent? Yes X No			
Remarks:											

Project/Site: Mahar Propert	City/County: Mo	nroe County		_ Sampling Date:	10/07/11				
Applicant/Owner: Waste Ma			State: New Yo	ork Sampling Po	oint: D-4 Wet				
Investigator(s): Johanna E.	Duffy, Barton & I	oguidice, P	С	Section, Township, Range: _Town of Riga					
Landform (hillslope, terrace,	etc.)::			Loc	cal relief (concave	e, convex, none	e): Concave		
Slope (%): <u>0-2%</u> La								 NAD 83	
Soil Map Unit Name:: Cana									
Are climatic/hydrologic condi									
Are Vegetation, Soil				-			present? Yes?	Y No	
								<u> </u>	
Are Vegetation, Soil SUMMARY OF FINDIN							ers in Remarks.)	tures etc	
SOMMAN OF THE	- Attach	Sile ilia	J SHOWING	Sampling po		, transects,	important real	ures, etc.	
Hydrophytic Vegetation Pres	ent?	Yes >		Is the Sar					
Hydric Soil Present?		Yes>	(No	within a V	Vetland?	Yes	X No		
Wetland Hydrology Present?		Yes>	(No	If yes, opti	ional Wetland Sit	e ID: Wetland	D		
Remarks: (Explain alternativ	e procedures he	re or in a se	eparate repor	.)					
HYDROLOGY									
Wetland Hydrology Indicate	ors:					Secondary Indi	cators (minimum of	two required)	
Primary Indicators (minimum	of one is require	d; check all	that apply)		_	Surface S	oil Cracks (B6)		
Surface Water (A1)				Leaves (B9)	_		Patterns (B10)		
High Water Table (A2)			quatic Fauna		_		n Lines (B16)		
X Saturation (A3)			Marl Deposits		_		on Water Table (C2	<u>'</u>)	
Water Marks (B1)			-	ide Odor (C1)	Danta (C2)		Burrows (C8)		
Sediment Deposits (B2)				ospheres on Livin	-		Note that the North Americal In		
Drift Deposits (B3) Algal Mat or Crust (B4)				educed Iron (C4) eduction in Tilled	_		r Stressed Plants (I hic Position (D2)	J1)	
Iron Deposits (B5)			hin Muck Su				quitard (D3)		
Inundation Visible on Ae	erial Imagery (B7)			in Remarks)	graphic Relief (D4)				
Sparsely Vegetated Cor			()	,	-		tral Test (D5)		
Field Observations:									
Surface Water Present?	Yes1	No X	Depth (inche	s): 0					
Water Table Present	Yes 1	No X	Depth (inche	s): >12.0					
Saturation Present	Yes X 1	No	Depth (inche	s): 0 - surface	Wetland Hy	drology Presei	nt? Yes	No X	
(includes capillary fringe)									
Describe Recorded Data (str Aerial photo review complete	0 0 .	J	, aerial photo	s, previous inspe	ctions), if availabl	le:			
Remarks:									
Remarks.									

Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.		· ·	2.3.00	Number of Dominant Species	
2.				· ·	۹)
3.				Total Number of Dominant	•,
4.				7	3)
5.				Percent of Dominant Species	٥,
6.				'	4/B)
7.				That Are OBL, FACW, or FAC:	ч Б)
		= Total Cove	er	Prevalence Index Worksheet:	
Sapling/Shrub Stratum (Plot Size: 15 feet)				Total % Cover of: Multiply by:	
1. Cornus amomum	10	Yes	FACW	OBL speciesx 1 =	
2.				FACW species x 2 =	
3.				FAC species x 3 =	
4.				FACU species x 4 =	
5.				UPL species x 5 =	
6.				Column Totals: (A) (E	3)
7.				(-,-,	-,
50% = 5, 20% = 2	10	= Total Cove	er	Prevalence Index = B/A =	
Herb Stratum (Plot Size: 5 feet)	10	- 1 otal 001	<u> </u>	Trovalonos masix = 5/1 =	
1. Typha x glauca	20	Yes	OBL	Hydrophytic Vegetation Indicators:	
Symphyotrichum novi-belgii	25	Yes	FACW	X Rapid Test for Hydrophytic Vegetation	
3. Leersia oryzoides	30	Yes	OBL	Dominance Test is >50%	
4. Epilobium hirsutum	5	No	FACW	Prevalence Index is =3.0<sup 1	
5.	3	INO	FACVV	Morphological Adaptations ¹ (Provide supporting	
6.				Data in Remarks or on a separate sheet)	
7.				Problematic Hydrophytic Vegetation ¹ (Explain)	
8.				¹Indicators of hydric soil and wetland hydrology must	
9.				Be present, unless disturbed or problematic.	
10.				Definitions of Vegetation Strata:	
11.				-	
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter	
13.				at breast height (DBH), regardless of height.	
14.				Sapling/shrub – Woody plants less than 3 in. DBH	
50% = 40, 20% = 16	80	= Total Cove	er	and greater than 3.28 ft (1 m) tall.	
Woody Vine Stratum: (Plot Size: 15 feet)			1	Herb – All herbaceous (non-woody) plants, regardless	
1. Vitis riparia	2	Yes	FACW	of size, and woody plants less than 3.28 ft tall.	
2.				Woody vines – All woody vines greater than 3.28 ft in	
3.				height.	
4.				4	
5.				Hydrophytic	
6.				Vegetation	
7.				Present? Yes X No	
50% = 1, 20% = 0.4	2	= Total Cove	er		
Remarks: (Include photo numbers here or on a s	eparate sheet	.)			
Photos 1 - 7					

SOIL Sampling Point: D4<u>- wet</u>

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
	Matrix	I	Redo	x Feature	s	I		i		
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-4	10 YR 2/2	100	-	-		-	Sand loam	Komano		
4-8	10 YR 4/2	95	10 YR 4/6	5	С	М	Sand loam			
8-12+	10 YR 4/1	90	10 YR 4/6	10	С	M	Sand loam	Iron deposits		
0-12+	10 110 4/1	30	10 11(4/0	10		IVI	Sand Ibani	non deposits		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS= Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.										
Hydric Soils	Indicators:						Indicators	for Problematic Hydric Soils ³ :		
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)										
Histic E	pipedon (A2)		MLRA 149B))			Coast	Prairie Redox (A16) (LRR K, L, 4)		
Black H	istic (A3)		Thin Dark Surface	e (S9) (L	RR R, ML	RA 149B)	5 cm N	Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydroge	en Sulfide (A4)		Loamy Mucky M			L)	Dark S	Surface (S7) (LRR K, L)		
Stratifie	d Layers (A5)		Loamy Gleyed M	1atrix (F2)			Polyva	llue Below Surface (S8) (BLRR K, L)		
Deplete	d Below Dark Surface (A11)	X Depleted Matrix	(F3)			Thin D	ark Surface (S9) (LRR K, L)		
	ark Surface (A12)		Redox DarkSurfa					anganese Masses (F12) (LRR K, L, R)		
	Mucky Mineral (S1)		Depleted Dark S		7)		Piedmont Floodplain Soils (F19) (MLRA 149B)			
-	Gleyed Matrix (S4)		Redox Depression	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	Redox (S5)							arent Material (TF2)		
	Matrix (S6)		<u></u>					shallow Dark Surface (TF12)		
Dark Su	ırface (S7) (LRR R, ML	RA 149B)					Other	(Explain in Remarks)		
³ Indicators of	hydrophytic vegetation	and wetlan	d hydrology must be pr	resent, un	less distur	bed or pro	blematic.			
Restrictive L	ayer (if observed):									
Туре: _										
Depth (i	inches).		<u></u>				Hydric Soil	I Present? Yes X No		
Ворит (г	1101100).						Tiyano con	105 <u>X</u> 10		
Remarks:										
Ca (Cd) – loc	al hydric soil unit									

Project/Site: Mahar Propert		City/County: Monroe County Sampling Date: 10/07/							
Applicant/Owner: Waste Ma	anagement of N	ew York,	LLC	State: New York Sampling Point: D-4 Upl					
Investigator(s): Johanna E.	e, PC	Section, Township, Range: Town of Riga							
Landform (hillslope, terrace,				=): Concave		
Slope (%): <u>0-2%</u> La									
							:		
Are climatic/hydrologic condi									
Are Vegetation, Soil						Circumstances"	present? Yes? X No		
Are Vegetation, Soil	, or Hyd	ology _	Naturally	problematic?	(If needed, e	explain any answe	ers in Remarks.)		
SUMMARY OF FINDIN	IGS – Attac	h site r	map showin	g sampling p	oint location	s, transects,	important features, etc.		
Hydrophytic Vegetation Pres	ent?	Yes	X No	ls the S			Х		
Hydric Soil Present?		Yes	X No	Is the S within a	ampled Area Wetland?	Yes	No		
Wetland Hydrology Present?							<u> </u>		
Welland Trydrology Fresent?		169	NO	n yes, o	olionai Weliand S	ite ib			
Remarks: (Explain alternativ	e procedures h	ere or in	a separate repo	ort.)					
HYDROLOGY									
IIIDROLOGI									
Wetland Hydrology Indicate						Secondary India	cators (minimum of two required)		
Primary Indicators (minimum	of one is requir					Surface So			
Surface Water (A1)		-	_ Water-Staine			Drainage I			
High Water Table (A2)			Aquatic Fau			·	Lines (B16)		
Saturation (A3)			_ Marl Deposit			Dry-Season Water Table (C2)			
Water Marks (B1)		-	_	ılfide Odor (C1)	. 5 (00)		urrows (C8)		
Sediment Deposits (B2)				zospheres on Liv		·	Visible on Aerial Imagery (C9)		
Drift Deposits (B3)				Reduced Iron (C			Stressed Plants (D1)		
Algal Mat or Crust (B4)		-	_	Reduction in Tille	d Solis (Cb)		nic Position (D2)		
Iron Deposits (B5) Inundation Visible on Ae	rial Imagery (R	7)	_ Thin Muck S	in in Remarks)			Shallow Aquitard (D3) Microtopographic Relief (D4)		
Sparsely Vegetated Cor	• • •		_ Other (Expla	iii iii iveiliaiks)		·	ral Test (D5)		
						, , , , , , , , , , , , , , , , ,			
Field Observations:									
Surface Water Present?	Yes	No X	· `	,					
Water Table Present	Yes	No X	· `						
Saturation Present	Yes	No X	Depth (inch	nes): >12.0	Wetland H	ydrology Preser	nt? Yes No _X_		
(includes capillary fringe)									
Describe Recorded Data (st	0 0 .	Ū	•	os, previous insp	ections), if availa	oie:			
Aerial photo review complete	a prior to site i	ivesilgal	ion						
Remarks:									

VEGETATION – Use scientific names of	plants.			Sampling Point: <u>D4-Up</u>	<u>) </u>
Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.	7,7,0,0,0	- ор оскоот		Number of Dominant Species	
2.				That Are OBL, FACW, or FAC: 3 (A)	J
3.				Total Number of Dominant	′
4.				Species Across All Strata: 4 (B)	()
5.				Percent of Dominant Species	,
				-1	/D)
6.				That Are OBL, FACW, or FAC:	/D)
7.		= Total Cove	l er	Prevalence Index Worksheet:	
Sapling/Shrub Stratum (Plot Size: 15 feet)		•		Total % Cover of: Multiply by:	
1. Cornus amomum	10	Yes	FACW	OBL speciesx1 =	
2.				FACW species x 2 =	
3.				FAC speciesx 3 =	
4.				FACU species x 4 =	
5.				UPL species x 5 =	
6.				Column Totals: (A) (B)	3
7.				(A)	,
50% = 5, 20% = 2	10	= Total Cove	<u> </u> 	Prevalence Index = B/A =	
Herb Stratum (Plot Size: 5 feet)	10	_ 1 otal 0 ov	<u> </u>	Trovalence madx = B/X =	
Solidago rugosa	25	Yes	FAC	Hydrophytic Vegetation Indicators:	
	20	Yes	FACW	7	
	40		FACU	- Rapid Test for Hydrophytic Vegetation X Dominance Test is >50%	
	40	Yes	FACU		
4.				Prevalence Index is =3.01</td <td></td>	
5.				Morphological Adaptations ¹ (Provide supporting	
6.				Data in Remarks or on a separate sheet)	
7.				Problematic Hydrophytic Vegetation ¹ (Explain)	
8.				Indicators of hydric soil and wetland hydrology must	
9.				Be present, unless disturbed or problematic.	
10.				Definitions of Vegetation Strata:	
11.				4	
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter	
13.				at breast height (DBH), regardless of height.	
14.				Sapling/shrub – Woody plants less than 3 in. DBH	
50% = 42.5, 20% = 17	85	= Total Cove	er	and greater than 3.28 ft (1 m) tall.	
Woody Vine Stratum: (Plot Size: 15 feet)				Herb – All herbaceous (non-woody) plants, regardless	
1.				of size, and woody plants less than 3.28 ft tall.	
2.				Woody vines – All woody vines greater than 3.28 ft in	
3.				height.	
4.					
5.				Hydrophytic	
6.				Vegetation	
7.				Present? Yes X No	
		= Total Cove	er		
Remarks: (Include photo numbers here or on a se	parate sheet	.)			

SOIL Sampling Point: D4-upl

Profile Desc	cription: (Describe to	the depth ne	eded to document t	the indica	tor or co	nfirm the a	bsence of in	dicators.)		
	Matrix	1	Redo	x Feature	es	Î		ı		
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-2	10 YR 3/2	100	-	-	- Type	-	Sand loam	Komano		
	10 YR 3/2	95	10 YR 4/6	5	С	М	Sand loam			
2-12+	10 1K 3/2	95	10 1K 4/6	3	C	IVI	Sanu Ivani			
				+						
				1						
				1						
4										
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS= Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.										
Hydric Soils	Indicators:						Indicators	for Problematic Hydric Soils ³ :		
Histoso	I (A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)		
Histic E	pipedon (A2)		MLRA 149B)			Coast	Prairie Redox (A16) (LRR K, L, 4)		
Black H	listic (A3)		Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B)	5 cm N	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydroge	en Sulfide (A4)		Loamy Mucky M	lineral (F1) (LRR K,	L)	Dark Surface (S7) (LRR K, L)			
Stratifie	d Layers (A5)		Loamy Gleyed N	/latrix (F2)			Polyva	alue Below Surface (S8) (BLRR K, L)		
Deplete	ed Below Dark Surface ((A11) _	X Depleted Matrix	(F3)			Thin D	ark Surface (S9) (LRR K, L)		
Thick D	ark Surface (A12)		Redox DarkSurf	ace (F6)			Iron-M	anganese Masses (F12) (LRR K, L, R)		
Sandy N	Mucky Mineral (S1)		Depleted Dark S	Surface (F	7)		Piedm	ont Floodplain Soils (F19) (MLRA 149B)		
Sandy (Gleyed Matrix (S4)	_	Redox Depressi	ons (F8)			Mesic			
Sandy F	Redox (S5)						Red P	arent Material (TF2)		
Striped	Matrix (S6)	_					Very S	Shallow Dark Surface (TF12)		
Dark Su	urface (S7) (LRR R, ML	RA 149B) _					Other	(Explain in Remarks)		
³ Indicators of	f hydrophytic vegetation	and wetland	hydrology must be n	resent un	less distu	rhed or pro	hlematic			
	Layer (if observed):	Taria Wollaria	nydrology maar be p	reserit, ur	iloss dista	bed of pre	biomatio.			
	Layer (ii observed).									
Type: _										
Depth (inches):						Hydric Soi	I Present? Yes X No		
Remarks:										
Co (Cd) loc	and budgin and unit									
Ca (Cd) - 100	cal hydric soil unit									

Project/Site: Mahar Property		City/County: Monroe County Sampling Date: 10/07/11						
Applicant/Owner: Waste Management of New Yo	ork, LLC	State: New York Sampling Point: D-5 Wet						
Investigator(s): Johanna E. Duffy, Barton & Logui	idice, PC	Section, Township, Range: _Town of Riga						
Landform (hillslope, terrace, etc.)::	_	Local relief (concave, convex, none): Concave						
Slope (%): <u>0-2%</u> Lat: <u>43° 2' 38.354" N</u>								
Soil Map Unit Name:: Brockport Silty Clay Loam,								
Are climatic/hydrologic conditions on the site typic								
		· · · · · · · · · · · · · · · · · · ·	al Circumstances" present? Yes? X No					
Are Vegetation, Soil, or Hydrology			· — —					
Are Vegetation, Soil, or Hydrology			, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach sit	e map showing	sampling point locatio	ns, transects, important features, etc.					
Hydrophytic Vegetation Present? Ye	s <u>X</u> No	Is the Sampled Area						
Hydric Soil Present? Ye	s <u>X</u> No	within a Wetland?	Yes <u>X</u> No					
Wetland Hydrology Present? Ye	s X No	If yes, optional Wetland	Site ID: Wetland D					
Remarks: (Explain alternative procedures here or	in a separate repor	.)						
HYDROLOGY								
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Water-Stained Aquatic Fauna Marl Deposits Hydrogen Sult Oxidized Rhiz Presence of R	(B13) (B15) ide Odor (C1) ospheres on Living Roots (C3) educed Iron (C4) eduction in Tilled Soils (C6) face (C7)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)					
Field Observations:								
Surface Water Present? Yes No	X Depth (inche	,						
	X Depth (inche							
Saturation Present Yes X No	Depth (inche	s): 3.0 Wetland	Hydrology Present? Yes X No					
(includes capillary fringe) Describe Recorded Data (stream gauge, monitori	na wall parial photo	nrovious inspections) if avoi	lable:					
Aerial photo review completed prior to site investig	•	s, previous inspections), ii avaii	able.					
Remarks:								

Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:				
1. Acer rubrum	5	Yes	FAC	Number of Dominant Species				
2.				That Are OBL, FACW, or FAC: 4 (A)				
3.				Total Number of Dominant				
4.				Species Across All Strata: 5 (B)				
5.				Percent of Dominant Species				
6.				That Are OBL, FACW, or FAC: 0.80 (80%) (A/B)				
7.								
50% = 2.5, 20% = 1	5	= Total Cove	er	Prevalence Index Worksheet:				
Sapling/Shrub Stratum (Plot Size: 15 feet)				Total % Cover of: Multiply by:				
Cornus racemosa	45	Yes	FAC	OBL speciesx1 =				
Fraxinus pennsylvanica	25	Yes	FACW	FACW speciesx 2 =				
3.		. 55	.,	FAC speciesx 3 =				
4.				FACU speciesx4 =				
5.				UPL species x5=				
6.				Column Totals: (A) (B)				
7.				Column Totals(A)(B)				
50% = 35, 20% = 14	70	= Total Cove	er er	Prevalence Index = B/A =				
Herb Stratum (Plot Size: 5 feet)	. 0	7 314. 3 37.						
Doellingeria umbellata	8	No	FACW	Hydrophytic Vegetation Indicators:				
Solidago canadensis	15	Yes	FACU	- Rapid Test for Hydrophytic Vegetation				
Solidago canaderisis Erigeron annuus	5	No	FACU	X Dominance Test is >50%				
-	3	INO	FACU	Prevalence Index is =3.01</td				
4.								
5.				Morphological Adaptations ¹ (Provide supporting				
6.				Data in Remarks or on a separate sheet)				
7.				Problematic Hydrophytic Vegetation ¹ (Explain)				
8.				¹ Indicators of hydric soil and wetland hydrology must				
9.				Be present, unless disturbed or problematic.				
10.				Definitions of Vegetation Strata:				
11.				-				
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter				
13.				at breast height (DBH), regardless of height.				
14.				Sapling/shrub – Woody plants less than 3 in. DBH				
50% = 14, 20% = 5.6	28	= Total Cove	er	and greater than 3.28 ft (1 m) tall.				
Woody Vine Stratum: (Plot Size: 15 feet)				Herb – All herbaceous (non-woody) plants, regardless				
1. Vitis riparia	2	Yes	FACW	of size, and woody plants less than 3.28 ft tall.				
2.				Woody vines – All woody vines greater than 3.28 ft in				
3.				height.				
4.								
5.				Hydrophytic				
6.				Vegetation				
7.				Present? Yes X No				
50% = 1, 20% = 0.4	2	= Total Cove	er					
Remarks: (Include photo numbers here or on a se	parate sheet	.)						
Photos 1 - 7								

SOIL Sampling Point: D5<u>- wet</u>

Profile Desc	cription: (Describe to	the depth ne	eded to document	the indica	tor or cor	nfirm the a	bsence of inc	dicators.)	
	Matrix			ox Feature		I			
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-10	10 YR 4/2	100	-	-	-	-	Loam		
10-12+	10 YR 4/2	94	10 YR 6/3	4	С	М	Loam		
			10 YR 6/6	2	С	М			
¹ Type: C=C	oncentration, D=Deplet	ion RM-Redu	iced Matrix, CS= Co	vered or (Coated Sai	nd Grains	² l ocatio	n: PL=Pore Lining, M=Matrix.	
Hydric Soils		on, rewi-recut	deca Mairix, 00= 00	vereu or e	Joaica Gai	ia Orains.		for Problematic Hydric Soils ³ :	
			Dolarduo Polor	Curtooo	(CO) (I DD	В		•	
Histoso	pipedon (A2)	_	Polyvalue Below MLRA 149B		(56) (LKK	к,		Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, 4)	
	istic (A3)		Thin Dark Surface	,	RRR MI	RA 149R)		Mucky Peat or Peat (S3) (LRR K, L, R)	
	en Sulfide (A4)	_	Loamy Mucky M				Dark Surface (S7) (LRR K, L)		
_	d Layers (A5)		Loamy Gleyed N			,		llue Below Surface (S8) (BLRR K, L)	
	d Below Dark Surface ((A11)	X Depleted Matrix					ark Surface (S9) (LRR K, L)	
Thick D	ark Surface (A12)	_	Redox DarkSurf	ace (F6)			Iron-M	anganese Masses (F12) (LRR K, L, R)	
Sandy I	Mucky Mineral (S1)	_	Depleted Dark S	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy (Gleyed Matrix (S4)	_	Redox Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	Redox (S5)							arent Material (TF2)	
	Matrix (S6)		<u></u>					shallow Dark Surface (TF12)	
Dark Su	ırface (S7) (LRR R, ML	RA 149B)					Other	(Explain in Remarks)	
³ Indicators of	hydrophytic vegetation	and wetland	hydrology must be p	resent, ur	less distu	bed or pro	blematic.		
Restrictive L	ayer (if observed):								
Type:									
Depth (i	inches):						Hydric Soil	Present? Yes X No	
, ,	,								
Remarks:									
.									
BrA – potenti	al for hydric inclusions								

Project/Site: Mahar Property	City/County: Monroe County Sampling Date: 10/07/11						
Applicant/Owner: Waste Management of New York, LLC	State: New York Sampling Point: D-5 Upl						
Investigator(s): Johanna E. Duffy, Barton & Loguidice, PC	Section, Township, Range: Town of Riga						
	Local relief (concave, convex, none): Concave						
	Long: _77° 55' 43.148" W Datum: _UTM NAD 83						
	NWI classification:						
Are climatic/hydrologic conditions on the site typical for this time of y							
	ntly 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	g sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes X No	X						
Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes No						
	X If yes, optional Wetland Site ID:						
Wetland Hydrology Present? Yes No	il yes, optional wetland Site ID.						
Remarks: (Explain alternative procedures here or in a separate repo	ort.)						
HYDROLOGY							
Watten d thidustons Indicators.							
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	<u>Secondary Indicators (minimum of two required)</u> Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stain							
High Water Table (A2) Aquatic Fau							
Saturation (A3) Marl Deposi							
<u> </u>	ulfide Odor (C1) Crayfish Burrows (C8)						
	izospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)						
	Reduced Iron (C4) Stunted or Stressed Plants (D1)						
	Reduction in Tilled Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck S	urface (C7) Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Expla	in in Remarks) Microtopographic Relief (D4)						
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	in in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)						
<u> </u>							
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Sparsely Vegetated Concave Surface (B8) Field Observations:	FAC-Neutral Test (D5) nes): 0						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No _X Depth (inc.)	FAC-Neutral Test (D5) nes): 0 nes): >12.0						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (included) Water Table Present Yes No X Depth (included)	FAC-Neutral Test (D5) nes): 0 nes): >12.0						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inc. Water Table Present Yes No X Depth (inc. Saturation Present Yes No X Depth (inc. (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	res): 0 nes): >12.0 Nes): >12.0 Wetland Hydrology Present? Yes NoX						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inc. Water Table Present Yes No X Depth (inc. Saturation Present Yes No X Depth (inc. (includes capillary fringe)	res): 0 nes): >12.0 Nes): >12.0 Wetland Hydrology Present? Yes NoX						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inc. Water Table Present Yes No X Depth (inc. Saturation Present Yes No X Depth (inc. (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo review completed prior to site investigation	res): 0 nes): >12.0 Nes): >12.0 Wetland Hydrology Present? Yes NoX						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inc. Water Table Present Yes No X Depth (inc. Saturation Present Yes No X Depth (inc. (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	res): 0 nes): >12.0 Nes): >12.0 Wetland Hydrology Present? Yes NoX						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inc. Water Table Present Yes No X Depth (inc. Saturation Present Yes No X Depth (inc. (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo review completed prior to site investigation	res): 0 nes): >12.0 Nes): >12.0 Wetland Hydrology Present? Yes NoX						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inc. Water Table Present Yes No X Depth (inc. Saturation Present Yes No X Depth (inc. (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo review completed prior to site investigation	res): 0 nes): >12.0 Nes): >12.0 Wetland Hydrology Present? Yes NoX						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inc. Water Table Present Yes No X Depth (inc. Saturation Present Yes No X Depth (inc. (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo review completed prior to site investigation	res): 0 nes): >12.0 Nes): >12.0 Wetland Hydrology Present? Yes NoX						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inc. Water Table Present Yes No X Depth (inc. Saturation Present Yes No X Depth (inc. (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo review completed prior to site investigation	res): 0 nes): >12.0 Nes): >12.0 Wetland Hydrology Present? Yes NoX						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inc. Water Table Present Yes No X Depth (inc. Saturation Present Yes No X Depth (inc. (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo review completed prior to site investigation	res): 0 nes): >12.0 Nes): >12.0 Wetland Hydrology Present? Yes NoX						

VEGETATION – Use scientific names of	f plants.			Sampling Point: <u>D5-Upl</u>
	Absolute	Dominant	Indicator	
Tree Stratum (Plot Size: 30 feet)	% Cover	Species?	Status	Dominance Test Worksheet:
1.				Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 2 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 3 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 0.66 (67%) (A/B)
7.				1
		= Total Cove	er	Prevalence Index Worksheet:
Sapling/Shrub Stratum (Plot Size: 15 feet)		•		Total % Cover of: Multiply by:
Cornus racemosa	85	Yes	FAC	OBL speciesx1 =
2.				FACW species x 2 =
3.				FAC speciesx3 =
4.				FACU speciesx4 =
5.				
6.				UPL species
7.				(A)(B)
50% = 42.5, 20% = 17	85	= Total Cove	or.	Prevalence Index = B/A =
<u> </u>	- 65	= 10tal C0V	el .	Frevalence midex = B/A =
Herb Stratum (Plot Size: 5 feet) 1. Viola sororia		Vaa	F40	Hudronhude Venetation Indicators
	5	Yes	FAC	Hydrophytic Vegetation Indicators:
2. Solidago canadensis	10	Yes	FACU	- Rapid Test for Hydrophytic Vegetation
3.				X Dominance Test is >50%
4.				Prevalence Index is =3.01</td
5.				Morphological Adaptations ¹ (Provide supporting
6.				Data in Remarks or on a separate sheet)
7.				Problematic Hydrophytic Vegetation ¹ (Explain)
8.				¹ Indicators of hydric soil and wetland hydrology must
9.				Be present, unless disturbed or problematic.
10.				Definitions of Vegetation Strata:
11.				_
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
13.				at breast height (DBH), regardless of height.
14.				Sapling/shrub – Woody plants less than 3 in. DBH
50% = 7.5, 20% = 3	15	= Total Cove	er	and greater than 3.28 ft (1 m) tall.
Woody Vine Stratum: (Plot Size: 15 feet)				Herb - All herbaceous (non-woody) plants, regardless
1.				of size, and woody plants less than 3.28 ft tall.
2.				Woody vines – All woody vines greater than 3.28 ft in
3.				height.
4.				
5.				Hydrophytic
6.				Vegetation
7.				Present? Yes X No
		= Total Cove	er	
Remarks: (Include photo numbers here or on a se	eparate sheet	.)		
, ,	•	,		

SOIL Sampling Point: D5-upl

Profile Desc	cription: (Describe to	the depth n	eeded to document t	he indica	tor or co	nfirm the a	absence of in	dicators.)		
5 4	Matrix	ĺ	Redo	x Feature	es	ĺ		1		
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-2	10 YR 4/2	100	-	-		-	Loam	TO. Harris		
2-10+	10 YR 4/2	98	10 YR 5/8	2	С	М	Clay loam			
2-101	10 110 4/2	30	10 11(5/6			IVI	Olay Idaili			
¹ Type: C=C	oncentration, D=Deplet	ion, RM=Re	duced Matrix, CS= Co	vered or C	Coated Sa	nd Grains.	² Locatio	n: PL=Pore Lining, M=Matrix.		
Hydric Soils Indicators: Indicators for Problematic Hydric Soils ³ :										
Histosol	(A1)		Polyvalue Below	Surface ('S8) (LRR	R.	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)		
	pipedon (A2)	-	MLRA 149B		() (,	· ·	Prairie Redox (A16) (LRR K, L, 4)		
Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B)								Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L)								Dark Surface (S7) (LRR K, L)		
Stratified Layers (A5) Loamy Gleyed Matrix (F2)								alue Below Surface (S8) (BLRR K, L)		
Deplete	d Below Dark Surface (A11)	X Depleted Matrix				Thin D	erk Surface (S9) (LRR K, L)		
Thick D	ark Surface (A12)	. -	Redox DarkSurf	ace (F6)			Iron-M	anganese Masses (F12) (LRR K, L, R)		
Sandy M	Mucky Mineral (S1)	-	Depleted Dark S	urface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy 0	Gleyed Matrix (S4)	-	Redox Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
Sandy F	Redox (S5)						Red Parent Material (TF2)			
	Matrix (S6)	-					Very Shallow Dark Surface (TF12)			
Dark Su	ırface (S7) (LRR R, ML	RA 149B)					Other	(Explain in Remarks)		
³ Indicators of	hydrophytic vegetation	and wetlan	d hydrology must be p	resent, un	less distu	rbed or pro	blematic.			
Restrictive L	ayer (if observed):									
Tuno										
Type: _ Depth (i	inches):						Hydric Soi	I Procent? Vec V No		
Depth (i	nches):						Hydric Soi	I Present? Yes X No		
Remarks:							•			
BrA – potenti	al for hydric inclusions									

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mahar Property	/				City/Coun	ty: Monr	oe County		Sampl	ing Date:	10/07/11
Applicant/Owner: Waste Ma	nagement of N	lew You	k, LLC					State: Ne	w York S	ampling Po	oint: D-6 Wet
Investigator(s): Johanna E.	Duffy, Barton &	Loguic	dice, PC	;	Section, T	ownship,	Range: To	wn of Riga			
Landform (hillslope, terrace,	etc.)::					Local	relief (conca	ave, convex, i	none): Con	cave	
Slope (%): <u>0-2%</u> La											NAD 83
Soil Map Unit Name:: Churc											
Are climatic/hydrologic condi											
								Circumstan			Y No
Are Vegetation, Soil											<u> </u>
Are Vegetation, Soil								explain any a			
SUMMARY OF FINDIN	IGS – Attac	h site	map	showing	sampli	ng poir	nt location	ns, transe	cts, impor	tant feat	tures, etc.
Hydrophytic Vegetation Pres	ent?	Yes	X	No	lo 4	ha Camu	led Area				
Hydric Soil Present?		Yes	X	No	wit	hin a We		Yes	X No	,	
Wetland Hydrology Present?		Yes	X	No	If y	es, optior	nal Wetland S	Site ID: Wet	and D		
			'								
Remarks: (Explain alternativ	e procedures h	nere or	in a sep	arate repor	.)						
HYDROLOGY											
Wetland Hydrology Indicate	ors:							Secondary	Indicators (r	minimum of	f two required)
Primary Indicators (minimum		red; che	eck all th	nat apply)					ce Soil Crack		<u></u>
Surface Water (A1)	•		X Wa	ater-Stained	Leaves (E	39)			age Patterns		
High Water Table (A2)			Aq	uatic Fauna	(B13)			·	Trim Lines (I		
X Saturation (A3)			Ma	arl Deposits	(B15)			Dry-S	eason Water	r Table (C2	2)
Water Marks (B1)		_	Ну	drogen Sulf	ide Odor (C1)		Crayf	sh Burrows ((C8)	
Sediment Deposits (B2)		_	Ox	idized Rhiz	ospheres o	n Living	Roots (C3)	Satur	ation Visible	on Aerial I	magery (C9)
Drift Deposits (B3)		_	Pre	esence of R	educed Iro	on (C4)		Stunt	ed or Stresse	ed Plants (I	D1)
Algal Mat or Crust (B4)		_	Re	ecent Iron R	eduction in	Tilled So	oils (C6)	Geom	orphic Positi	ion (D2)	
Iron Deposits (B5)		_	Th	in Muck Su	face (C7)			Shalld	ow Aquitard (D3)	
Inundation Visible on Ae	rial Imagery (B	57)	Otl	her (Explair	in Remar	ks)		Micro	topographic	Relief (D4)	
Sparsely Vegetated Cor	cave Surface	(B8)						FAC-	Neutral Test	(D5)	
Field Observations:											
Surface Water Present?	Yes	No _	<u>X</u> [Depth (inche	s): 0						
Water Table Present	Yes	No	X [Depth (inche	s): >12	.0					
Saturation Present	Yes X	No _	[Depth (inche	s): 0 - s	surface	Wetland F	lydrology Pr	esent? Yo	es X	
(includes capillary fringe)											
Describe Recorded Data (str	0 0 .		•	aerial photo	s, previous	inspection	ons), if availa	able:			
Aerial photo review complete	d prior to site	investig	ation								
Remarks:											

	Sampling	Point:	D6-Wet
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	Absolute	Dominant	Indicator					
Tree Stratum (Plot Size: 30 feet)	% Cover	Species?	Status	Dominance Test Worksheet:				
1. Fraxinus pennsylvanica	10	Yes	FACW	Number of Dominant Species				
2.				That Are OBL, FACW, or FAC: 6 (A)				
3.				Total Number of Dominant				
4.				Species Across All Strata: 6 (B)				
5.				Percent of Dominant Species				
6.				That Are OBL, FACW, or FAC: 100% (A/B	3)			
7.								
50% = 5, 20% = 2	10	= Total Cove	er	Prevalence Index Worksheet:				
Sapling/Shrub Stratum (Plot Size: 15 feet)				Total % Cover of: Multiply by:				
1. Fraxinus pennsylvanica	5	Yes	FACW	OBL speciesx 1 =				
2. Cornus amomum	20	Yes	FACW	FACW speciesx 2 =				
3.				FAC speciesx 3 =				
4.				FACU speciesx 4 =				
5.				UPL speciesx 5 =				
6.				Column Totals:(A)(B)				
7.								
50% = 12.5, 20% = 5	25	= Total Cove	er	Prevalence Index = B/A =				
Herb Stratum (Plot Size: 5 feet)								
1. Doellingeria umbellata	15	Yes	FACW	Hydrophytic Vegetation Indicators:				
2. Euthamia graminifolia	20	Yes	FAC	- Rapid Test for Hydrophytic Vegetation				
3. Carex crinita	5	No	OBL	X Dominance Test is >50%				
4. Mentha x piperita	5	No	FACW	Prevalence Index is =3.0<sup 1				
5. Eutrochium maculatum	2	No	FACW	Morphological Adaptations ¹ (Provide supporting				
6. Lycopus americanus	2	No	OBL	Data in Remarks or on a separate sheet)				
7.				Problematic Hydrophytic Vegetation ¹ (Explain)				
8.				¹ Indicators of hydric soil and wetland hydrology must				
9.				Be present, unless disturbed or problematic.				
10.				Definitions of Vegetation Strata:				
11.								
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter				
13.				at breast height (DBH), regardless of height.				
14.				Sapling/shrub – Woody plants less than 3 in. DBH				
50% = 24.5, 20% = 9.8	49	= Total Cove	er	and greater than 3.28 ft (1 m) tall.				
Woody Vine Stratum: (Plot Size: 15 feet)				Herb – All herbaceous (non-woody) plants, regardless				
1. Vitis riparia	2	Yes	FACW	of size, and woody plants less than 3.28 ft tall.				
2.				Woody vines - All woody vines greater than 3.28 ft in				
3.				height.				
4.								
5.				Hydrophytic				
6.				Vegetation				
7.				Present? Yes X No				
50% = 1, 20% = 0.4	2	= Total Cove	er					
Remarks: (Include photo numbers here or on a se	eparate sheet	.)						

Photos 1 - 7

SOIL Sampling Point: D6_wet

Profile Desc	cription: (Describe to	the depth	needed to document t	the indica	tor or cor	nfirm the a	bsence of inc	dicators.)
	Matrix			ox Feature		ĺ	ĺ	,
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10 YR 3/2	100	-	-	-	-	Silt loam	
3-12+	10 YR 4/1	83	10 YR 5/4	7	С	М	Silty clay loam	
			7.5 YR 5/8	10	С	М		
¹ Type: C=C	oncentration, D=Depleti	ion, RM=Re	educed Matrix, CS= Co	vered or C	Coated Sar	nd Grains.	² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soils			,					or Problematic Hydric Soils ³ :
Histosol	I (A1)		Polyvalue Below	/ Surface ('S8) (LRR	R.	2 cm M	fluck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		MLRA 149B		()(,		Prairie Redox (A16) (LRR K, L, 4)
Black H	istic (A3)		Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B)	5 cm M	flucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky M	lineral (F1) (LRR K,	L)	Dark S	urface (S7) (LRR K, L)
Stratifie	d Layers (A5)		Loamy Gleyed N	//atrix (F2)			Polyva	lue Below Surface (S8) (BLRR K, L)
	d Below Dark Surface (A11)	X Depleted Matrix	, ,				ark Surface (S9) (LRR K, L)
	ark Surface (A12)		Redox DarkSurf		_,			anganese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1)		Depleted Dark S		7)			ont Floodplain Soils (F19) (MLRA 149B)
_	Gleyed Matrix (S4)		Redox Depressi	ons (F8)				Spodic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5) Matrix (S6)							arent Material (TF2) hallow Dark Surface (TF12)
	urface (S7) (LRR R, ML	RA 149B)						Explain in Remarks)
	hydrophytic vegetation		—— nd hydrology must be p	resent, un	less distur	bed or pro		, — , — , — , — , — , — , — , — , — , —
	_ayer (if observed):							
Type:								
Depth (i							Hydric Soil	Present? Yes X No
	menes).						Tiyane con	Tresent: Tes X No
Remarks:								
ChA – potent	tial for hydric inclusions							
o poto	and ref rigation includes							

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mahar Propert	у			_ City/County: _ N	Ionroe County		Sampling Date: 10/07/11
Applicant/Owner: Waste Ma	anagement of	New Y	ork, LLC			State: New Yo	rk Sampling Point: D-6 Upl
Investigator(s): Johanna E.	Duffy, Barton	& Logu	idice, PC				
Landform (hillslope, terrace,				 '	·		: Concave
Slope (%): <u>0-2%</u> La							
							Demonto V
Are climatic/hydrologic condi							
Are Vegetation, Soil						Circumstances" p	oresent? Yes? X No
Are Vegetation, Soil	, or Hy	drology	/ Naturall	y problematic?	(If needed, e	explain any answe	ers in Remarks.)
SUMMARY OF FINDIN	IGS – Atta	ch sit	e map showii	ng sampling p	oint location	s, transects,	important features, etc.
Hydrophytic Vegetation Pres	ent?	Ye	es X No				Х
Hydric Soil Present?		Ye	es X No es X No	Is the S	ampled Area Wetland?	Yes	
Wetland Hydrology Present?			es No			· · · · · · · · · · · · · · · · · · ·	
Welland Hydrology Present?		16	:S INU _	II yes, o	olionai Welland S	ite ib	
Remarks: (Explain alternativ	e procedures	here o	r in a separate rep	ort.)			
HYDROLOGY							
Wetland Hydrology Indicate	ors:					Secondary Indic	cators (minimum of two required)
Primary Indicators (minimum	of one is requ	ired; cl	neck all that apply)	<u>L</u>		Surface So	oil Cracks (B6)
Surface Water (A1)			Water-Stain	ed Leaves (B9)		Drainage F	Patterns (B10)
High Water Table (A2)			Aquatic Fau	ına (B13)		Moss Trim	Lines (B16)
Saturation (A3)			Marl Depos	its (B15)		Dry-Seaso	n Water Table (C2)
Water Marks (B1)				Sulfide Odor (C1)			urrows (C8)
Sediment Deposits (B2)				nizospheres on Liv	• , ,	·	Visible on Aerial Imagery (C9)
Drift Deposits (B3)				f Reduced Iron (C			Stressed Plants (D1)
Algal Mat or Crust (B4)				Reduction in Tille	d Soils (C6)		ic Position (D2)
Iron Deposits (B5)				Surface (C7)			quitard (D3)
Inundation Visible on Ac	• • •	,	Other (Expl	ain in Remarks)		·	graphic Relief (D4)
Sparsely Vegetated Cor	icave Suпасе	(88)				FAC-Neutr	ral Test (D5)
Field Observations:							
Surface Water Present?	Yes	_ No	X Depth (inc	ches): 0			
Water Table Present	Yes	_ No	X Depth (inc	ches): >12.0			
Saturation Present	Yes	_ No	X Depth (inc	ches): >12.0	Wetland H	ydrology Presen	t? Yes No _X_
(includes capillary fringe)							
Describe Recorded Data (st	0 0 .		•	otos, previous insp	ections), if availal	ble:	
Aerial photo review complete	ea prior to site	investi	gation				
Remarks:							

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of	plants.			Sampling Point: <u>D6-Upl</u>
Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
Fraxinus pennsylvanica	5	Yes	FACW	Number of Dominant Species
2.	-		_	That Are OBL, FACW, or FAC: 4 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 5 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 0.8 (80%) (A/B)
7.				
50% = 2.5, 20% = 1	5	= Total Cove	er	Prevalence Index Worksheet:
Sapling/Shrub Stratum (Plot Size: 15 feet)				Total % Cover of: Multiply by:
Fraxinus pennsylvanica	10	No	FACW	OBL speciesx 1 =
2. Cornus racemosa	45	Yes	FAC	FACW speciesx 2 =
3.	10	1.00	1710	FAC speciesx3 =
4.				5.00
5.				FACU species
6.				Column Totals:(A)(B)
7.				(A)(B)
50% = 27.5, 20% = 11	55	= Total Cove	er er	Prevalence Index = B/A =
Herb Stratum (Plot Size: 5 feet)	33	7 010. 0011		
Doellingeria umbellata	15	Yes	FACW	Hydrophytic Vegetation Indicators:
Solidago canadensis	5	Yes	FACU	- Rapid Test for Hydrophytic Vegetation
3.		100	17100	X Dominance Test is >50%
4.				Prevalence Index is =3.01</td
5.				Morphological Adaptations ¹ (Provide supporting
6.				Data in Remarks or on a separate sheet)
7.				Problematic Hydrophytic Vegetation ¹ (Explain)
8.				¹ Indicators of hydric soil and wetland hydrology must
9.				Be present, unless disturbed or problematic.
10.				Definitions of Vegetation Strata:
11.				Definitions of Vegetation of atta.
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
13.				at breast height (DBH), regardless of height.
14.				Sapling/shrub – Woody plants less than 3 in. DBH
50% = 10, 20% = 4	20	= Total Cove	<u>l</u>	and greater than 3.28 ft (1 m) tall.
Woody Vine Stratum: (Plot Size: 15 feet)	20	_ 1 otal 00v0	<u> </u>	Herb – All herbaceous (non-woody) plants, regardless
1. Vitis riparia	3	Yes	FACW	of size, and woody plants less than 3.28 ft tall.
2.		1.00	17.011	Woody vines – All woody vines greater than 3.28 ft in
3.				height.
4.				noight.
5.				Hydrophytic
6.				Vegetation
7.				Present? Yes X No
50% = 1.5, 20% = 0.6	3	= Total Cove	er	1.55 <u>//</u> 110
Remarks: (Include photo numbers here or on a se				
	_ 3. 3.0 011000	,		

SOIL Sampling Point: D6-upl

Profile Desc	cription: (Describe to	the depth ne	eded to document t	the indica	tor or cor	nfirm the a	bsence of inc	dicators.)			
	Matrix	-		ox Feature		1					
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-3	10 YR 3/2	100	-					7.5.7.6.7.16			
3-12+	10 YR 3/2	95	7.5 YR 5/8	5	С	М	Loam Clay loam				
4							2				
	oncentration, D=Deplet	ion, RM=Redι	iced Matrix, CS= Co	vered or C	Coated Sar	nd Grains.		n: PL=Pore Lining, M=Matrix.			
Hydric Soils	Indicators:						Indicators	for Problematic Hydric Soils ³ :			
Histosol	I (A1)	_	Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)			
	pipedon (A2)		MLRA 149B	,				Prairie Redox (A16) (LRR K, L, 4)			
	istic (A3)	_	Thin Dark Surface				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
	en Sulfide (A4)	_	Loamy Mucky M			L)	Dark Surface (S7) (LRR K, L)				
	d Layers (A5)	_	Loamy Gleyed N				Polyvalue Below Surface (S8) (BLRR K, L)				
	d Below Dark Surface (_	X Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)				
	ark Surface (A12)	_	Redox DarkSurf		- \		Iron-Manganese Masses (F12) (LRR K, L, R)				
	Mucky Mineral (S1)	_	Depleted Dark S		7)		Piedmont Floodplain Soils (F19) (MLRA 1498				
	Gleyed Matrix (S4)	_	Redox Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	Redox (S5)						Red Parent Material (TF2) Very Shallow Dark Surface (TF12)				
	Matrix (S6)		<u> </u>								
	ırface (S7) (LRR R, ML	·						(Explain in Remarks)			
³ Indicators of	hydrophytic vegetation	and wetland	hydrology must be p	resent, un	less distur	bed or pro	blematic.				
Restrictive L	_ayer (if observed):										
Type:											
Depth (i	inches):						Hydric Soil	Present? Yes X No			
, ,	,										
Remarks:											
0.4											
ChA – potent	tial for hydric inclusions										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mahar Property	City/County: Monroe County Sampling Date: 10/04/11
Applicant/Owner: Waste Management of New York, LLC	State: New York Sampling Point: E-1 Wet
Investigator(s): _Johanna E. Duffy, Barton & Loguidice, PC	Section, Township, Range: _Town of Riga
Landform (hillslope, terrace, etc.)::	Local relief (concave, convex, none): Concave
	Long: _77° 56' 6.675" W Datum: _UTM NAD 83
	NWI classification: PFO1
	of year? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology sign	
Are Vegetation, Soil, or Hydrology Natu	
	wing sampling point locations, transects, important features, etc.
Hudranhutia Vasatetian Pressanta	
Hydrophytic Vegetation Present? Yes X No	is the Sampled Area
Hydric Soil Present? Yes X No	
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland E
Remarks: (Explain alternative procedures here or in a separate	report.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap	ply) Surface Soil Cracks (B6)
	tained Leaves (B9) Drainage Patterns (B10)
 ;	Fauna (B13) Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	n Sulfide Odor (C1) Crayfish Burrows (C8)
	Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) e of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	e of Reduced Iron (C4) Ton Reduction in Tilled Soils (C6) X Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
	ck Surface (C7) Shallow Aquitard (D3)
	xplain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
	<u> </u>
Field Observations:	Carland
	(inches): 0 (inches): >12.0
	(inches): >12.0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	(monos). 712.0 Wedand Hydrology Freschit. 165 A
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Aerial photo review completed prior to site investigation	
Remarks:	
Inundation observed at wetland but not within limits of data plot	
mundation observed at wetland but not within limits of data prot	

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of	plants.			Sampling Point: E <u>1-Wet</u>	
Tree Stratum (Plot Size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. Acer saccharinum	35		FACW	Number of Dominant Species	
2. Fraxinus pennsylvanica	10		FACW	That Are OBL, FACW, or FAC: (A)	
3.				Total Number of Dominant	
4.				Species Across All Strata: (B)	
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC: (A/B	3)
7.					
	45	= Total Cove	er	Prevalence Index Worksheet:	
Sapling/Shrub Stratum (Plot Size: feet)			-	Total % Cover of: Multiply by:	
1.				OBL speciesx 1 =	
2.				FACW speciesx 2 =	
3.				FAC species x 3 =	
4.				FACU speciesx 4 =	
5.				UPL speciesx 5 =	
6.				Column Totals:(A)(B)	
7.					
		= Total Cov	er	Prevalence Index = B/A =	
Herb Stratum (Plot Size: 5 feet)					
1.				Hydrophytic Vegetation Indicators:	
2.				X Rapid Test for Hydrophytic Vegetation	
3.				Dominance Test is >50%	
4.				Prevalence Index is =3.01</td <td></td>	
5.				Morphological Adaptations ¹ (Provide supporting	
6.				Data in Remarks or on a separate sheet)	
7.				Problematic Hydrophytic Vegetation ¹ (Explain)	
8.				¹ Indicators of hydric soil and wetland hydrology must	
9.				Be present, unless disturbed or problematic.	
10.				Definitions of Vegetation Strata:	_
11.				1	
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter	
13.				at breast height (DBH), regardless of height.	
14.				Sapling/shrub – Woody plants less than 3 in. DBH	
		= Total Cov	er	and greater than 3.28 ft (1 m) tall.	
Woody Vine Stratum: (Plot Size: 15 feet)			-	Herb – All herbaceous (non-woody) plants, regardless	
1.				of size, and woody plants less than 3.28 ft tall.	
2.				Woody vines – All woody vines greater than 3.28 ft in	
3.				height.	
4.				noigh.	
5.				Hydrophytic	
6.				Vegetation	
7.				Present? Yes X No	
		= Total Cov	er	1100 <u>X</u> 110 <u></u>	
Remarks: (Include photo numbers here or on a se	parate sheet	•	<u>v. </u>		
Photo 12					
1 11010-12					

SOIL Sampling Point: <u>E1- wet</u>

Profile Desc	ription: (Describe to t	he depth	neede	d to document t	he indica	tor or cor	firm the	absence of in	dicators.)		
Donth	Matrix			Redo	x Feature	S					
Depth (inches)	Color (moist)	%		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-2	10 YR 3/1	100		-	-	-	-	Loam	Organic surface layer		
2-10	10 YR 3/1	90		10 YR 4/4	10	С	М	Loam	, , , , , , , , , , , , , , , , , , ,		
10-12+	10 YR 5/1	100		-	-	_	_	Fine sand			
	oncentration, D=Depletion	on, RM=R	educed	d Matrix, CS= Cov	ered or C	oated Sar	nd Grains.		n: PL=Pore Lining, M=Matrix.		
Hydric Soils	Indicators:							Indicators	for Problematic Hydric Soils ³ :		
Histosol	(A1)			Polyvalue Below	Surface (S8) (LRR	R,	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)		
Histic E	pipedon (A2)			MLRA 149B))			Coast	Prairie Redox (A16) (LRR K, L, 4)		
Black H	istic (A3)			Thin Dark Surfac	e (S9) (Ll	RR R, ML	RA 149B)	5 cm N	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydroge	en Sulfide (A4)			Loamy Mucky Mi	ineral (F1)	(LRR K,	L)	Dark S	Surface (S7) (LRR K, L)		
Stratifie	d Layers (A5)			Loamy Gleyed M	latrix (F2)			Polyvalue Below Surface (S8) (BLRR K, L)			
Deplete	d Below Dark Surface (A	(11)	X	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)			
Thick Da	ark Surface (A12)			Redox DarkSurfa	ace (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)			
Sandy N	Mucky Mineral (S1)			Depleted Dark S	urface (F7	')		Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy C	Gleyed Matrix (S4)			Redox Depression	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
Sandy F	Redox (S5)							Red Parent Material (TF2)			
Striped	Matrix (S6)				-				Very Shallow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R, MLF	RA 149B)						Other (Explain in Remarks)			
³ Indicators of	hydrophytic vegetation	and wetla	nd hyd	rology must be pr	esent, un	less distur	bed or pro	blematic.			
	.ayer (if observed):										
Type: _	nahaa).							Usadria Cai	I Drecont2 Vec V No		
Depth (i	niches).							Hydric Soi	I Present? Yes X No		
Remarks:								•			
St - local hyd	dric soil unit										

Appendix B

Site Photographs



Photo 1: Facing south, looking into Wetland D.



Photo 2: Photo looking west along corn field and Wetland D on left.



Photo 3: Facing south into Wetland D - forested covertype.



Photo 4: Facing northeast, south area of Wetland D is shown.



Photo 5: Facing northwest and looking into Wetland D.



Photo 6: Facing west near scrub-shrub transition area of Wetland D.



Photo 7: Looking northeast at Wetland D spur (west edge) in alfalfa field.



Photo 8: Facing west along Bovee Road, Wetland A on left.



Photo 9: Portion of Wetland A shown facing south from Bovee Road.



Photo 10: Looking at middle of Wetland B- signs of seasonal inundation.



Photo 11: Picture showing Wetland C - located in center of wetland.



Photo 12: Facing northwest within Wetland E - seasonally inundated.



Photo 13: Facing east, access location between two ag fields.



Photo 15: Showing wooded hillside along south edge of property.

Photo 14: View southwest across alfalfa field.



Photo 16: South area of property - upland forest.

Addendum to Wetland Monitoring & Assessment Baseline Report NATURAL RESOURCES INVENTORY of the Mill Seat Property

Monroe County, New York





Addendum to Wetland Monitoring & Assessment Baseline Report NATURAL RESOURCES INVENTORY of the Mill Seat Property

Monroe County, New York

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September 24, 2012

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 $\label{lem:cover_photographs: Top left - young red maple hardwood swamp; bottom \ right - flooded \ red maple hardwood swamp.$

INTRODUCTION

In April, and May 2012, Applied Ecological Services, Inc. and Barton & Loguidice conducted a field visit to collect data on the Natural Resources in portions of the Mill Seat Landfill property. The purpose of this inventory was to provide additional ecological information to become the basis for potential future land use decisions for portions of Mill Seat's property. The information includes a summary of the physiographic and natural community elements

Portions of the Mill Seat Property have conservation value, in spite of the extent of agricultural land use on the property. A sizable portion of the Mill Seat property contains hydric soils and remnant native wetland plant communities, as well as mesic forest uplands containing spring ephemeral populations. The following report presents the results of our inventory, including a description of the natural community remnants and other land cover types.

METHODS

Information Search and Review

A search and review of available resource data and documentation pertaining to natural resources and land uses on the Mill Seat was performed. Available materials included recent digital orthophotography, property boundary survey, Monroe County Soil Survey, Natural Heritage Inventory endangered resource database, NWI and NYSDEC wetland maps, and recent wetland delineations (B&L 2009, 2011).

Land Cover Classification & Mapping

A base map of the project area was developed using a color aerial photograph, with property boundaries. Prior to field investigation, a preliminary in-house review was conducted of previous vegetation and land cover type mapping by Barton & Loguidice 2011. A land cover type map (Figure 1) was produced that used a similar color-coded Land Classification mapping system to what had been developed previously by Barton & Loguidice (2009, 2011).

Field Reconnaissance

On April 25 and May 15, 2012, AES and B&L conducted a ground reconnaissance of the Mill Seat property. Natural Plant communities were identified/confirmed and mapped and plant species in each community recorded. Occasional animal sightings and signs were documented as were site disturbances and general ecological health conditions of the various vegetation communities. Representative conditions of vegetation communities identified during the survey were photo documented.

RESULTS

Site Conditions

The Mill Seat Landfill Property was largely comprised of existing landfill operations land and agricultural land (Figure 1). Most agricultural fields have typically been planted to row crops. Most fields were in an unplanted condition at the time of our site visits. Upland tree lines, woodlands and wetlands, mostly which are forested were also found in the Mill Seat Property. An old farmstead occupied a small portion of the property.

Existing delineated wetlands were found in most areas that contained hydric soil. The west, south and east sides of the property investigated in this study consisted mostly of wetlands, some of which were along portions of Hotel Creek.

Physiography & Native Vegetation

The Mill Seat Property was level to gently rolling (0-6% slopes), with some steep slopes ranging from 25-60% (see soils map in B&L 2011). A constructed ditch drained a portion of a wooded wetland in the central area of the Mill Seat Property investigated without flow directed south to Hotel Creek.

Soils

Soil types of the Mill Seat Property have previously been described and mapped in B&L (2011). Upland soils consisted largely of well-drained loams and silt loams over glacial tills. Soils of low-lying areas consisted of hydric soils comprised of Brockport silty clay loam, Lakemont silt loam, shallow Muck and Wayland silt loam. Churchill silt loam, an upland soil, typically contained hydric inclusions.

Endangered Resources

NYSDEC's Natural Heritage Program data files of recent and historical records in the project area listed two species that potentially could occur on the Mill Seat Property (B & L 2011). These were the federally threatened and NY State endangered bog turtle (*Clemmys muhlenbergii*) and the NY State endangered log fern (*Dryopteris celsa*). There were also several Exploitably Vulnerable plant species that potentially could be found on the Mill Seat Property.

Wildlife Sightings

Wildlife encountered during the site visit was comprised of bird species, utilizing the site or flying over. Commonly seen and heard songbirds included those of open and brushy agricultural lands, such as robin, cardinal, turkey vulture, red winged blackbird, song sparrow and field sparrow. In the woodlands, flickers and downy woodpeckers were observed or heard.

Natural Communities

A general description of the natural communities and other land cover types identified on the Mill

Seat Property follows. The approximate extent of each community is delineated on the map in Figure 1, the Existing Conditions Map. Our investigations were conducted in the early part of the growing season, but most of the vegetation had emerged from dormancy.

UPLAND PLANT COMMUNITIES

Agricultural Fields & Meadows

Agricultural fields and meadows comprised approximately 150 acres of the Mill Seat Property (Figure 1). Upland meadows were comprised mostly of non-native cool season grasses, non-native agricultural weeds and a few non-conservative native upland species.

Deciduous Forests

Small areas of upland mesic deciduous forest areas were found on the property. These were sugar maple dominated woodlands with a moderate level of spring wildflowers. Typical native species included sugar maple (*Acer saccharum*), ironwood (*Ostrya virginiana*), white ash (*Fraxinus americana*), woodbine (*Parthenocissus quinquefolia*), yellow trout lily (*Erythronium americanum*), wild leek (*Allium tricoccum*), wild geranium (*Geranium maculatum*), jack-in-the-pulpit (*Arisaema triphyllum*), seer sucker sedge (*Carex plantaginea*), and enchanter's nightshade (*Circaea lutetiana*). Other occasionally observed species were wild black cherry (*Prunus serotina*), shagbark hickory (*Carya ovata*), pin cherry (*Prunus pensylvanica*), sedges (*Carex* spp.), prickly ash (*Zanthoxylum americana*), red oak (*Quercus rubra*), white rattlesnake-root (*Prenanthes alba*), kidney leaf buttercup (*Ranunculus abortivus*), blue cohosh (*Caulophyllum thalictroides*), violets (*Viola* spp.), zig-zag goldenrod (*Solidago flexicaulis*), white snake root (*Eupatorium rugosum*), false Solomon's seal (*Smilacina racemosa*), white trillium (*Trillium grandiflorum*), Christmas fern (*Polystichum acrostichoides*) and horsetail (*Equisetum arvense*). Two species, white trillium and Christmas fern are listed in NY State as Exploitably Vulnerable species.

Shrub Land and Treeline

Upland shrub lands and treelines were found south of the existing Landfill Operations Areas (Figure 1). Tree lines provided the borders of most of the agricultural fields and some of the upland border of the wetlands. This community type has been disturbed for years as a result of the adjacent agricultural activities. Most tree lines have had field stones from the nearby agricultural fields placed in them. Most of this community was comprised of narrow bands of trees and shrubs and thus contained a variety of native woody (Photographs 1, 2, & 3) and herbaceous species typically associated with upland forests as well as a number of native and non-native weedy species. Typical native species included yellow trout lily, prickly ash, white avens (Geum canadense), heal all (Prunella vulgaris), poison ivy (Rhus radicans), ash (Fraxinus sp.), Pennsylvania bitter cress (Cardamine pensylvanica), sedge (Carex sp.), American hazelnut (Corylus americana), shagbark hickory, pin cherry, red maple, bloodroot (Sanguinaria canadensis), Canada goldenrod (Solidago canadensis), farewell summer aster (Symphyotrichum lateriflorum), raspberry (Rubus idaeus), wild black currant (Ribes americana), woodbine, woodland knotweed (*Polygonum virginianum*), gray dogwood (*Cornus racemosa*), rose's sedge (Carex rosea), bur oak (Quercus macrocarpa), ash (Fraxinus sp.), Violet (Viola sp.), choke cherry (Prunus virginiana), wild black cherry, horsetail, bedstraw (Galium sp.), strawberry (Fragaria virginiana), planted black walnut (Juglans nigra) and black raspberry (Rubus occidentalis). One species found in this community; bloodroot, is listed as a NY State Exploitably Vulnerable species.

Non-native herbaceous and woody species were also commonly observed in this disturbed wooded community. These included garlic mustard (*Alliaria petiolata*), burdock (*Arctium minus*), multiflora rose (*Rosa multiflora*), European buckthorn (*Rhamnus cathartica*), honeysuckle (*Lonicera* spp.), reed canary grass (*Phalaris arundinacea*), dandelion (*Taraxacum officinale*), climbing nightshade (*Solanum dulcamara*), hawthorns (*Crataegus* spp.), teasel (*Dipsacus* sp.), curly dock (*Rumex crispus*), black locust (*Robinia pseudoacacia*), and planted apples (*Malus* sp.).



Photograph 1. Shagbark hickory in the shrub land/treeline community.



Photograph 2. Young trees & shrubs in the shrub land and treeline community.



Photograph 3. Shrub land/treeline community.

WETLAND PLANT COMMUNITIES

Wetland areas investigated in 2012 in the Mill Seat Property were dominated by forested wetlands with a sizable acreage of Palustrine Emergent/Shrub Scrub Mix wetlands and a small constructed pond (Figure 1).

Forested Wetlands

Forested wetlands were found mostly on the east and west sides of the Mill Seat Property with a small area also found to the south along Hotel Creek (Figure 1). Other than Landfill Operations areas, forested wetlands comprised the largest acreage of vegetation communities on the Mill Seat Property investigated, approximately 136 acres. A smaller sized forested wetland of approximately 12 acres (RG-6) was also investigated in the central area of the property just south of the current landfill foot print (Figure 1). This wetland was actively being drained by a constructed ditch that was located to the south of this wetland and eventually connected to the eastern wetland complex and then to Hotel Creek.

Western and Southern Forested Wetlands (RG-5)

The wetlands along the western side of the Mill Seat Property (Photographs 4-7) were mostly comprised of forested wetlands consisting of red maple (*Acer rubrum*) and green ash (*Fraxinus pensylvanica*). Within these forested areas were small patches of the Palustrine Emergent/Shrub scrub wetlands. The vegetation in forested wetland on the west side was moderately diverse and moderate to high quality. Evidence of past logging (dead cut stumps of varying age) was observed in most of the forested wetland areas.

Some of the plant species observed in the western and southern forested wetland communities included red maple, green ash, sensitive fern (*Onoclea sensibilis*), farewell summer aster, fowl manna grass (*Glyceria striata*), bulbous bitter cress (*Cardamine bulbosa*), awl-fruited sedge (*Carex stipata*), spicebush (*Lindera benzoin*), blue beech (*Carpinus caroliniana*), starry Solomon's seal (*Smilacina stellata*), marsh marigold (*Caltha palustris*), black willow (*Salix nigra*), wild iris (*Iris versicolor*), poison ivy, wood reed (*Cinna arundinacea*), hog peanut (*Amphicarpaea bracteata*), tufted yellow-loosestrife (*Lysimachia*)

thyrsiflora), hemlock water parsnip (Sium suave), turtles head (Chelone glabra), bishop's cap (Mitella diphylla) and jewelweed (Impatiens capensis). One species; turtles head is listed as a NY State Exploitably Vulnerable species.



Photograph 4. Flooded red maple hardwood swamp.



Photograph 5. Young red maple hardwood swamp with shrubs.



Photograph 6. Forested red maple hardwood swamp with patches of open wetlands.



Photograph 7. Young forested red maple hardwood swamp.

Eastern Forested Wetland (RG-7)

The forested wetland area located to the south and east on the Mill Seat Property was dominated by red maple and also contained green (and perhaps some black ash; Fraxinus nigra) trees (Photograph 8). Native plant species diversity was moderately high and the quality moderate to high (Photograph 9). Native plant species included; red maple, green ash, farewell summer aster, wild black currant, wild grape (Vitis riparia), bristly buttercup (Ranunculus hispidus), virgin's bower (Clematis virginiana), lake bank sedge (Carex lacustris), fowl manna grass, violet (Viola sp.), awl-fruited sedge, false nettle, Joe pye weed (Eupatorium maculatum), wood reed grass, wild iris, water horehound (Lycopus americana), marsh marigold, spicebush, red osier dogwood, sensitive fern and cattail (Typha spp.). One species; believed to be Canada lily (Lilium canadense) was also found in the southern area adjacent to Hotel Creek just inside the treeline of this community. Canada lily is listed as a NY State Exploitably

Vulnerable species. The lily plant specimens located were immature and there was a possibility that some of these individuals could have been the NY State endangered Michigan lily (*Lilium michiganense*) or the Exploitably Vulnerable turk's cap lily (*Lilium superbum*). Identification during flowering may be required.

The forested wetland tree canopy was most likely second or third growth, based on tree diameters, with most trees less than 18 inches DBH (Photographs 10 & 11). The sub canopy of woody species ranged from almost an open sub canopy to areas where dense spicebush was found. Downed woody material cover, which provides habitat and nutrient recycling, was moderate. In more open patches, the non-native aggressive reed canary grass was observed.



Photograph 8. Young to moderate of forested wetland along the eastern portions of the Mill Seat Property.



Photograph 9. Marsh marigold and a variety of plant species in the southern portion of the forested wetland along Hotel Creek.



Photograph 10. Second or third growth forested red maple hardwood swamp.



Photograph 11. Spice bush in understory of forested red maple hardwood swamp.

Central Forested Wetland, (RG-6)

This forested wetland community was being actively drained by a constructed ditch. In April, most of the interior woods were inundated with up to 6 inches of water (or more in a few areas). The woods were dominated by red maple, especially in the woodland interior with scattered silver maples (*Acer saccharinum*), green ash and swamp white oaks (*Quercus bicolor*). Red maples were mostly smaller sized (4-12" DBH) and the swamp white oaks were typically larger (8-14" DBH). A few larger red maples were observed and tended to be raised on hummocks above the standing water (Photographs 12, 13, & 14). Overall, most trees appeared to have very shallow roots, as a number of trees had blown down.



Photograph 12. Central forested wetland (RG-6).



Photograph 13. Downed wood in central forested wetland (RG-6).



Photograph 14. Forested wetland with downed wood (RG-6).

An abundance of red maple and ash seedlings had germinated and were the dominant vegetation in the deeper water areas of this central wetland (Photographs 13 & 14). While diversity was moderate, the percentage of ground cover of the native vegetation in this central wetland appeared to be much less than the other forested wetland areas on the east, south and west on the Mill Seat Property. Some of the native species observed included red maple, silver maple, green ash, swamp white oak, red osier dogwood, buttonbush (*Cephalanthus occidentalis*), sedges (*Carex* spp.), false nettle, fowl manna grass, farewell summer aster, sensitive fern, black raspberry, hop sedge, wild iris, awl-fruited sedge, water horehound, white avens, cattail, cursed buttercup (*Ranunculus sceleratus*), wool grass (*Scirpus cyperinus*) and dark green bulrush (*Scirpus atrovirens*).

Towards the edge of this area, non-native grasses of reed canary grass (Photograph 15) and giant reed grass (*Phragmites australis*) had gained a foothold. In drier areas of the periphery of this woodland, non-native woody species of European buckthorn, multiflora rose and honeysuckle have also invaded as have some non-native herbaceous species; dandelion and climbing nightshade.



Photograph 15. Reed canary grass (foreground) and giant reed canary grass (background) in the central forested wetland (RG-6).

Palustrine Emergent/Shrub Scrub Mix (parts of RG-5 & 7)

This plant community was found in patches throughout the wetlands around the Mill Seat Landfill, with a more expansive area along Hotel Creek to the south (Figure 1). Trees were smaller sized and usually spaced along the outer edge of the patch with some areas having dense shrubs or dense sedges with few to no trees (Photographs 16-18). This community comprised more than 58 acres of the areas investigated (Figure 1). The Palustrine Emergent/Shrub Scrub mix contained a diverse mix of herbaceous and woody species. The herbaceous species included, lake bank sedge, horsetail, sensitive fern, wild iris, marsh marigold, fowl manna grass, farewell summer aster, fringed loosestrife (*Lysimachia ciliata*), violet (*Viola* sp.), cardinal flower (*Lobelia cardinalis*), tussock sedge (*Carex stricta*), awl-fruited sedge, turtles head, red stemmed aster (*Symphyotrichum puniceum*), jewelweed, cattail, Joepye weed, cinnamon fern (*Osmunda cinnamomea*), royal fern (*Osmunda regalis*), poison ivy, cattail, hemlock water parsnip, boneset (*Eupatorium perfoliatum*), graceful sedge (*Carex gracillima*), hop sedge, poison hemlock (*Cicuta maculata*), and buttercups (*Ranunculus* spp.). Cardinal flower and turtles head are listed as State of NY Exploitably Vulnerable species. Woody plant species included, ashes, wild black currant, red osier dogwood, red maple, gray dogwood, silky dogwood (*Cornus amomum*), willows (*Salix* spp.), buttonbush, blue beech, swamp white oak and nanny berry (*Viburnum lentago*).

Both non-native herbaceous and woody species were observed in this community or in adjacent habitats, most likely a result of an increase in light availability. Reed canary grass, dandelion, climbing nightshade, honeysuckles, European buckthorn and high bush cranberry (*Viburnum opulus*) were the most commonly observed non-native species in this community.



Photograph 16. Palustrine emergent/shrub scrub area along Hotel Creek.



Photograph 17. Dense shrub in the palustrine emergent/shrub scrub community.



Photograph 18. Sedge dominated open areas of palustrine emergent/shrub scrub community.

Open Water/Pond

A small constructed pond/open water area was located on the western side of the Mill Seat Property in wetland RG-5 (Figure 1). The pond appeared to be an acre in size or slightly larger. The pond depth was not determined, but appeared of sufficient depth to perhaps support a limited fishery and a variety of amphibians. The pond edge was vegetated with mostly native species and localized populations of non-native reed grass. Native species included wild iris, lakebank sedge, buttonbush and sensitive fern.

References

- Barton & Loguidice. 2009. Wetland Delineation Report for the Proposed Mill Seat Landfill Soil Expansion Area. Prepared for: Waste Management of New York, Inc. Monroe County, New York.
- Barton & Loguidice. 2011. Wetland Monitoring and Assessment Baseline Report & 2011 Annual Report. Prepared for Waste Management of New York, LLC; Monroe County Mill Seat Landfill, Town of Riga, New York.

Figure 1. Existing Plant Community Map

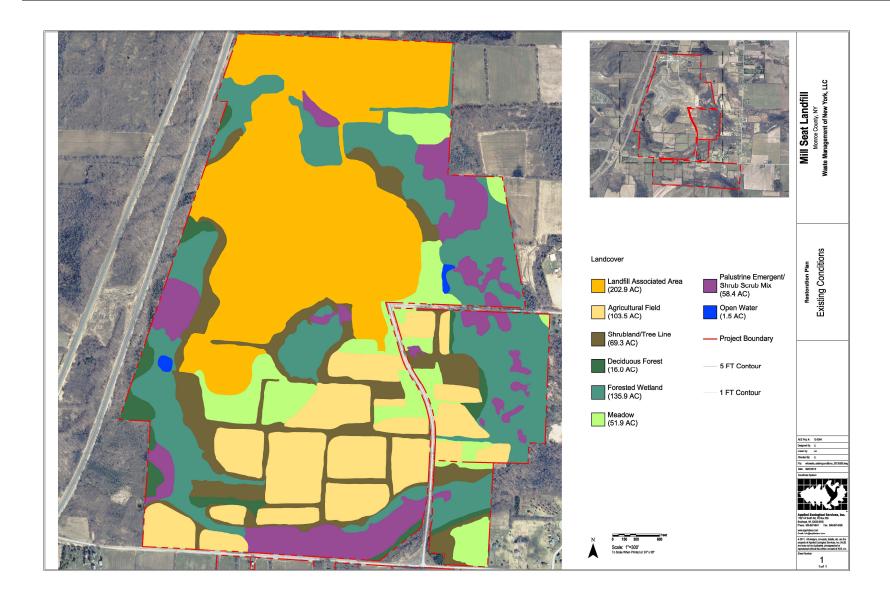


Table 1. Plant species observed in Palustrine Emergent/Shrub Scrub Community and Western Forested Wetland (DEC RG-5)

Scientific Name	Common Name
Acer rubrum	Red maple
Acer saccharinum	Silver maple
Agrimonia gryposepala	Tall agrimony
Alliaria petiolata	Garlic mustard
Arctium minus	Common burdock
Asclepias incarnate	Swamp milkweed
Aster lateriflorus	Side-flowering aster
Caltha palustris	Marsh marigold
Cardamine pensylvanica	Pennsylvania bitter cress
Carex lacustris	Lake sedge
	Awl-fruited sedge
Chelene globre	Turtlehead
Chelone glabra Cicuta maculate	Water hemlock
Cornus stolonifera	Red- osier dogwood
Crataegus mollis	Downy hawthorn
Crataegus sp.	Hawthorn
Dryopteris sp.	Shield fern
Epilobium coloratum	Cinnamon willow herb
Equisetum arvense	Horsetail
Erythronium americanum	Yellow trout lily
Euphorbia maculate	Nodding spurge
Fragaria virginiana	Wild strawberry
Fraxinus pennsylvanica subintegerrima	Green ash
Galium obtusum	Wild madder
Geum canadense	White avens
Glyceria striata	Fowl manna grass
Impatiens capensis	Spotted touch-me-not
Iris virginica shrevei	Blue flag iris
Lilium michiganense	Michigan lily
Lobelia cardinalis	Cardinal flower
Lonicera tatarica	Tartarian honeysuckle
Lysimachia ciliate	Fringed loosestrife
Lythrum salicaria	Purple loosestrife
Mentha arvensis villosa	Wild mint
Onoclea sensibilis	Sensitive fern
Populus deltoids	Cottonwood
Prunella vulgaris	Common self heal
Prunus pensylvanica	Pin cherry
Prunus virginiana	Choke cherry
Rhamnus cathartica	Buckthorn
Ribes americanum	Wild black currant
Rosa palustris	Swamp rose
Salix nigra	Black willow
Sium suave	Water parsnip
Smilacina racemosa	Feathery false Solomon's seal
	<u>, </u>

Solanum dulcamara	Bittersweet nightshade
Typha latifolia	Cattail
Viburnum opulus	European highbush cranberry
Viola cucullata	Hooded violet
Xanthoxylum americanum	Prickly ash

Table 2. Plant Species Observed in Shrubland/Treeline Community

Scientific Name	Common Name
Acer rubrum	Red maple
Alliaria petiolata	Garlic mustard
Allium sp.	Onion species
Aster lateriflorus	Side-flowering aster
Carex rosea	Curly-styled wood sedge
Carya ovate	Shagbark hickory
Cornus racemosa	Gray dogwood
Crataegus mollis	Downy hawthorn
Fraxinus nigra	Black ash
Fraxinus pennsylvanica subintegerrima	Green ash
Geum canadense	White avens
Glyceria striata	Fowl manna grass
Lonicera tatarica	Tartarian honeysuckle
Onoclea sensibilis	Sensitive fern
Parthenocissus quinquefolia	Virginia creeper
Polygonum virginianum	Woodland knotweed
Prunus pensylvanica	Pin cherry
Prunus virginiana	Choke cherry
Quercus bicolor	Swamp white oak
Quercus macrocarpa	Bur oak
Ranunculus abortivus	Small-flowered buttercup
Rhamnus cathartica	Buckthorn
Rhus radicans	Poison ivy
Ribes americanum	Wild black currant
Rosa multiflora	Multiflora rose
Rubus occidentalis	Black raspberry
Sanguinaria Canadensis	Bloodroot
Taraxacum officinale	Dandelion
Viburnum rafinesquianum	Downy arrow wood
Vitis riparia	Riverbank grape

Table 3. Plant Species Observed in Forested Wetlands (Central Forested Wetland DEC RG-6)

Scientific Name	Common Name
Acer rubrum	Red maple
Acer saccharinum	Silver maple
Alliaria petiolata	Garlic mustard
Aster lateriflorus	Side-flowering aster
Boehmeria cylindrical	False nettle
Carex stipata	Awl-fruited sedge
Cornus stolonifera	Red-osier dogwood
Erigeron philadelphicus	Marsh fleabane
Eupatorium perfoliatum	Boneset
Fragaria virginiana	Wild strawberry
Fraxinus pennsylvanica subintegerrima	Green ash
Geum canadense	Wood avens
Iris virginica shrevei	Blue flag iris
Juncus effuses	Common rush
Lonicera tatarica	Tartarian honeysuckle
Lycopus rubellus	Stalked water horehound
Phalaris arundinacea	Reed canary grass
Phragmites australis	Reed
Quercus bicolor	Swamp white oak
Rhamnus cathartica	Buckthorn
Rhus radicans	Poison ivy
Rosa palustris	Swamp rose
Rubus occidentalis	Black raspberry
Rubus occidentalis	Black raspberry
Scirpus fluviatilis	River bulrush
Solanum dulcamara	Bittersweet nightshade
Taraxacum officinale	Dandelion

Table 4. Plant Species Observed in the Eastern Forested Wetlands (DEC RG-7)

Scientific Name	Common Name
Acer rubrum	Red maple
Acer saccharinum	Silver maple
Agalinis sp.	Foxglove species
Alisma subcordatum	Water plantain
Alliaria petiolata	Garlic mustard
Allium sp.	Onion species
Asclepias incarnata	Swamp milkweed
Aster lateriflorus	Side-flowering aster
Aster puniceus	Swamp aster
Boehmeria cylindrical	False nettle
Carex lacustris	Lake sedge
Carex stipata	Awl-fruited sedge
Chelone glabra	Turtlehead
Cicuta maculate	Water hemlock
Cinna arundinacea	Wood reed
Circaea lutetiana canadensis	Enchanter's nightshade

Clematis virginiana	Virgin's bower
Cornus stolonifera	Red-osier dogwood
Dryopteris sp.	Shield fern species
Epilobium coloratum	Cinnamon willow herb
Equisetum arvense	Horsetail
Eupatorium maculatum	Joe-pye weed
Eupatorium perfoliatum	Boneset
Eupatorium rugosum	White snakeroot
Fraxinus nigra	Black ash
Fraxinus pennsylvanica subintegerrima	Green ash
Galium apariné	Annual bedstraw
Galium triflorum	Sweet-scented bedstraw
Geum canadense	White avens
Glyceria striata	Fowl manna grass
Impatiens capensis	Spotted touch-me-not
Iris virginica shrevei	Blue flag iris
Lemna minor	Small duckweed
Lindera benzoin	Spicebush
Ludwigia palustris americana	Marsh purslane
Lycopus americanus	Water horehound
Lycopus rubellus	Stalked water horehound
Matteuccia struthiopteris	Ostrich-feather fern
Mentha arvensis villosa	Wild mint
Mimulus ringens	Monkey flower
Onoclea sensibilis	Sensitive fern
Phragmites australis	Reed
Prunella virginiana	Choke cherry
Ranunculus sceleratus	Cursed buttercup
Ranunculus septentrionalis	Swamp buttercup
Rhamnus cathartica	Buckthorn
Rhus radicans	Poison ivy
Ribes americanum	Wild black currant
Rosa multiflora	Multiflora rose
Rubus occidentalis	Black raspberry
Salix nigra	Black willow
Sanguinaria canadensis	Bloodroot
Smilacina racemosa	Feathery false Solomon's seal
Solanum dulcamara	Bittersweet nightshade
Symphoricarpos orbiculatus	Coralberry
Taraxacum officinale	Dandelion
Typha latifolia	Cattail
Urtica procera	Tall nettle
Viburnum lentago	Nannyberry
Viburnum opulus	European highbush cranberry
Viburnum rafinesquianum	Downy arrow wood
Viola cucullata	Hooded violet

NATURAL RESOURCES INVENTORY of the The Mahar Property

Monroe County, New York





A P P L I E D ECOLOGICAL SERVICES

August, 2012

NATURAL RESOURCES INVENTORY of the The Mahar Property

MONROE COUNTY, New York

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Cover Photographs: Top Photograph - Mesic Forest; bottom photograph- Forested Wetland on the Mahar Property, taken in spring, 2012

INTRODUCTION

In April 2012, Applied Ecological Services, Inc. conducted a Natural Resource Inventory on the 207-acre Mahar parcel. The Mahar Property is located south of the current Mill Seat landfill, along the south side of Bovee Road, Town of Riga, Monroe County, New York. The Mahar property is located in the southwest corner of Monroe County.

The purpose of this inventory effort is to provide valuable ecological information that will become the basis for future land use planning on this agricultural property. The information includes a summary of the physiographic and natural community elements, as well as identifies critical resource issues and opportunities to restore and manage native remnant wetland and upland communities on the site. These elements can serve as important links to local environmental corridors, as well as provide visual amenities in the developed landscape, potentially provide soil borrow opportunities and evaluate the site as wetland mitigation for Mill Seat Landfill expansion.

Portions of the Mahar property have conservation value, in spite of the extensive agricultural land uses on the property. A portion of the property contains hydric soils with remnant native wetland plant populations, as well as mesic forest upland, containing spring ephemeral native wildflower populations. Other forested wetlands and upland shrub scrub cover provides an opportunity to integrate a complex of wetland and upland habitat within a larger environmental corridor.

The results of the Natural Resource Inventory, including a description of the natural community remnants and other land cover types, as well as a discussion of critical resource issues and opportunities for restoration and management on the property follow.

METHODS

Information Search and Review

AES conducted a brief review of available resource data and documentation pertaining to natural resources and land uses on the Mahar property. Available materials included recent aerial photography, topography, Monroe County Soil Survey, NWI and NYSDEC wetland maps, and recent wetland delineation (Barton & Loguidice 2011).

Physical Setting

The Mahar property is located within the upper Genesee Basin and in the Great Lakes Plain (Zone B), Erie-Ontario Plain Ecological Zone of New York (NYSDEC 2008). Hotel Creek, a mapped by NYSDEC waterway is found north of the Mahar property across Bovee Road.

Past glaciations have influenced the Mahar Property. Three drumlins are found within the Mahar property. Over 100 feet of relief occurs on the Mahar property, with the highest point being 760 feet above sea level at the top of Pinnacle Hill one of the three drumlins located in the south central portion of the site and the lowest relief being 650 feet above sea level in the northeast portion of the site (Barton & Loguidice 2011).

Soils on the property have been previously described by Barton & Loguidice (2011). Approximately 60 acres are described as being somewhat to very poorly drained soils and 4 acres as being freshwater marsh with most of hydric soils currently supporting wetlands. The largest onsite wetland complex is found in the southeast corner of the Property (B&L 2011). Smaller wetlands are located in the southwestern portion of the property and a small wetland is located along Bovee road (see B&L 2011 for wetland locations). The NWI wetland map showed two wetland types: Palustrine Emergent and Palustrine Forested/Scrub-Shrub.

Upland soils consist of moderately well to well drained silt loams and loams. In addition, some sandy loams, cobbly loams and fine sandy loams are well drained soils associated mostly with the three onsite drumlins.

Land Cover Classification & Mapping

A color aerial photograph was used to map the major vegetation and land cover types in the field. On April 26, AES conducted a ground reconnaissance of the Mahar property. AES identified and mapped the locations of natural community boundaries, recorded plant species representative of each identified plant community, recorded occasional animal sightings and signs, documented disturbances and general ecological health conditions on the property and identified restoration and management opportunities. Representative plant community conditions identified during the survey were photo documented.

RESULTS

Site Conditions

The Mahar property consists of mostly agricultural land, with most fields typically planted to row crops or hay fields (Figure 1). Tree lines typically separate the individual crop fields. Upland woodlands consist of sugar maple and beech in the southeast and southwest corners. Scrub/shrub areas (former apple orchards) on the drumlins were found in higher contour zones while forested hardwood swamp and shrub/scrub wetlands were located on lower contours. Most row crop fields were in an unplanted condition at the time of our site visits. Hydric and or poorly drained soils comprised approximately 30% of the property. The south east side corner of the property consists of sizable forested and shrub/scrub wetland.

Natural Communities

Following is a general description of the natural communities and other land cover types identified on the Mahar property. The extent of each community is delineated on the existing conditions map (Figure 1). Our investigations were conducted in the early part of the growing season (April), but most of the vegetation was well enough established to identify. Site photographs were also taken of representative plant communities.

<u>Uplands</u>

Agricultural Fields (Land Cover Type 1, Figure 1) – Agricultural lands made up the majority of the Mahar Property and were comprised of row cropped fields and hay fields. Most row crop fields had not been planted at the time of our site visit.

Mesic Forests (Land Cover Type 8, Figure 1) – The southwest corner of the property contained a mature mesic upland forest community comprised of sugar maple (Acer saccharum) and beech (Fagus grandiflora). This mesic forest had a somewhat open understory with a beech and sugar maple saplings and small trees (Photographs 1-3) and scattered small trees and shrubs and can be described as typical healthy mesic forest. The sugar maple-beech community supported a diverse plant community comprised of trees, shrubs and wildflowers. The tree canopy was comprised of some differing of age classes of maple and beech with the sub canopy dominated by sugar maple and ironwood (Ostrya virginiana). Additional woody species included chokecherry (Prunus virginiana), pin cherry (Prunus pensylvanica), shagbark hickory (Carya ovata), red maple (Acer rubrum), bitternut hickory (Carya cordiformis), white ash (Fraxinus Americana), wild black cherry (Prunus serotina), ironwood, spicebush (Lindera benzoin), red elm (Ulmus rubra), red oak (Quercus rubra), basswood (Tilia americana), alternate leaved dogwood (Cornus alternifolia), gooseberry (Ribes cynobasti), red elderberry (Sambucus pubens), woodbine (Parthenocissus quinquefolia) and poison ivy (Rhus radicans).



Photo 1. Sugar maple-beech mesic woods.



Photo 2. Sugar maple-beech mesic woods – note old cut stumps in foreground.



Photo 3. Sugar maple-beech mesic woods with numerous saplings of maple and beech.

The ground story flora was mostly comprised of spring ephemerals and included sedges such as Pennsylvanica sedge, curly styled wood sedge, and plantain leaf sedge (Carex pennsylvanica, C rosea, and C plantaginea) onion (Allium sp.), wild leek (Allium tricoccum), yellow trout lily (Erythronium americanum), blue cohosh (Caulophyllum thalictroides), Virginia water leaf (Hydrophyllum virginiana), bloodroot (Sanguinaria canadensis), toothwort (Dentaria laciniata), large flowered trillium (Trillium grandiflora), bottle brush grass (Elymus Hystrix), violets (Viola spp.), false Solomon seal (Smilacina racemosa) red raspberry (Rubus idaeus), black raspberry (Rubus occidentalis), white snake root (Eupatorium rugosum), jack-in-the pulpit (Arisaema triphyllum), white avens (Geum canadense), moon seed (Menispermum canadense) (Photographs 4 & 5).

Some non-natives species were present, but their numbers were generally low. These included garlic mustard (*Alliaria petiolata*), dandelion (*Taraxacum officinale*), dame's rocket (*Hesperis matronalis*), lesser burdock (*Arctium minus*) and multiflora rose (*Rosa multiflora*). Anthropogenic activities included past logging which was evident from the number of old and variously decayed stumps. Placement of glacial rocks into fence walls that had been removed from the farm fields over the years was also common (Photograph 6).



Photo 4. Mesic woods spring ephemerals: trilliums & broad leaved wild leek.



Photo 5. Spring ephemeral ground cover in mesic woods.



Photo 6. Stone fence built from glacial material collected from farm fields.

A second mesic woodland area was located in the southeastern portion of the Mahar Property (Figure 1). This woodland was also dominated by sugar maple and beech with some red maples (Photograph 7). The larger sugar maple comprised a somewhat even-aged stand. Evidence of past logging activities was found throughout this area. Beech drops (*Epifagus virginiana*), an uncommon saprophyte on beech roots were found in this mesic woods. Occasionally, white ash, pin cherry, wild black cherry, ironwood, spice bush, woodbine, red elderberry and toothache tree (*Zanthoxylum americanum*) were observed. The ground story component was moderately diverse and included yellow trout lily, sedges, bloodroot, violets, toothwort, wild onion, red raspberry, jack-in-the-pulpit, enchanter's nightshade (*Circaea lutetiana*), white snake root and squirrel corn (*Dicentra canadensis*). Occasionally, the non-native European buckthorn shrub (*Rhamnus cathartica*) was found.



Photo 7. More mature sugar maple-beech mesic woods.

Tree Lines. (Land Cover Type 11, Figure 1). A number of tree lines were found on the Mahar Property and separated most of the agricultural fields. A combination of non-native and native species was typically found in the tree lines. Non-natives were typically more prevalent in these tree covered areas do most likely to the adjacency of the agricultural fields. Natives such as gray dogwood (Cornus racemosa), pin cherry, red maple, willows (Salix sp.), bur oak (Quercus macrocarpa), basswood, wild black cherry, smooth and staghorn sumacs (Rhus glabra, R. typhina), blackberry (Rubus allegheniensis), red raspberry, wild onion, sedges and Canada goldenrod (Solidago canadensis) were observed as were non-natives such as dandelion, garlic mustard, dame's rocket, dock (Rumex sp.), honeysuckles (Lonicera spp.) and multiflora rose. Agricultural field stones had also been deposited in many of the tree lines.

Young Woodland. (Land Cover Type 10, Figure 1). A small size, young-aged woodland was located in the north central portion of the Mahar Property along Bovee Road (Photographs 8 & 9). A residential outlot comprised the western boundary of this woodland. Young ash trees (30 yrs of age or younger), hawthorns (Crataegus spp.) and apple trees (Malus spp.) with scattered red maples comprised the woodled canopy. Shrubby species, both native and non-native were dense in most of this woodland. Non-native of European buckthorn, honeysuckle, multiflora rose and natives such as gray dogwood, young ash trees/saplings, elderberry (Sambucus canadensis) were also prominent in this woodland. A few native herbaceous species were observed, such as, sedges, farewell-summer aster (Symphyotrichum lateriflorum), and wild onion. Garlic mustard has aggressively invaded into this woodland.



Photo 8. Young woodland with ash trees, European buckthorn, and garlic mustard.



Photo 9. Young woodland with abundant honeysuckles and garlic mustard.

Scrub/shrub areas. (Land Covers Types 2, 7 & 9, Figure 1). Three drumlins were found on the Mahar Property and consisted mostly of disturbed scrub/shrub or small forest areas and non-native cool season grass openings/areas.

The Science Hill Drumlin (Land Cover Types s 2 & 9, Figure 1) was found along Bovee Road in the central portion of the Mahar Property. The top of the Science Hill Drumlin was comprised of an old field/pasture encompassed by narrow tree lines along the north, east and west top of the drumlin. The south slope of the drumlin was dominated by a steeply sloped scrub-shrub and disturbed woodland (Photograph 10). The old field had mostly non-native species such as orchard grass (*Dactylis glomerata*), Kentucky blue grass (*Poa pratensis*), dandelion, clovers (*Trifolium* spp.), lance leaved plantain (*Plantago lanceolata*) sulfur cinquefoil (*Potentilla recta*) and Queen Anne's lace (*Daucus carota*). A few native non-conservative plant species were also observed in the old field. These included Canada goldenrod, fleabane (*Erigeron* sp.), hairy aster (*Symphyotrichum pilosum*) and red osier dogwood (*Cornus stolonifera*).



Photo 10. Young shrubby woodland located on Science Hill Drumlin.

The disturbed wooded portion of the Science Hill drumlin, most of which was located on the steeper sloped areas, was comprised of non-native and native woody species (Photograph 11). Non-native woody species included European buckthorn, hawthorn, honeysuckle, multiflora rose and apple trees. Native woody species included ash (*Fraxinus* sp.), red osier dogwood, gray dogwood, chokecherry, smooth sumac, wild black cherry, prickly ash, poison ivy and wild grape (*Vitis* sp.). Some areas were heavily shade suppressed with little to no ground story vegetation (Photograph 12)



Photo 11. Young, shrubby area on Science Hill Drumlin.



Photo 12. Shade suppressed woodland area on Science Hill Drumlin.

Patches of shrubs, such as gray dogwood were dense in some areas, such as along the south slope. Portions of the south facing slope contained a mixture of non-native and native herbaceous species interspersed between the shrub patches. Commonly observed native species included, black raspberry, hairy aster, white avens, strawberry (Fragaria virginiana), arrow leaf aster (Symphyotrichum sagittifolius), New England aster (Symphyotrichum novae-angliae), gray goldenrod (Solidago nemoralis), grass leaf goldenrod (Euthamia graminifolia), poverty oats grass (Danthonia spicata) and a sedge species (Carex sp.). Non-native species were also present and include garlic mustard, orchard grass, Kentucky blue grass, dandelion, lesser bur dock and Canada blue grass (Poa compressa).

The Pinnacle Hill drumlin (Land Cover Type 7) was the largest of the three drumlins on the Mahar Property and was found along the southern border in the central portion of the site. The western two thirds of the drumlin which comprised the steepest slopes is a scrub- shrub dominated community. The eastern third of the drumlin, where slopes are not quite as steep, had a scrubby more open grassed understory community (Photograph 13) that graded into a sugar maple beech mesic forest. In this slope area a small spring daylights at mid slope of the drumlin and the spring flows into the scrub/shrub wetland below.

The presence of old apple trees provided evidence that this drumlin, as were the other two, likely were previously managed as an apple orchard. The orchard is no longer maintained and a variety of woody species have invaded and now they dominate the drumlin. Gray dogwood, pin cherry, young red maple, young ash, chokecherry and Missouri Gooseberry (*Ribes missouriense*) were observed as were non-native woody species such as honeysuckle, hawthorns, and multiflora rose. Ground story vegetation was absent and/or almost totally shade suppressed and when present was confined to more open areas of the scrub-shrub complex. Densely shaded ground areas contained an almost total cover of mosses. The scattered native ground story plants found mostly in scattered light gaps included white avens, sedges, arrow leaf aster, Canada goldenrod, enchanter's nightshade (*Circaea lutetiana*), black raspberry and red raspberry, strawberry, violets, mayapple (*Podophyllum peltatum*), woodland smartweed (*Polygonum virgin*iana) and yellow trout lily. Non natives were also scattered and included dandelion, lance leaf plantain, orchard grass, clovers, Kentucky blue grass, burdock and dames rocket. A non-native highly aggressive invasive species; black swallow-wort (*Cynanchum louiseae*) was occasionally observed.



Photo 13. Pinnacle Hill drumlin scrub/shrub area. Note spring in lower left corner.

The third drumlin on the Mahar property was called the Blue Hill Drumlin (Land Cover Types 2 & 7) and was located along the eastern property boundary (Figure 1). The presence of old apple trees, similar to the Pinnacle Hill Drumlin, suggested that these drumlins were historically used as an orchard. The apple trees are no longer maintained and have been out grown by a variety of weedy species such as honeysuckles, brome grasses (*Bromus sp.*), blue grasses (*Poa* sp.) and orchard grass along with Queen Anne's lace, dandelion, yarrow (*Achillea millefolium*), knapweed (*Centaurea maculosa*), lance leaved plantain, strawberry, hairy aster, gray goldenrod, gray dogwood and common milkweed (*Photographs* 14, 15, 16 & 17).



Photo 14. Densely shade suppressed mid slope of Blue Hill Drumlin.



Photo 15. Cool season non-native grassy/shrub area on Blue Hill Drumlin.



Photo 16. Shrubby area with mixed cool season non-native grasses on Blue Hill Drumlin.



Photo 17. Sparsely vegetated sloped area of the Blue Hill Drumlin.

Wetlands. Wetlands in the Mahar Property have been delineated and described in 2011 (Barton and Loguidice 2011). The following sections further describe the wetland community types on the Mahar property.

Cattail Wetland (Land Cover Type 4, Figure 1) - A small cattail (*Typha* sp.) wetland was found in a low spot along Bovee Road and most likely was an isolated wetland. This area contained what appeared to be narrow leaf cattail (*Typha angustifolia*), willow and a few other species.

Forested Wetlands (Land Cover Type 5, Figure 1) - Several forested wetland areas were found on the Mahar property. The larger of the forested wetlands was located in the southeast corner of the Mahar Property. The larger forested wetland was part of a larger connected forested wetland complex that continued off site to the southeast. Most of this wetland had 6-12 inches of standing water in April (Photograph 18). Red maple seedlings had germinated and were the dominant species observed growing throughout the areas were standing water was present, such as vernal pool areas. Downed wood, mostly branches were located throughout the wetland, most likely the result of past wind storms.

Canopy cover of tree species was dominated by red maple with varying abundances of green ash (Fraxinus pennsylvanica), American elm (Ulmus americana), silver maple (Acer saccharinum), black willow (Salix nigra) and sugar maple. The understory woody component was sparse and comprised of spicebush, button bush (Cephalanthus occidentalis), red osier dogwood, gray dogwood, elderberry, nanny berry (Viburnum lentago), marsh rose (Rose palustris) with some tooth ache tree in drier areas. Ground story species included, wild onion, sensitive fern (Onoclea sensibilis), white avens, turtle head (Chelone glabra), skunk cabbage (Symplocarpus foetidus), fowl manna grass (Glyceria striata), violets, horsetail (Equisetum sp.), lake sedge (Carex lacustris), jewelweed (Impatiens capensis), dewberry (Rubus hispidus), wild iris (Iris versicolor), poison hemlock (Cicuta maculata), Farewell to summer aster, marsh fern (Thelypteris palustris), meadow rue (Thalictrum dasycarpum), poison ivy, royal fern (Osmunda regalis), sedges, wood reed grass (Cinna arundinacea), buttercups (Ranunculus sp.), red stem aster (Aster puniceus), hop sedge (Carex lupulina), jack-in-the-pulpit, cow parsnip (Sium suave), tufted loosestrife (Lysimachia thyrsiflora) and false nettle (Boehmeria cylindrica). The NY State Exploitably Vulnerable species; Canada lily (Lilium canadense) was also observed. Drier slightly higher elevation areas contained species such as white snake root, Canada may flower (Maianthemum canadense) and enchanters nightshade (Photograph 19).



Photo 18. Forested wetland with standing water.



Photo 19. Drier portion of the forested wetland.

A few non-native species were found in the larger wooded wetland and included multiflora rose, nightshade, reed grass (*Phragmites australis*) and high bush cranberry (*Viburnum opulus*). This wetland area had evidence of past logging with a number of cut stumps of various age.

Three smaller wooded wetlands are located in the southwest corner of the property (Land Cover 5). These wetlands have been impacted to varying degrees by the previous agricultural related activities that occurred on the Mahar Property. The forested wetland farthest east and its surrounding upland woods was comprised of a diverse compliment of plants (Photograph 20). This area transitions from upland to a small red maple swamp. Areas surrounding this small wetland were mature second growth, with evidence of past logging.



Photo 20. Small forested wetland depression in southeast area of the Mahar Property.

Woody native plant species observed included sugar maple, green ash, beech, red maple, elms (*Ulmus* sp.), spice bush, red elderberry, swamp rose (*Rosa palustris*), gray dogwood, nanny berry, June berry (*Amelanchier* sp.), wild black currant (*Ribes americana*), alternate leaved dogwood, Wahoo (*Euonymus atropurpurea*), red osier dogwood, wild grape and button bush. An occasional non-native woody plant or vine was observed such as multiflora rose, European buckthorn, honeysuckle, high bush cranberry and nightshade (*Solanum dulcamara*). Non-native herbaceous species were garlic mustard and cleavers (*Galium aparine*).

The ground story was quite diverse with a combination of upland and wetland species. Native herbaceous species included sensitive fern, hop sedge, fowl manna grass, calico aster, jewelweed, common rush (Juncus effusus), strawberry, onion, horsetail (Equisetum arvense), wood fern (Dryopteris sp.), wild cucumber (Echinocystis lobata), skunk cabbage, spring cress (Cardamine bulbosa), dewberry (Rubus sp.), sedges, water hemlock, wild iris, meadow rue, bed straw (Galium sp.), royal fern, violet, turtlehead, Buttercups (Ranunculus sp.), Parasol white top aster (Doellingeria umbellatus), white avens, tall hairy grooveburr (Agrimonia gryposepala), tufted loosestrife (Lysimachia thyrsiflora), water parsnip (Sium suave), jack-in-the pulpit, Canada may flower (Maianthemum canadense), Canada lily, bishops cap (Mitella diphylla), white snake root, Enchanter's nightshade, false nettle and false Solomon's seal (Smilacina racemosa).

The two other small forested wetlands (land Cover Type 5) in the eastern portion of the Mahar property were also small red maple swamp areas that have been partially filled as part of the removal of glacial rocks from the surrounding agricultural lands (Photographs 21 & 22). Most of the rock material appears to have been placed in this area some years ago. The deeper flooded red maple swamp portions of these two wetland lacked vegetation cover. Downed woody vegetation was abundant. Red maple, poison ivy, reed grass, hop sedges, sensitive fern, bitternut hickory were some commonly observed species.



Photo 21. Small depressional forested wetland in southeastern corner of Mahar Property.



Photo 22. Wet forest/ponded area in the southeastern corner of the Mahar Property.

Scrub/Shrub Wetland. (Land Cover Type 6)- An open scrub/shrub wetland, with a history of previous agricultural activity (based on old aerial photography interpretation) was found in the central portion of the Mahar Property, immediately to the east of the larger forested wetland on the site (Photographs 23, 24 & 25). Dogwoods, willows, nannyberry and small ashes were interspersed with cool season grasses such as Kentucky blue grass and redtop grass (Agrostis sp.) with native sedges such as awl fruited sedge (Carex stipata), fox sedge (Carex vulpinoidea) and dark green bulrush

(Scirpus atrovirens). This area was historically farmed and has only recently (perhaps 20 years) reverted back to wetland conditions.



Photo 23. Cattail patch within the scrub/shrub wetland.



Photo 24. Cool season non-native grass area in the scrub/shrub wetland.



Photo 25. Scrub/shrub wetland in Mahar Property.

Endangered Resources

During our field investigations on, we did not identify any known or suspected state or federally listed plant or animal species. An Exploitably Vulnerable listed species; Canada lily (*Lilium canadense*) was found at several locations in the Mahar Property. Our investigations were conducted in the early part of the growing season, and thus it was not possible to provide positive identification of the *Lilium* species. It is possible that the some of the individual plants may also have been Turk's cap lily (*Lilium michiganense*) a State of NY Endangered species known to occur in Monroe County. Given the extensive historic and current agricultural land use impacts to the property, no other listed plant species are anticipated to be located in the Mahar site. Positive identification of the *Lilium* species should be made when the species is in flower.

Wildlife Sightings

Wildlife encountered during the site visit was comprised of bird species, utilizing the site or flying over and a few amphibians heard calling in the wetlands. Commonly seen and heard songbirds included those of open and brushy agricultural lands and woodlands, such as robin, cardinal, turkey vulture, yellow-rumped warbler, pileated wood pecker, song sparrow, field sparrow, blue jay, crow, red tailed hawk and redwing blackbird. Amphibians hear calling were spring peepers.

OPPORTUNITIES for RESTORATION & MANAGEMENT

In the process of conducting the natural resource survey, we identified a number of critical natural resource features which we believe merit attention in the future restoration planning and land management efforts for the Property.

- Of the 200+ acres comprising the Maher property, approximately 25% of the site currently contains wetlands. The entire delineated wetland area occupies hydric soils, with the some edges of the delineated wetland more or less disturbed by agricultural practices. Nevertheless, a large portion of the wetland contains remnant forested wetland conditions. Graminoid and shrub covered wetland appears to have developed a number of years ago when an agricultural field was abandoned.
- Mesic forests are for the most part in a healthy ecological condition, containing a diverse spring ephemeral population, provides an opportunity to integrate mesic forest elements into any proposed restoration of the property.
- Topographic relief is dramatic because of the drumlins and could provide an opportunity to
 integrate a diverse complex of natural wetland and upland forests with upland grassland
 communities on the drumlins and agricultural fields comprised of upland and wetland
 grassland communities along moisture gradients.

REFERENCES

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Figure 1. Existing Conditions Map



Exhibit 1. Plant Community Species Lists

Science Hill Drumlin Mahar Property

Scientific Name	Common Name
Agrimonia gryposepala	Tall hairy grooveburr
Alliaria petiolata*	Garlic mustard
Allium canadense	Wild onion
Arctium minus*	Burdock
Cornus racemosa	Gray dogwood
Crataegus mollis	Hawthorn
Dactylis glomerata*	Orchard grass
Danthonia spicata	Poverty oats grass
Echinocystis lohata	Wild cucumber
Fragaria virginiana	Strawberry
Fraxinus pennsylvanica	Green ash
Galium aparine*	Cleavers
Geum canadense	White avens
Lonicera tatarica*	Honeysuckle
Malus sp. *	Apple tree
Poa compressa*	Canada bluegrass
Poa pratensis*	Kentucky bluegrass
Prunus americana	Wild plum
Prunus pensylvanica	Pin cherry
Prunus serotina	Wild black cherry
Rhamnus cathartica*	European buckthorn
Rhus radicans	Poison ivy
Rosa multiflora*	Multiflora rose
Rubus occidentalis	Black raspberry
Solidago nemoralis	Old-field goldenrod
Symphyotrichum novae-angliae	New England aster
Symphyotrichum lateriflorum	Calico aster
Symphyotrichum sagittifolius	Arrowleaf aster
Taraxacum officinale*	Dandelion
Vitis riparia	Wild grape
Zanthoxylum americanum	Toothache tree (Prickly ash)
*Non-native	

Upland Mesic Forest SE Corner Mahar Property		
Scientific Name	Common Name	
Acer saccharum	Sugar maple	
Actaea pachypoda	Doll's eyes	
Alliaria petiolata	Garlic mustard	
Arisaema triphyllum	Jack-in-the-pulpit	
Carex sp.	Unidentified Sedge	
Circaea lutetiana	Enchanter's nightshade	
Dentaria laciniata	Toothwort	
Dicentra canadensis	Squirrel corn	
Epifagus virginiana	Beech drops	
Erythronium americanum	Yellow trout lily	
Eupatorium rugosum	White snake root	
Fagus grandifolia	Beech	
Fraxinus americana	White ash	
Geranium robertianum	Herb robert	
Lindera benzoin	Spicebush	
Ostrya virginiana	Ironwood	
Parthenocissus quinquefolia	Woodbine	
Prunus pensylvanica	Pin cherry	
Prunus virginiana	Choke cherry	
Ranunculus recurvatus	Buttercup	
Rhamnus cathartica*	European buckthorn	
Ribes sp.	Gooseberry	
Rubus idaeus	Raspberry	
Rubus occidentalis	Black raspberry	
Sambucus pubens	Red elderberry	
Sanguinaria canadensis	Bloodroot	
Solidago canadensis	Canada goldenrod	
Viola sororia	Violet	
Zanthoxylum americanum	Tooth ache tree (Prickly ash)	

Scrub/Shrub Marsh Land Cover 5 Mahar Property

Scientific Name	Common Name
Agrostis alba	Red top grass
Asclepias incarnata	Swamp milkweed
Carex stipata	Awl fruited sedge
Carex vulpinoidea	Fox sedge
Cirsium arvense *	Canada thistle
Cornus racemosa	Gray dogwood
Cornus stolonifera	Red osier dogwood
Dipsacus sylvestris *	Teasel
Epilobium coloratum	Cinnamon willow herb
Equisetum arvense	Horsetail

Eupatoriadelphus maculatus	Joe-pye weed
Fraxinus nigra	Black ash
Juncus sp.	Rush
Mentha arvensis	Wild mint
Muhlenbergia mexicana	Mexican Muhly grass
Salix petiolaris	Willow
Scirpus atrovirens	Dark green bulrush
Symphyotrichum lateriflorum	Calico aster
Symphyotrichum puniceum	Red stem aster
Taraxacum officinale *	Dandelion
Typha latifolia	Broad-leaf cattail
Viburnum lentago	Nannyberry
*Non-native species	

Young Woodland Land Cover 10 Mahar Property

Scientific Name	Common Name
Acer rubrum	Red maple
Alliaria petiolata *	Garlic mustard
Allium sp.	Onion
Carex sp.	Sedge
Cornus racemosa	Gray dogwood
Crataegus crus-galli	Hawthorn
Fraxinus pennsylvanica	Green ash
Galium aparine*	Cleavers
Geum canadense	White avens
Lonicera tatarica *	Honeysuckle
Malus sp.*	Apple tree
Prunus pensylvanica	Pin cherry
Rhamnus cathartica *	European buckthorn
Ribes americanum	Wild black current
Rosa multiflora*	Multiflora rose
Sambucus canadensis	Elderberry
Symphyotrichum lateriflorum	Calico aster
Taraxacum officinale *	Dandelion
*Non-native Species	

Pinnacle Hill Drumlin

Scientific Name	Common Name
Acer rubrum	Red maple
Achillea millefolium *	Yarrow
Allium sp.	Onion
Anemone virginiana	Tall anemone
Arctium minus *	Burdock
Carex rosea	Rose's sedge
Carex sp.	Sedge
Carya cordiformis	Butternut hickory
Circaea lutetiana	Enchanter's nightshade
Cornus racemosa	Gray dogwood
Crataegus sp.	Hawthorn
Cynanchum sp*	Swallowwort
Dactylis glomerata*	Orchard grass
Erythronium americanum	Yellow trout lily
Fragaria virginiana	Strawberry
Geranium robertianum	Herb Robert
Geum canadense	White avens
Hesperis matronalis *	Dame's rocket
Lonicera tatarica *	Honeysuckle
Malus sp.*	Apple tree
Plantago lanceolata *	Lanced-leaved plantain
Poa pratensis*	Kentucky blue grass
Podophyllum peltatum	May apple
Polygonum virginianum	Woodland knotweed
Prunella vulgaris	Heal all
Prunus pensylvanica	Pin cherry
Prunus serotina	Wild black cherry
Rhamnus cathartica *	European buckthorn
Ribes missouriense	Missouri gooseberry
Rosa multiflora *	Multiflora rose
Solidago altissima	Tall goldenrod
Solidago canadensis	Canada goldenrod
Symphyotrichum novae-angliae	New England aster
Symphyotrichum sagittifolius	Arrowleaf aster
Taraxacum officinale *	Dandelion
Trifolium pratense *	Red clover
Viola sororia	Violet
*Non-Native species	

Mesic Upland Forest southwest corner of the Mahar Property

Acer saccharum Alliaria petiolata Garlic mustard Allium sp. Onion Allium tricoccum Wild leek Arctium minus * Burdock Arisaema triphyllum Red osier dogwood Carex albursina Blunt-scaled wood sedge Carex pensylvanica Pennsylvania sedge Carex radiata Straight-styled wood sedge Carya cordiformis Bitternut hickory Carya ovata Shagbark hickory Caulophyllum thalictroides Blue cohosh Cornus alternifolia Alternate-leaved dogwood Cornus racemosa Gray dogwood Dentaria laciniata Erythronium americanum Yellow trout lily Fagus grandifolia Beech Fraxinus americana White ash Fraxinus sp. Ash Hesperis matronalis * Dame's rocket Hydrophyllum virginianum Virginia water leaf Hystrix patula Lindera benzoin Spicebush	Mesic Upland Forest southwest corner of the Mahar Property		
Acer saccbarum Alliam spetiolata Alliam spetiolata Alliam spetiolata Alliam spetiolata Alliam spetiolata Arsiam intrioccum Alliam sina Arsiam intipllum Red osier dogwood Arsiam intipllum Red osier dogwood Carex albursina Blunt-scaled wood sedge Carex penylvania Pennsylvania sedge Carex radiata Carya ordiformis Bitternut hickory Carya orota Carya orota Carolphyllum thalictroides Blue cohosh Carus alternifolia Alternate-leaved dogwood Cornus racemosa Gray dogwood Dentaria laciniata Toothwort Erythoroutum americanum Yellow trout lily Fagus grandifolia Beech Fraxinus americana White ash Fraxinus spe. Ash Ilesperis matronalis* Dame's rocket Ilydrophyllum virgnianum Virgnia water leaf Hystric patula Bottlebrush grass Lindera benzain Menispermum canadeuse Ostrya virgniana Prunus penylwania Prunus penylwania Prunus penylwania Prunus penylwania Prunus penylwania Rannoulus aborticus Buttercup Rosa multifora * Rosa multifora * Rubus oscidentalis Black raspberry Rubus occidentalis Bloodroot Smilacina racemosa False Solomon's seal Tultum grandiforum Large flower trillium Fagus sasswood Trillium grandiforum Large flower trillium		Common Name	
Alliuria petiolata Allium sp. Onion Allium tricoccum Wild leek Arctum minus* Burdock Arctum minus* Burdock Arctum minus* Burdock Arctum minus* Blunt-scaled wood sedge Carex ensylvania Blunt-scaled wood sedge Carex pensylvania Pennsylvania sedge Carex radiata Straight-styled wood sedge Carey arctifucture Shagbark hickory Carya orata Canya orata Canya orata Canya blue cohosh Carnus racemosa Gray dogwood Cornus racemosa Gray dogwood Dentaria laciniata Toothwort Erythomium americanum Yellow trout lily Fagus grandifolia Beech Fraximus americana White ash Fraximus sp. Ash Hesperis matronalis* Dame's rocket Hydrophyllum virginianum Virginia water leaf Hydroxybulum virginianum Virginia water leaf Hydroxybulum virginianum Pranus pensylvania Bottlebrush grass Lindera benzoin Monoseed Ostrya virginiana Querus rubra Red oak Ramunculus abortirus Buttercup Rhus radicans Rubus dokum sees Raspberry Rubus occidentalis Black raspberry Rubus occidentalis Black raspberry Rubus occidentalis Black raspberry Sambus iduent Basswood Trillium grandiforum Large flower trillium Basswood Trillium grandiforum Large flower trillium	Acer rubrum	Red maple	
Allium sp. Onion Allium trioccum Wild leek Arcium minus* Burdock Arcium minus* Burdock Arcium minus* Burdock Arcium minus* Red osier dogwood Garex albursina Blunt-scaled wood sedge Carex pensylvania cdge Carex radiata Straight-styled wood sedge Carya cordiformis Bitternut hickory Carya owata Canlophyllum thalictroides Blue cohosh Cornus alternifolia Alternate-leaved dogwood Cornus racemosa Gray dogwood Dentaria laciniata Toothwort Erythonium americanum Yellow trout lily Fagus grandifolia Beech Fraxinus americana White ash Fraxinus sp. Hesperis matronalis* Dame's rocket Hydrophyllum virginianum Virginia water leaf Hystrix patula Bottlebrush grass Lindera benzoin Menispernum canadense Ostrya virginiana Fornus grandifolia Woodbine Puruus pensylvania Puruus pensylvania Puruus grandigolia Puruus grandigol			
Allium tricoccum Artium minus * Burdock Burdock Burdock Artium minus * Burdock Burdock Burdock Burdock Burdoch Straight-styled wood sedge Carex panylvania sedge	Alliaria petiolata		
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Arisaema triphyllum Carex albursina Blunt-scaled wood sedge Carex penylvanica Carex penylvanica Carex andata Straight-styled wood sedge Carya cordiformis Bluternut hickory Carya orata Shagbark hickory Caulophyllum thalictroides Blue cohosh Cornus alternifolia Alternate-leaved dogwood Cornus racemosa Gray dogwood Dentaria laciniata Toothwort Erythronium americanum Yellow trout lily Feagus grandfolia Beech Fraxinus americana White ash Fraxinus americana White ash Fraxinus sp. Ash Hesperis matronalis* Dame's rocket Hydrophyllum virginianum Virginia water leaf Ilystrix patula Bottlebrush grass Lindera bengoin Menispermum canadense Moonseed Ostrya virginiana Ironwood Parthenocissus quinquefolia Prunus penylvanica Pin cherry Prunus serotina Wild black cherry Prunus robes Rannanlus abortivus Buttercup Rhus radicans Ross multiflora * Rubus occidentalis Baker raspherry Rubus occidentalis Baker raspherry Rubus occidentalis Baker raspherry Sambucas Belower Basswood Trillium grandiflorum Large flower trillium	Allium tricoccum	Wild leek	
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Carex radiata Carya oratiformis Bitternut hickory Carya orata Shagbark hickory Carya orata Shagbark hickory Carya orata Shagbark hickory Carya orata Shagbark hickory Carya orata Canlophyllum thalictroides Blue cohosh Alternate-leaved dogwood Cornus racemosa Gray dogwood Dentaria laciniata Toothwort Erythronium americanum Yellow trout lily Fragus grandifolia Beech Fraxinus americana White ash Fraxinus sp. Ash Hesperis matronalis* Dame's rocket Hydrophyllum virginianum Virginia water leaf Hystrix patula Bottlebrush grass Lindera benzoin Menispermum canadense Moonseed Ostrya virginiana Ironwood Parthenocissus quinquefolia Woodbine Prunus persylvanica Princherry Prunus serotina Prunus sirginiana Chokeberry Quercus rubra Red oak Ranunculus abortivus Buttercup Rhus radicans Poison ivy Ribes cynosbati Gooseberry Rubus videntalis Black raspberry Rubus oicidentalis Black raspberry Sambucus pubens Red-berried elder Sanguinaria canadensis Bloodroot Franca Basswood Trillium grandiflorum Large flower trillium	Carex albursina	Blunt-scaled wood sedge	
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Carya ovata Canlophyllum thalictroides Blue cohosh Cornus alternifolia Alternate-leaved dogwood Cornus racemosa Dentaria laciniata Toothwort Erythronium americanum Yellow trout lily Fagus grandifolia Beech Fraxinus americana White ash Fraxinus sp. Hesperic matronalis* Dame's rocket Hydrophyllum virginianum Virginia water leaf Hystrix patula Bottlebrush grass Lindera benzoin Menispermum canadense Ostrya virginiana Pranus pensylvanica Pranus pensylvanica Prunus pensylvanica Prunus virginiana Chockeberry Prunus virginiana Chockeberry Runus virginiana Ranunculus abortinus Buttercup Rhus radicans Ros multiflora * Rubus idaeus Rubus occidentalis Black raspberry Rubus occidentalis Black raspberry Sambucus pubens Smilei anadenie* Dandelion Tilliau meradidiorum Large flower trillium Rasswood Trillium grandiflorum Large flower trillium	Carex radiata	Straight-styled wood sedge	
Canlophyllum thalictroides Cornus alternifolia Cornus auternifolia Cornus racemosa Gray dogwood Cornus racemosa Gray dogwood Toothwort Erythronium americanum Yellow trout lily Fagus grandifolia Beech Frascinus americana White ash Frazinus sp. Ash Hesperis matronalis* Dame's rocket Hydrophyllum virginianum Virginia water leaf Ilystrix patula Bottlebrush grass Lindera benzoin Menispermum canadense Ostrya virginiana Pranus serotina Prunus pensylvanica Prunus pensylvanica Prunus virginiana Quercus rubra Ramunculus abortivus Buttercup Rhus radicans Rosa multiflora* Rubus occidentalis Back raspberry Rubus occidentalis Sanbucus pubens Red-berrice elder Sanguinaria canadensis Smilea mandelion Tillia un grandiflorum Basswood Trillium grandiflorum Large flower trillium	Carya cordiformis	Bitternut hickory	
Cornus alternifolia Cornus racemosa Continuo Erythronium americanum Fagus grandifolia Beech Frazinus spandifolia Beech Frazinus sp. Ash Hesperis matronalis* Dame's rocket Hydrophyllum virginianum Virginia water leaf Hystrix patula Bottlebrush grass Lindera benzoin Spicebush Menispermum canadense Moonseed Ostrya virginiana Ironwood Parthenocissus quinquefolia Woodbine Prunus pensylvanica Prinus serotina Prunus pensylvanica Prinus serotina Prunus virginiana Chokeberry Quercus rubra Red oak Ranunculus abortivus Buttercup Rhus radicans Poison ivy Ribes cynosbati Gooseberry Rosa multiflora * Multiflora rose Rubus idaens Raspberry Rubus occidentalis Black raspberry Rubus occidentalis Sanginaria canadensis Bloodroot Smilacina racemosa False Solomon's seal Traraxacum officinale * Dandelion Tilia americana Basswood Trillium grandiflorum Large flower trillium	Carya ovata	Shagbark hickory	
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Fraxinus sp. Ash Fraxinus sp. Ash Hesperis matronalis* Dame's rocket Hydrophyllum virginianum Virginia water leaf Hystrix patula Bottlebrush grass Lindera benzoin Menispermum canadense Moonseed Ostrya virginiana Ironwood Parthenocissus quinquefolia Prunus pensylvanica Prunus pensylvanica Prunus virginiana Chokeberry Prunus virginiana Chokeberry Prunus virginiana Chokeberry Red oak Ranunculus abortivus Buttercup Rhus radicans Roseberry Rosa multiflora* Multiflora rose Rubus idaeus Rangunaria canadensis Bloodroot Smilacina racemosa False Solomon's seal Taraxacum officinale* Dandelion Tillia americana Basswood Trillium grandiflorum Large flower trillium	Erythronium americanum	Yellow trout lily	
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Menispermum canadenseMoonseedOstrya virginianaIronwoodParthenocissus quinquefoliaWoodbinePrunus pensylvanicaPin cherryPrunus serotinaWild black cherryPrunus virginianaChokeberryQuercus rubraRed oakRanunculus abortivusButtercupRhus radicansPoison ivyRibes cynoshatiGooseberryRosa multiflora *Multiflora roseRubus idaeusRaspberryRubus occidentalisBlack raspberrySambucus pubensRed-berried elderSanguinaria canadensisBloodrootSmilacina racemosaFalse Solomon's sealTilia americanaBasswoodTrilium grandiflorumLarge flower trillium		Bottlebrush grass	
Menispermum canadenseMoonseedOstrya virginianaIronwoodParthenocissus quinquefoliaWoodbinePrunus pensylvanicaPin cherryPrunus serotinaWild black cherryPrunus virginianaChokeberryQuercus rubraRed oakRanunculus abortivusButtercupRhus radicansPoison ivyRibes cynoshatiGooseberryRosa multiflora *Multiflora roseRubus idaeusRaspberryRubus occidentalisBlack raspberrySambucus pubensRed-berried elderSanguinaria canadensisBloodrootSmilacina racemosaFalse Solomon's sealTilia americanaBasswoodTrilium grandiflorumLarge flower trillium	Lindera benzoin	Spicebush	
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Prunus pensylvanicaPin cherryPrunus serotinaWild black cherryPrunus virginianaChokeberryQuercus rubraRed oakRanunculus abortivusButtercupRhus radicansPoison ivyRibes cynosbatiGooseberryRosa multiflora *Multiflora roseRubus idaeusRaspberryRubus occidentalisBlack raspberrySambucus pubensRed-berried elderSanguinaria canadensisBloodrootSmilacina racemosaFalse Solomon's sealTaraxacum officinale *DandelionTilia americanaBasswoodTrillium grandiflorumLarge flower trillium	Ostrya virginiana	Ironwood	
Prunus pensylvanicaPin cherryPrunus serotinaWild black cherryPrunus virginianaChokeberryQuercus rubraRed oakRanunculus abortivusButtercupRhus radicansPoison ivyRibes cynosbatiGooseberryRosa multiflora *Multiflora roseRubus idaeusRaspberryRubus occidentalisBlack raspberrySambucus pubensRed-berried elderSanguinaria canadensisBloodrootSmilacina racemosaFalse Solomon's sealTaraxacum officinale *DandelionTilia americanaBasswoodTrillium grandiflorumLarge flower trillium	Parthenocissus quinquefolia	Woodbine	
Prunus serotinaWild black cherryPrunus virginianaChokeberryQuercus rubraRed oakRanunculus abortivusButtercupRhus radicansPoison ivyRibes cynosbatiGooseberryRosa multiflora *Multiflora roseRubus idaeusRaspberryRubus occidentalisBlack raspberrySambucus pubensRed-berried elderSanguinaria canadensisBloodrootSmilacina racemosaFalse Solomon's sealTaraxacum officinale *DandelionTilia americanaBasswoodTrillium grandiflorumLarge flower trillium		Pin cherry	
Quercus rubraRed oakRanunculus abortivusButtercupRhus radicansPoison ivyRibes cynosbatiGooseberryRosa multiflora *Multiflora roseRubus idaeusRaspberryRubus occidentalisBlack raspberrySambucus pubensRed-berried elderSanguinaria canadensisBloodrootSmilacina racemosaFalse Solomon's sealTaraxacum officinale *DandelionTilia americanaBasswoodTrillium grandiflorumLarge flower trillium		Wild black cherry	
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Rosa multiflora * Multiflora rose Rubus idaeus Raspberry Rubus occidentalis Black raspberry Sambucus pubens Red-berried elder Sanguinaria canadensis Bloodroot Smilacina racemosa False Solomon's seal Taraxacum officinale * Dandelion Tilia americana Basswood Trillium grandiflorum Large flower trillium	Rhus radicans	Poison ivy	
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Rubus occidentalis Black raspberry Sambucus pubens Red-berried elder Sanguinaria canadensis Bloodroot Smilacina racemosa False Solomon's seal Taraxacum officinale * Dandelion Tilia americana Basswood Trillium grandiflorum Large flower trillium	Rosa multiflora *	Multiflora rose	
Sambucus pubens Red-berried elder Sanguinaria canadensis Bloodroot Smilacina racemosa False Solomon's seal Taraxacum officinale* Dandelion Tilia americana Basswood Trillium grandiflorum Large flower trillium	Rubus idaeus	Raspberry	
Sambucus pubensRed-berried elderSanguinaria canadensisBloodrootSmilacina racemosaFalse Solomon's sealTaraxacum officinale *DandelionTilia americanaBasswoodTrillium grandiflorumLarge flower trillium	Rubus occidentalis	Black raspberry	
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Taraxacum officinale *DandelionTilia americanaBasswoodTrillium grandiflorumLarge flower trillium	Sanguinaria canadensis		
Tilia americana Basswood Trillium grandiflorum Large flower trillium	Smilacina racemosa	False Solomon's seal	
Tilia americana Basswood Trillium grandiflorum Large flower trillium	Taraxacum officinale *	Dandelion	
	Tilia americana	Basswood	
Ulmus rubra Red elm	Trillium grandiflorum	Large flower trillium	
	Ulmus rubra	Red elm	

Ulmus sp.	Elm
Viola sororia	Violet
*Non-native species	

Smaller Forested Wetlands in southwest corner of the Mahar Property

Smaller Forested Wetlands in souths Acer rubrum	Red maple
Acer saccharum	Sugar maple
Agrimonia gryposepala	Tall hairy grooveburr
Allium sp.	Onion
Amelanchier sp.	Juneberry
Arisaema triphyllum	Jack-in-the-pulpit
Boehmeria cylindrica	False nettle
Cardamine bulbosa	Bulbous cress
Carex lacustris	Lake bank sedge
Carex lupulina	Hop sedge
Carex radiata	Straight-style wood sedge
Cephalanthus occidentalis	Buttonbush
Chelone glabra	Turtlehead
Cicuta maculata	Water hemlock
Circaea lutetiana	Enchanter's nightshade
Cornus alternifolia	Alternate-leaf dogwood
Cornus racemosa	Gray dogwood
Cornus stolonifera	Red osier dogwood
Doellingeria umbellata	Flat-topped aster
Dryopteris thelypteris	Marsh fern
Equisetum arvense	Horsetail
Euonymus alatus	Burning bush
Eupatorium rugosum	White snakeroot
Fagus grandifolia	Beech
Fraxinus pennsylvanica	Green ash
Galium sp.	Bedstraw
Galium triflorum	Sweet-scented bedstraw
Geum canadense	White avens
Glyceria striata	Foul manna grass
Impatiens capensis	Jewelweed
Iris virginica shrevei	Wild iris
Lilium canadense/michiganense	Canada/Turk's cap lily
Lindera benzoin	Spice bush
Lonicera tatarica *	Honeysuckle
Lycopus rubellus	Water horehound
Lysimachia thyrsiflora	Tufted loosestrife
Maianthemum canadense	Canada may flower
Mitella diphylla	Bishop's cap
Onoclea sensibilis	Sensitive fern
Osmunda regalis	Royal fern
Ranunculus abortivus	Buttercup

Ranunculus recurvatus	Buttercup
Rhamnus cathartica *	European buckthorn
Ribes americanum	Wild black current
Rosa multiflora *	Multiflora rose
Rosa palustris	Swamp rose
Rubus strigosus	Red raspberry
Salix interior	Sand bur willow
Sambucus pubens	Red elderberry
Sium suave	Water parsnip
Smilacina racemosa	False Solomon's seal
Solanum dulcamara *	Nightshade
Symphyotrichum lateriflorum	Calico aster
Symplocarpus foetidus	Skunk cabbage
Thalictrum dasycarpum	Meadow rue
Urtica procera	Nettle
Viburnum lentago	Nannyberry
Viburnum opulus *	Highbush cranberry
Viola nephrophylla	Violet
Vitis riparia	Wild grape
*Non-native species	

Supplemental Wetland Delineation Project Memorandum, October 4, 2013

Barton & Loguidice, P.C.

Memo to: Project File File: 1242.022.013

From: Johanna E. Duffy Date: October 4, 2013

Re: Supplemental Wetland Delineation

Proposed Mill Seat Landfill Expansion

Wetland RG-6

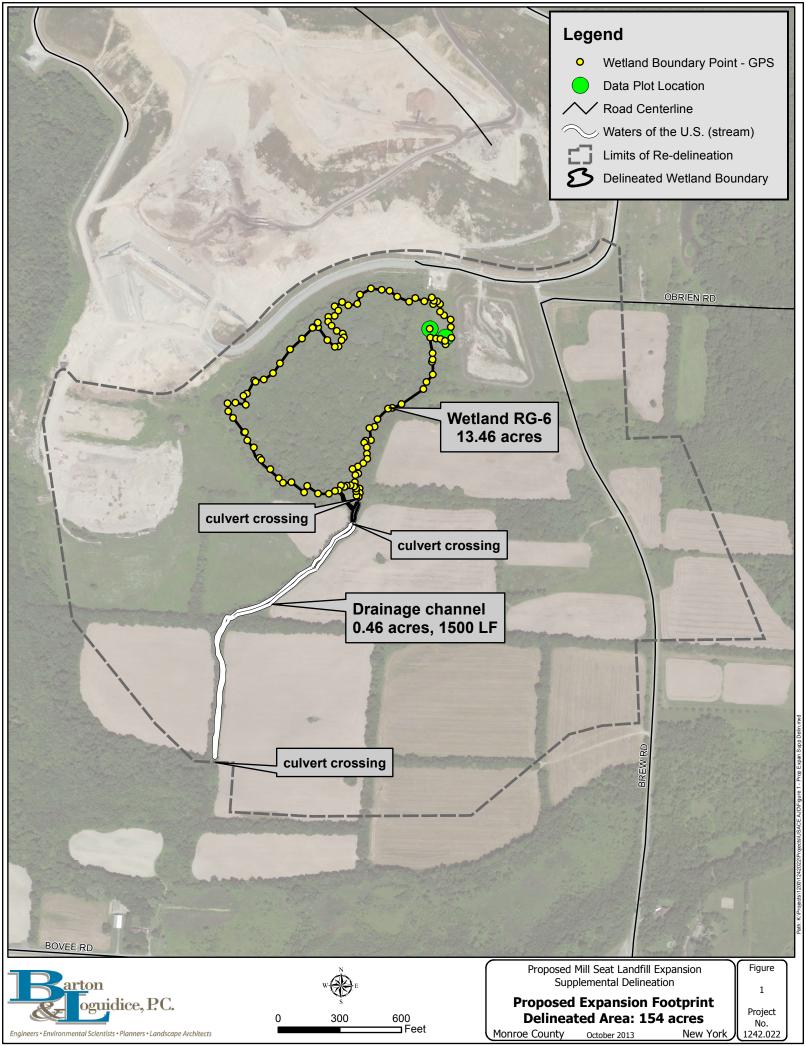
On August 13, 2013, Todd Phillips and Johanna Duffy from Barton & Loguidice, P.C. (B&L) completed a revised delineation of New York State Department of Environmental Conservation (NYSDEC) mapped freshwater wetland RG-6. This wetland is located directly south of the existing Mill Seat Facility landfill footprint, and is located within the limits of disturbance for the Proposed Landfill Expansion. Wetland RG-6 was initially delineated in November 2008 for the proposed Soil Borrow Area project at the Mill Seat Landfill Facility. This wetland is referred to as delineated Wetland B in the Wetland Delineation Report for the Proposed Mill Seat Landfill Soil Borrow Area Expansion – August 2009. Due to the age of this initial delineation effort and the implementation of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region since that time, it was determined that a re-delineation of the Proposed Mill Seat Landfill Expansion area was warranted.

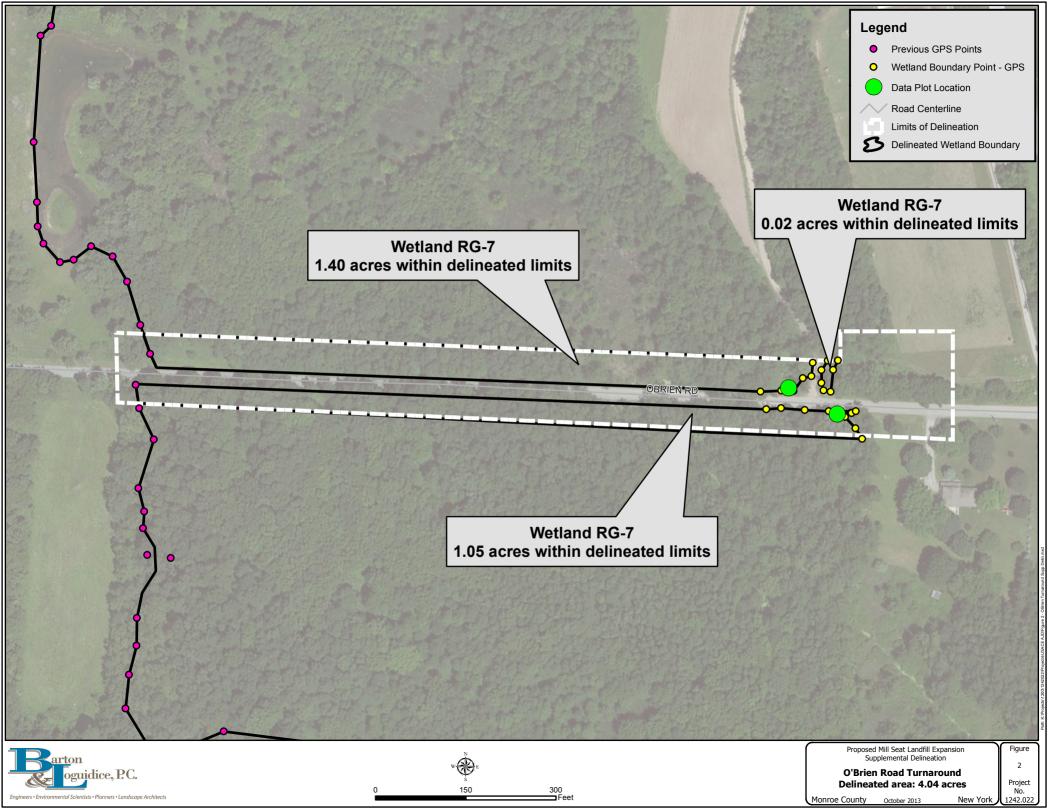
The discharge channel that conveys flow from RG-6 south to NYSDEC mapped freshwater wetland RG-5 and Hotel Creek was reconfirmed in the field as meeting the definition of a Water of the U.S. The characteristics of this channel have not changed; therefore, the previously mapped limits still represent the current channel boundaries. The discharge channel remains 0.46 acres in size, and approximately 1500 linear feet in length and 4 to 8 feet in width. As a result of this updated delineation effort, the acreage associated with the delineated boundary of Wetland RG-6 increased from 12.08 acres in 2008 to13.46 acres. Attached Figure 1 shows the current limits of Wetland RG-6 and the drainage channel. Field datasheets from the delineation of Wetland RG-6 are included in Appendix A.

Wetland RG-7

Another component of the Proposed Landfill Expansion project is to terminate the Town of Riga owned O'Brien Road at the last residential driveway (south side) and install a turnaround for school buses, plow trucks, and other vehicles. Monroe County owns lands north and south of O'Brien road west of this location. Based on the limits of disturbance for the Proposed Landfill Expansion, O'Brien Road would need to be abandoned at some point east of its intersection with Brew Road. Abandoning the roadway prior to its travel through NYSDEC mapped freshwater Wetland RG-7 will protect the wetland community from unnecessary traffic and loitering, and would also provide the potential opportunity to remove the existing roadway embankment and culvert within the wetland to provide a more continuous connection within Wetland RG-7. A wetland delineation of the eastern limits of Wetland RG-7 was completed at its crossing of O'Brien Road to ascertain how much area was available to design the turnaround location. This delineation was also completed on August 13, 2013, by the same personnel from B&L. Attached Figure 2 illustrates the delineated limits of wetland RG-7 that were identified in the field. Field datasheets for Wetland RG-7 are included in Appendix B.

JED/akg Attachment <u>Figures 1 & 2</u>





Appendix A

Wetland RG-6 Field Datasheets

August 13, 2013

Project/Site: Mill Seat Landfill – south of existing footprint City/County: Riga, Monroe Cour	nty Sampling Date: 8/13/13
Applicant/Owner: Waste Management / Monroe County	State: NY Sampling Point: Wet RG-6 Meadow
Investigator(s): Todd J. Phillips and Johanna E. Duffy Section, Township, Range: Township,	n of Riga
Landform (hillslope, terrace, etc.):Local relief (concave, convex, none):	Concave Slope (%): 0-2%
Subregion (LRR or MLRA): LRR-L Lat: 43° 03' 17.8" Long: 77° 5	5' 56.8" Datum: WGS 84
Soil Map Unit Name:: Churchville silt loam, 0-2% slopes N	WI classification: PEM (wet meadow)
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, e	xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations	s, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area	
Hydric Soil Present? Yes X No within a Wetland?	Yes <u>X</u> No
Wetland Hydrology Present? Yes X No If yes, optional Wetland Si	te ID: RG-6 Meadow
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
X Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7)	Geomorphic Position (D2) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present Yes X No Depth (inches): 8	
Saturation Present Yes X No Depth (inches): Surface Wetland Hy	ydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available	ole:
Remarks:	
Stormwater pond discharges into meadow area from the east. Soil saturation documented at surface, water table recorded at 8" before soil surface Indicators for hydrology met	

SOIL Sampling Point: Wet RG-6 Meadow

Profile Desc	cription: (Describe to	the depth	needed to document	the indica	ator or co	nfirm the	absence of indicators.)		
Donth	Matrix		Red	dox Feature	es				
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-9	10YR 4/1	98	10YR 4/3	2	С	М	Silty Clay		
		+		+			Loam		
	: 22 2 4/4	+		+	+	l	-:: a:		
9-14	10YR 4/1	94	10YR 5/6	2	С	M	Silty Clay Loam		
		1	10YR 4/3	2	D	М			
		1		1					
14-24	10YR 5/2	55	10YR 4/6	25	С	М	Sandy		
							Clay		
			10YR4/1	20	D	М			
		\bot							
		\bot							
		\bot							
¹ Type: C=C	oncentration, D=Deple	tion, RM=F	Reduced Matrix, MS= M	lasked Sar	nd Grains.	² Loc	eation: PL=Pore Lining, M=Matrix.		
Hydric Soils	Indicators:						Indicators for Problematic Hydric Soils	³ :	
Histoso	I (A1)		Polyvalue Belov	w Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA	149B)	
Histic E	pipedon (A2)		MLRA 149	B)			Coast Prairie Redox (A16) (LRR K,	L, R)	
Black H	listic (A3)		Thin Dark Surfa	ace (S9) (L	RR R, ML	RA 149B)	5 cm Mucky Peat or Peat (S3) (LRR	K, L, R)	
	en Sulfide (A4)		Loamy Mucky N			L)	Dark Surface (S7) (LRR K, L, M)		
	d Layers (A5)		Loamy Gleyed)		Polyvalue Below Surface (S8) (BLRR K, L)		
	ed Below Dark Surface	(A11)	X Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)		
	ark Surface (A12)		Redox DarkSur		_\		Iron-Manganese Masses (F12) (LRR K, L, R)		
	Mucky Mineral (S1)		Depleted Dark		7)		Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spedic (TA6) (MLRA 144A 145 149B)		
	Gleyed Matrix (S4) Redox (S5)		Redox Depress	Hons (Fo)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)		
	Matrix (S6)			Very Shallow Dark Surface (TF12)					
	urface (S7) (LRR R, M I	LRA 149B)					Other (Explain in Remarks)		
	, , ,	ŕ							
		n and wetla	and hydrology must be p	present, ur	niess distu	rbed or pr	oblematic.		
Restrictive L	Layer (if observed):								
Type: _	N/A								
Depth (i	inches):						Hydric Soil Present? Yes X	No	
								-	
Remarks:									
Hydric soils p	present within plot loca	tion – indic	ator F3 met						

VEGETATION – Use scientific names of	Sampling Point: Wet RG-6 Meadow				
Tree Stratum (Plot Size: 30-feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.				Number of Dominant Species	
2.				That Are OBL, FACW, or FAC: 5	(A)
3.				Total Number of Dominant	,
4.				Species Across All Strata: 5	(B)
5.				Percent of Dominant Species	,
6.				That Are OBL, FACW, or FAC: 100	(A/B)
7.				<u> </u>	`
	5	= Total Cov	er	Prevalence Index Worksheet:	
Sapling/Shrub Stratum (Plot Size: 30-feet)				Total % Cover of: Multiply by:	
Cornus stolonifera	15	Yes	FACW	OBL speciesx 1 =	
2. Fraxinus pennsylvanica	5	Yes	FACW	FACW species x 2 =	
3.	-			FAC species x 3 =	
4.				FACU species x 4 =	
5.				UPL speciesx 5 =	=
6.				Column Totals: (A)	
7.					(2)
r.	20	= Total Cov	er	Prevalence Index = B/A =	
Herb Stratum (Plot Size: 5-feet)	20	- 1 otal 00V	0.	Trovalence mask = B// (=	
Solidago gigantea	30	Yes	FACW	Hydrophytic Vegetation Indicators:	
Carex vulpinoidea	15	Yes	OBL	Rapid Test for Hydrophytic Vegetation	
3. Carex scoparia	20	Yes	FACW	X Dominance Test is >50%	
4. Glyceria sp.	10	-	-	Prevalence Index is #3.0 ¹	
5. Lycopus uniflorus	5	No	OBL	Morphological Adaptations ¹ (Provide supporting	
6.		140	OBL	Data in Remarks or on a separate sheet)	
7 .				Problematic Hydrophytic Vegetation ¹ (Explain)	
8.				¹ Indicators of hy6dric soil and wetland hydrology must	
9.				Be present, unless disturbed or problematic.	
<u>10.</u> 11.				Definitions of Vegetation Strata:	
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter	
				at breast height (DBH), regardless of height.	
13.				1	
14.	70	= Total Cov	or	Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
Woody Vine Stratum: (Plot Size: 30-feet)	70	= 10tal 00V	-	Herb – All herbaceous (non-woody) plants, regardless	
1.		T T		of size, and woody plants less than 3.28 ft tall.	
2.				Woody vines – All woody vines greater than 3.28 ft in	
3.				height.	
3. 4.				Height.	
				Hydrophytic	
5.				Vegetation	
6.					
7.		= Total Cov	Or.	Present? Yes X No	
Remarks: (Include photo numbers here or on a s	eparate sheet	1	<u> </u>	1	

US Army Corps of Engineers

Dominance of hydrophytic vegetation present within plot – dominance test completed

Project/Site: Mill Seat Landfill – South of existing footprint City/County: Riga, Monroe Cour	sampling Date: 8/13/13
Applicant/Owner: Waste Management / Monroe County	State: NY Sampling Point: Wet RG-6 Forest
Investigator(s): Todd J. Phillips and Johanna E. Duffy Section, Township, Range: Township,	n of Riga
Landform (hillslope, terrace, etc.): Local relief (concave, convex, none):	
Subregion (LRR or MLRA): LRR-L Lat: 43° 03' 15.7" Long: 77° 5	6' 07.7" Datum: WGS 84
Soil Map Unit Name:: Lakemont silt loam, loamy subsoil variant	WI classification: PFO
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
	xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations	s, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area	
Hydric Soil Present? Yes X No within a Wetland?	Yes <u>X</u> No
Wetland Hydrology Present? Yes X No If yes, optional Wetland Si	te ID: RG-6 Forest
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) X Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
X Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4)	Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present Yes No X Depth (inches):	
Saturation Present Yes No X Depth (inches): Wetland Hy	rdrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available	le:
Remarks: Aquatic snails present Watermarks present – evidence of seasonal inundation	

SOIL Sampling Point: Wet RG-6 Forest

Profile Desc	cription: (Describe to	the depth	needed to document	the indica	tor or co	nfirm the	absence of in	dicators.)		
5 (1	Matrix		Redo	ox Feature	es			ı		
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-10	10YR 3/1	95	10YR 3/4	5	С	М	Silty Clay			
							Loam			
40.47	40VP 0/4	00	40VD 0/4		0		0:14 - 01			
10-17	10YR 2/1	96	10YR 3/4	2	С	M	Silty Clay			
			10YR 5/2	2	D	M				
17-23+	10YR 5/1	90	10YR 5/4	10	0 C M	Sandy Clay				
		tion, RM=R	educed Matrix, MS= Ma	asked San	d Grains.	² Loc		e Lining, M=Matrix.		
Hydric Soils	Indicators:						Indicators	for Problematic Hydric Soils ³ :		
Histoso	I (A1)		Polyvalue Belov		(S8) (LRR	R,	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)		
	pipedon (A2)		MLRA 149E	•				Coast Prairie Redox (A16) (LRR K, L, R)		
	istic (A3)		Thin Dark Surfa					Mucky Peat or Peat (S3) (LRR K, L, R)		
_	en Sulfide (A4)		Loamy Mucky N			L)	Dark Surface (S7) (LRR K, L, M)			
_	d Layers (A5) d Below Dark Surface	(111)	Loamy Gleyed N Depleted Matrix				Polyvalue Below Surface (S8) (BLRR K, L) Thin Dark Surface (S9) (LRR K, L)			
	ark Surface (A12)	(A11)	X Redox DarkSurf				Iron-Manganese Masses (F12) (LRR K, L, R)			
_	Mucky Mineral (S1)		Depleted Dark S		7)		Piedmont Floodplain Soils (F19) (MLRA 149B)			
	Gleyed Matrix (S4)		Redox Depressi		,		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	Redox (S5)		<u> </u>	Red Parent Material (F21)						
Striped	Matrix (S6)			Very Shallow Dark Surface (TF12)						
Dark Sເ	ırface (S7) (LRR R, MI	RA 149B)					Other	(Explain in Remarks)		
³ Indicators of	hydrophytic vegetation	n and wetla	nd hydrology must be p	resent, un	less distu	bed or pro	oblematic.			
Restrictive I	ayer (if observed):									
Туре:	N/A									
Depth (i							Hydric Soi	I Present? Yes X No		
Remarks:										
Hydric soils o	documented at plot loca	ation - indi	cator F6 met							

VEGETATION – Use scientific names of	f plants.			Sampling	Point: Wet RG-6 Fo	<u>orest</u>
Tree Stratum (Plot Size: 30-feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
Fraxinus pennsylvanica	10	No	FACW	Number of Dominant Species		
2. Acer saccharinum	60	Yes	FACW	That Are OBL, FACW, or FAC:	4	(A)
3.				Total Number of Dominant		` '
4.				Species Across All Strata:	4	(B)
5.				Percent of Dominant Species		()
6.				That Are OBL, FACW, or FAC:	100	(A/B)
7.						()
	70	= Total Cov	er	Prevalence Index Worksheet:		
Sapling/Shrub Stratum (Plot Size: 30-feet)			-	Total % Cover of:	Multiply by:	
Rhamnus cathartica	2	No	FAC	OBL species	x 1 =	
Acer saccharinum	20	Yes	FACW	FACW species	x 2 =	
3.	20	100	171011	FAC species		
4.				1	x 3 =	
				FACU species	x 4 =	
5.				UPL species	x 5 =	(D)
6.				Column Totals:	(A)	(B)
7.		T / 10				
	22	= Total Cov	er	Prevalence Index = B/A	=	
Herb Stratum (Plot Size: 5-feet)	_	.,	- 1 O.11			
1. Impatiens capensis	5	Yes	FACW	Hydrophytic Vegetation Indicator		
2. Toxicodendron radicans	3	Yes	FAC	Rapid Test for Hydrophytic Ve	egetation	
3.				X Dominance Test is >50%		
4.				Prevalence Index is #3.01		
5.				Morphological Adaptations ¹ (F	Provide supporting	
6.				Data in Remarks or on a	a separate sheet)	
7.				Problematic Hydrophytic Veg	etation ¹ (Explain)	
8.				¹ Indicators of hy6dric soil and wetlan	nd hydrology must	
9.				Be present, unless disturbed or prob	olematic.	
10.				Definitions of Vegetation Strata:		
11.				1		
12.				Tree - Woody plants 3 in. (7.6 cm)	or more in diameter	
13.				at breast height (DBH), regardless of		
14.				Sapling/shrub – Woody plants less	-	
	8	= Total Cov	er	and greater than 3.28 ft (1 m) tall.		
Woody Vine Stratum: (Plot Size: 30-feet)				Herb – All herbaceous (non-woody)	plants, regardless	
1.				of size, and woody plants less than	. , ,	
2.				Woody vines – All woody vines gre		
3.				height.	ator triair 0.20 it iii	
4.				noigh.		
5.				- Hydrophytic		
				Vegetation		
6.					No	
7.		Total O	1	Present? Yes X	_ NO	
Develop (leak-de-rhete)		= Total Cov	eı	1		
Remarks: (Include photo numbers here or on a se	parate sneet	.)				

Dominance of hydrophytic vegetation present within plot – dominance test completed

Appendix B

Wetland RG-7 Field Datasheets

August 13, 2013

Project/Site: Mill Seat Landfill – O'Brien Road	City/County: Riga, Monroe Coun	ty	Sampling Date: 8/13/13			
Applicant/Owner: Mill Seat Landfill/Monroe County	State: NY Sampling Point:					
Investigator(s): _Todd J. Phillips and Johanna E. Duffy	Section, Township, Range: Tow	n of Riga, O'Brien	Road			
Landform (hillslope, terrace, etc.): Roadside slope Loca	I relief (concave, convex, none):	Concave	Slope (%): 5%			
Subregion (LRR or MLRA): LRR-L Lat: 43° 03'	17.8" Long: <u>77° 5</u>	5' 23.4"	Datum: WGS 84			
Soil Map Unit Name: Wampsville cobbly loam, 8-15% slopes, Edward	ards Muck also in wetland N	WI classification:	PSS/PFO			
Are climatic/hydrologic conditions on the site typical for this time of y	ear? Yes <u>X</u> No	(If no, explain in I	Remarks.)			
Are Vegetation, Soil, or Hydrology significa	ntly disturbed? Are "Normal	Circumstances" pr	resent? Yes? X No			
Are Vegetation, Soil, or Hydrology Naturally	problematic? (If needed, ex	xplain any answers	s in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations	s, transects, i	mportant features, etc.			
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland?	Yes X				
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Si	te ID: RG-7 Sout	h			
Remarks: (Explain alternative procedures here or in a separate repo	ort.)					
Upland adjacent area is mowed road shoulder.						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)	_	Surface Soil	Cracks (B6)			
Surface Water (A1) Water-Staine	ed Leaves (B9)	Drainage Pa	atterns (B10)			
High Water Table (A2) X Aquatic Faul	·	Moss Trim L	Lines (B16)			
Saturation (A3) Marl Deposit	•		Water Table (C2)			
	ılfide Odor (C1)	Crayfish Bui				
	zospheres on Living Roots (C3)		isible on Aerial Imagery (C9)			
	Reduced Iron (C4)		Stressed Plants (D1)			
	Reduction in Tilled Soils (C6)	X Geomorphic				
Iron Deposits (B5) Thin Muck S Other (Figure	•	Shallow Aqu	, ,			
Inundation Visible on Aerial Imagery (B7) Other (Expla Sparsely Vegetated Concave Surface (B8)	in in Remarks)	Microtopogr	aphic Relief (D4) I Test (D5)			
Field Observations:						
Surface Water Present? Yes No X Depth (incl	nes):					
Water Table Present Yes No X Depth (incl	•					
Saturation Present Yes No X Depth (incl	•	drology Present	? Yes X No			
(includes capillary fringe)	•					
Describe Recorded Data (stream gauge, monitoring well, aerial pho	os, previous inspections), if availab	le:				
Remarks:						
Aquatic snails present No soil saturation within 12-inches of surface Indicators B13, C2, and D2 recorded at plot location						

SOIL Sampling Point: Wet RG-7 South

Profile Desc	ription: (Describe to t	he depth	needed to document t	he indica	tor or cor	firm the	absence of in	dicators.)	
Donath	Matrix		Redo	x Feature	S				
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-5	10YR 3/1	99	10YR 4/3	1	С	M	Sandy	7 501.101.112	
0 0	10111 0/1	33	1011(4/0	,	Ü	101	Clay Loam		
5-20+	10YR 6/2	65	10YR 4/6	20	С	М	Sandy Clay		
		10YR 5/8	5	С	М				
			10YR 5/2	10	D	М			
¹ Type: C=C	oncentration, D=Depletion	on, RM=R	educed Matrix, MS= Ma	sked Sand	d Grains.	² Loc	ation: PL=Por	e Lining, M=Matrix.	
Hydric Soils	Indicators:						Indicators	for Problematic Hydric Soils ³ :	
Histosol	(A1)		Polyvalue Below	Surface (S8) (LRR	R.	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)	
	pipedon (A2)		MLRA 149B)		/(,		Prairie Redox (A16) (LRR K, L, R)	
	istic (A3)		Thin Dark Surfac		RR R, ML	RA 149B)		Mucky Peat or Peat (S3) (LRR K, L, R)	
	en Sulfide (A4)		Loamy Mucky Mi					Surface (S7) (LRR K, L, M)	
	d Layers (A5)		Loamy Gleyed M		, ,	,	Polyvalue Below Surface (S8) (BLRR K, L)		
	d Below Dark Surface (A	A11)	X Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)		
	ark Surface (A12)	,	Redox DarkSurfa				Iron-Manganese Masses (F12) (LRR K, L, R)		
	Mucky Mineral (S1)		Depleted Dark S		')		Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy (Gleyed Matrix (S4)		Redox Depression	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy F	Redox (S5)						Red Parent Material (F21)		
Striped	Matrix (S6)			Very Shallow Dark Surface (TF12				Shallow Dark Surface (TF12)	
Dark Su	ırface (S7) (LRR R, MLF	RA 149B)					Other	(Explain in Remarks)	
3Indiantora of	hudrophutia vagatatian	and watta	nd hydrology must be pr	ocent un	loop diatur	had ar ar	hlomotio		
	ayer (if observed):	and wella	<u>na nyarology mast be pr</u>	esent, un	iess distui	bed of pro	DDIemauc.		
Type:	N/A								
Depth (i							Hydric Soi	I Present? Yes X No	
Remarks:	·								
rtomarks.									
Hydric soils o	locumented at plot locat	ion – indic	ator F3 met						

Tree	Stratum (Plot Size: 30-feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.	Acer saccharinum	5	No	FACW	Number of Dominant Species	
2.	Fraxinus pennsylvanica	25	Yes	FACW	That Are OBL, FACW, or FAC: 5	(A)
3.			. 55	.,	Total Number of Dominant	_ (/ //
4.					1	(B)
5.					Species Across All Strata: 7 Percent of Dominant Species	_ (D)
					1	(A (D)
6.					That Are OBL, FACW, or FAC: 71	(A/B)
7.			T			
	(2) (2) (2) (2) (2)	30	= Total Cove	er	Prevalence Index Worksheet:	
	ng/Shrub Stratum (Plot Size: 30-feet)		I		Total % Cover of: Multiply by:	
1.	Cornus stolonifera	20	Yes	FACW	OBL speciesx 1 =	-
2.	Lonicera tatarica	10	Yes	FACU	FACW speciesx 2 =	_
3.	Rhamnus cathartica	3	No	FAC	FAC speciesx 3 =	
4.					FACU speciesx 4 =	_
5.					UPL speciesx 5 =	_
6.					Column Totals:(A)	(B)
7.						
		33	= Total Cove	er	Prevalence Index = B/A =	
Herb	Stratum (Plot Size: 5-feet)					
1.	Coptis trifolia	5	Yes	FACW	Hydrophytic Vegetation Indicators:	
2.	Phragmites australis	3	Yes	FACW	Rapid Test for Hydrophytic Vegetation	
3.	Aster sp.	10	-	-	X Dominance Test is >50%	
4.	·				Prevalence Index is #3.0 ¹	
5.					Morphological Adaptations ¹ (Provide supporting	
6.					Data in Remarks or on a separate sheet)	
7.					Problematic Hydrophytic Vegetation ¹ (Explain)	
8.					¹ Indicators of hy6dric soil and wetland hydrology must	
9.					Be present, unless disturbed or problematic.	
10.						
					Definitions of Vegetation Strata:	
11.					Tree Mondy plants 2 in /7 C am) as more in diameter	
12.					Tree - Woody plants 3 in. (7.6 cm) or more in diameter	
13.					at breast height (DBH), regardless of height.	
14.		8	= Total Cove	<u> </u>	Sapling/shrub – Woody plants less than 3 in. DBH	
Mooo	ly Vine Stratum: (Plot Size: 30-feet)	0	= 10tal Cove	-	and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless	
1.	Vitis riparia	7	Yes	FAC	of size, and woody plants less than 3.28 ft tall.	
		7		1	1	
2.	Parthenocissus quinquefolia	/	Yes	FACU	Woody vines – All woody vines greater than 3.28 ft in	
3.					height.	
4.					1	
5.				1	Hydrophytic	
6.					Vegetation	
7.					Present? Yes X No	
		14	= Total Cove	er		
Rema	irks: (Include photo numbers here or on a se	parate sheet	.)			

Dominance of hydrophytic vegetation present within plot – dominance test completed

Sampling Point: Wet RG-7 South

Project/Site: Mill Seat Landfill – O'Brien Road Turnaround City/County: Riga, Monroe Coun	ty Sampling Date: 8/13/13
Applicant/Owner: Waste Management / Monroe County	State: NY Sampling Point: wet RG-7 N
Investigator(s): Todd J. Phillips and Johanna E. Duffy Section, Township, Range: Tow	n of Riga, O'Brien Road
Landform (hillslope, terrace, etc.): Roadside slope Local relief (concave, convex, none):	
Subregion (LRR or MLRA): LRR-L Lat: 43° 03′ 18.3" Long: 77° 5	5' 24.0" Datum: WGS 84
Soil Map Unit Name: Wampsville cobbly loam, 8-15% slopes, Edwards Muck also in wetland N'	WI classification: PEM/PSS
· — · · · · · · · · · · · · · · · · · ·	(If no, explain in Remarks.)
· · · · · · · · · · · · · · · · · · ·	Circumstances" present? Yes? X No
	· — —
Are Vegetation, Soil, or Hydrology Naturally problematic? (If needed, ex	xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations	s, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area	
Hydric Soil Present? Yes X No within a Wetland?	Yes <u>X</u> No
Wetland Hydrology Present? Yes X No If yes, optional Wetland Sit	te ID: RG-7 North
Remarks: (Explain alternative procedures here or in a separate report.)	NI). Qualiza atriata (FAQII). Plantama maior
Upland vegetation on road shoulder consists of <i>Cichorium intybus</i> (FACU), <i>Ambrosia artemisiifolia</i> (FAC (FACU), <i>and Clematis virginiana</i> (FAC).	CU), Oxalis stricta (FACU), Plantago major
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) X Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Surface Water Present? Yes No X Depth (inches):	
Water Table Present Yes No X Depth (inches):	
Saturation Present Yes No X Depth (inches): Wetland Hy	drology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if availab	le:
Remarks:	
Aquatic snails present Evidence of seasonal saturation in plot location	

SOIL Sampling Point: Wet RG-7 N

Profile Desc	cription: (Describe to	the depth	neede	ed to document	the indica	tor or co	nfirm the	absence of in	dicators.)	
	Matrix	•	l		ox Feature				1	
Depth (inches)	Color (moist)	%	(Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6	10YR 3/1	100						Silty Clay Loam		
6-17	10YR 3/1	98	10YF	R 3/6	2	С	M	Silty Clay		
								Loam		
17-20+	10YR 3/2	60	10YF	R 2/1	40	С	М	Silt Loam	Mixed Matrix	
		+-								
¹ Type: C=C	oncentration, D=Deple	tion, RM=R	educe	d Matrix, MS= Ma	asked San	d Grains.	² Loc	ation: PL=Por	e Lining, M=Matrix.	
Hydric Soils		•		,					for Problematic Hydric Soils ³ :	
Histoso	I (A1)			Polyvalue Belov	w Surface	(S8) (LRR	R.	2 cm l	Muck (A10) (LRR K, L, MLRA 149B)	
	pipedon (A2)			MLRA 149E		()(,	· · · · · · · · · · · · · · · · · · ·	Prairie Redox (A16) (LRR K, L, R)	
_	istic (A3)			Thin Dark Surfa	, ice (S9) (L	RR R, ML	RA 149B)		Mucky Peat or Peat (S3) (LRR K, L, R)	
_	en Sulfide (A4)			Loamy Mucky M				Dark Surface (S7) (LRR K, L, M)		
	d Layers (A5)			Loamy Gleyed I			,	Polyvalue Below Surface (S8) (BLRR K, L)		
_	d Below Dark Surface	(A11)		Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)		
	ark Surface (A12)	(****)	X	Redox DarkSurf				Iron-Manganese Masses (F12) (LRR K, L, R)		
_	Mucky Mineral (S1)			Depleted Dark S		7)		Piedmont Floodplain Soils (F19) (MLRA 149B)		
	Gleyed Matrix (S4)			Redox Depress		,		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	Redox (S5)			. todox 2 op. 000	(. 0)			Red Parent Material (F21)		
	Matrix (S6)								Very Shallow Dark Surface (TF12)	
	ırface (S7) (LRR R, MI	RA 149B)		Other (Explain in Remarks)						
									(Explain in Nomano)	
	hydrophytic vegetatio	n and wetla	nd hyd	Irology must be p	oresent, un	ıless distu	rbed or pro	oblematic.		
Туре:	N/A									
	inches):							Hydric Soi	I Present? Yes X No	
Remarks:										
Hydric soil in	dicator F6 met									

Tree Stratum (Plot Size: 30-feet)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Fraxinus pennsylvanica	5	Yes	FACW	Number of Dominant Species	
2.				That Are OBL, FACW, or FAC: 4	(A)
3.				Total Number of Dominant	` ,
4.				Species Across All Strata: 4	(B)
5.				Percent of Dominant Species	()
6.					(A/B)
7.					(/
	5	= Total Cove	er	Prevalence Index Worksheet:	
Sapling/Shrub Stratum (Plot Size: 30-feet)				Total % Cover of: Multiply by:	
Cornus stolonifera	25	Yes	FACW	OBL speciesx1 =	
2.				FACW speciesx 2 =	
3.				FAC speciesx3 =	
4.				FACUL	
5.				FACU species	
6.				·	(B)
				Column rotals.	(B)
7.	25	= Total Cove		Dravalance Index - D/A	
Hart Otastana (DL 10)	25	= 10tal Cove	er	Prevalence Index = B/A =	
Herb Stratum (Plot Size: 5-feet)	_		0.51		
1. Lycopus uniflorus	5	No	OBL	Hydrophytic Vegetation Indicators:	
2. Phragmites australis	40	Yes	FACW	Rapid Test for Hydrophytic Vegetation	
3. Aster sp.	5	No	-	X Dominance Test is >50%	
4. Solanum dulcamara	10	No		Prevalence Index is #3.0 ¹	
5. Clematis virginiana	3	No		Morphological Adaptations ¹ (Provide supporting	
6.				Data in Remarks or on a separate sheet)	
7.				Problematic Hydrophytic Vegetation ¹ (Explain)	
8.				¹ Indicators of hy6dric soil and wetland hydrology must	
9.				Be present, unless disturbed or problematic.	
10.				Definitions of Vegetation Strata:	
11.					
12.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter	
13.				at breast height (DBH), regardless of height.	
14.				Sapling/shrub – Woody plants less than 3 in. DBH	
	63	= Total Cove	er	and greater than 3.28 ft (1 m) tall.	
Woody Vine Stratum: (Plot Size: 30-feet)			_	Herb – All herbaceous (non-woody) plants, regardless	
Parthenocissus quinquefolia	7	Yes	FAC	of size, and woody plants less than 3.28 ft tall.	
2.		1.00	1710	Woody vines – All woody vines greater than 3.28 ft in	
3.				height.	
4.				Height.	
				- Lhadronbysia	
5.				Hydrophytic	
6.				Vegetation	
7.	_			Present? Yes X No	
	7	= Total Cove	er		
Remarks: (Include photo numbers here or on a se	parate sheet	.)			

US Army Corps of Engineers

 $\label{eq:definition} \mbox{Dominance of hydrophytic vegetation present within plot-dominance test completed}$

Sampling Point: Wet RG-7 N