WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Map 151 Lot 0 North Main Street   City/County: Deerfield / Franklin   Sampling Date: 10/6/2022

Applicant/Owner: Town of Deerfield   State: MA   Sampling Point: A10-WET

Investigator(s): GZA GeoEnvironmental Inc.; Dan Nitzsche   Section, Township, Range:

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

Subregion (LRR or MLRA): LRR R, MLRA 145   Lat: 42.486   Long: -72.609   Datum: WGS84

Soil Map Unit Name: Raynham silt loam   NWI classification: Not Mapped

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

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

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**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: _____

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

_____ Surface Soil Cracks (B6)
X Drainage Patterns (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Stunted or Stressed Plants (D1)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
X Microtopographic Relief (D4)
X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____	
Water Table Present?	Yes _____	No X	Depth (inches): _____	
Saturation Present?	Yes _____	No X	Depth (inches): _____	**Wetland Hydrology Present?** **Yes** X **No** _____
(includes capillary fringe)				

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

Remarks:
Hydric soil characteristics provide evidence of water table at 5 inches below ground surface.

VEGETATION – Use scientific names of plants.   Sampling Point: ___A10-WET___

Tree Stratum (Plot size: _30 ft radius_)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	40	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	40	=Total Cover	

Sapling/Shrub Stratum (Plot size: _15 ft radius_)			
1. *Acer rubrum*	10	Yes	FAC
2. *Viburnum recognitum*	10	Yes	FAC
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	

Herb Stratum (Plot size: _5 ft radius_)			
1. *Onoclea sensibilis*	30	Yes	FACW
2. *Osmunda spectabilis*	25	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55	=Total Cover	

Woody Vine Stratum (Plot size: _30 ft radius_)			
1. *Vitis labrusca*	10	Yes	FACU
2.			
3.			
4.			
	10	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That Are OBL, FACW, or FAC: ___5___ (A)

Total Number of Dominant
Species Across All Strata: ___6___ (B)

Percent of Dominant Species
That Are OBL, FACW, or FAC: ___83.3%___ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	30	x 2 =	60
FAC species	60	x 3 =	180
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	125 (A)		305 (B)

Prevalence Index = B/A = ___2.44___

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

_X_ 2 - Dominance Test is >50%

_X_ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting
data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in
diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH
and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless
of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in
height.

**Hydrophytic
Vegetation
Present?**   Yes _X_   No _____

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

SOIL   Sampling Point __A10-WET__

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	2.5Y 5/3	100					Loamy/Clayey	Sandy Loam
5-12	2.5Y 5/2	98	2.5Y 5/6	2	C	M	Loamy/Clayey	Fine Sandy Loam; Prom. Redox Concentrations
12-16	2.5Y 5/1	75	10YR 5/6	15	C	M	Loamy/Clayey	Fine Sandy Loam; Prom. Redox Concentrations
			10YR 4/1	10	D	M		
16-20	2.5Y 5/2	80	10YR 5/6	20	C	M	Sandy	Loamy Fine Sand; Prom. Redox Concentrations

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

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)

- Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- High Chroma Sands (S11) (**LRR K, L**)
- Loamy Mucky Mineral (F1) (**LRR K, L**)
- Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ? Coast Prairie Redox (A16) (**LRR K, L, R**)
- 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- Polyvalue Below Surface (S8) (**LRR K, L**)
- Thin Dark Surface (S9) (**LRR K, L**)
- Iron-Manganese Masses (F12) (**LRR K, L, R**)
- Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?   Yes __X__   No _____

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