

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 506 Granby Rd City/County: South Hadley/Hampshire Sampling Date: 4-29-2025

Applicant/Owner: SAI SHYAM LLC State: MA Sampling Point: TI-UP

Investigator(s): Ryan Nelson Section, Township, Range: _____

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave

Slope (%): 1-2 Lat: 42.2358136 Long: -72.5589453 Datum: Ma State plane

Soil Map Unit Name: Z60A - Sudbury fine sandy loam NWI classification: Palustrine - FO-6

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

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

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

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

Hydrophytic Vegetation Present? Yes ___ No <u>X</u> Hydric Soil Present? Yes ___ No <u>X</u> Wetland Hydrology Present? Yes ___ No <u>X</u>	Is the Sampled Area within a Wetland? Yes ___ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <p align="center" style="font-size: 1.2em;">Location 30' upland of flag A29</p>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes ___ No <u>X</u> Depth (inches): _____ Water Table Present? Yes ___ No <u>X</u> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes ___ No <u>X</u> Depth (inches): _____	Wetland Hydrology Present? Yes ___ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: <p align="center" style="font-size: 1.2em;">At time of delineation, Mass is in a state of D1 - Moderate drought</p>	

VEGETATION – Use scientific names of plants.

Sampling Point: T1-up

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Red Maple (Acer rubrum)</u>	<u>63</u>	<u>Y</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>63</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Morrow's honeysuckle (Lonicera morrowii)</u>	<u>63</u>	<u>Y</u>	<u>FACU</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>3</u> x 1 = <u>3</u> FACW species <u>10.5</u> x 2 = <u>21</u> FAC species <u>63</u> x 3 = <u>189</u> FACU species <u>73.5</u> x 4 = <u>294</u> UPL species <u>3</u> x 5 = <u>15</u> Column Totals: <u>153</u> (A) <u>522</u> (B) Prevalence Index = B/A = <u>3.41</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>63</u> = Total Cover				
Herb Stratum (Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Skunk cabbage (Symplocarpus foetidus)</u>	<u>3</u>	<u>N</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Sensitive Fern (Onoclea sensibilis)</u>	<u>10.5</u>	<u>N</u>	<u>FACW</u>	
3. <u>Hay scented fern (Dennstaedtia punctilobula)</u>	<u>3</u>	<u>N</u>	<u>UPL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
<u>16.5</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Oriental Bittersweet (Celastrus orbiculatus)</u>	<u>10.5</u>	<u>N</u>	<u>FACU</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>10.5</u> = Total Cover				
Hydrophytic Vegetation Present? Yes _____ No <u>X</u>				
Remarks: (Include photo numbers here or on a separate sheet.) _____ _____ _____				

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 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave
 Slope (%): 1-2 Lat: 42.2359984 Long: -72.5588916 Datum: MA State Plane
 Soil Map Unit Name: Z60A - Sudbury fine sandy loam NWI classification: Palustrine - FO-6
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ___ No X (If no, explain in Remarks.)
 Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
 Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No ___ Hydric Soil Present? Yes ___ No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No ___	Is the Sampled Area within a Wetland? Yes <u>X</u> No ___ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <p align="center" style="font-size: 1.2em;">Location opposite of flag A29 in wetland</p>	

HYDROLOGY

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

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

Remarks:
 BWU with drainage patterns ^{and intermittent stream} within. Fed by offsite subsurface drainage outfalls.
 At time of delineation, Mass is in a state of D1 moderate drought

VEGETATION – Use scientific names of plants.

Sampling Point: T1-Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Red Maple (Acer rubrum)</u>	<u>63</u>	<u>Y</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

63 = Total Cover

Sapling/Shrub Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Multiflora Rose (Rosa multiflora)</u>	<u>10.5</u>	<u>N</u>	<u>FACU</u>
2. <u>choke cherry (Prunus virginiana)</u>	<u>3</u>	<u>N</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

13.5 = Total Cover

Herb Stratum (Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Skunk cabbage (Symlocarpus foetidus)</u>	<u>3</u>	<u>N</u>	<u>OBL</u>
2. <u>Sphagnum moss</u>	<u>10.5</u>	<u>N</u>	<u>OBL</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

13.5 = Total Cover

Woody Vine Stratum (Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Bittersweet (Celastrus orbiculatus)</u>	<u>3</u>	<u>N</u>	<u>FACU</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

3 = Total Cover

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>13.5</u>	x 1 = <u>13.5</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>63</u>	x 3 = <u>189</u>
FACU species <u>16.5</u>	x 4 = <u>66</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>93</u> (A)	<u>268.5</u> (B)

Prevalence Index = B/A = 2.88

Hydrophytic Vegetation Indicators:

Rapid Test for Hydrophytic Vegetation

Dominance Test is >50%

Prevalence Index is ≤3.0¹

Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes No

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

Inundated - sparse vegetation limited to edges of wetland

