



**NOTICE OF PUBLIC HEARING**  
**SUDBURY CONSERVATION COMMISSION**  
**Monday, July 25, 2022 at 6:45 PM**  
**Virtual Meeting**

The Sudbury Conservation Commission will hold a public meeting to review the Request for Determination of Applicability filing under the Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw to mill and repave the road surface, reline culvert pipes, and remove berms along the shoulder within the Buffer Zone, Bordering Land Subject to Flooding and 200-foot Riverfront Area along Water Row in Sudbury, MA. Department of Public Works c/o Dan Nason, DPW Director, Applicant. The meeting will be held on Monday, July 25, 2022 at 6:45 pm, via Zoom.

Copies of the application may be reviewed on the Conservation Department web page at:

<https://sudbury.ma.us/conservationcommission/meeting/conservation-commission-meeting-monday-july-25-2022/>

Please contact the Conservation Office with any questions at 978-440-5470.

SUDBURY CONSERVATION COMMISSION  
7/13/2022



# WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

## A. General Information

**Important:**

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Name _____		E-Mail Address _____	
Mailing Address _____			
City/Town _____	State _____	Zip Code _____	
Phone Number _____	Fax Number (if applicable) _____		

2. Representative (if any):

Firm _____			
Contact Name _____		E-Mail Address _____	
Mailing Address _____			
City/Town _____	State _____	Zip Code _____	
Phone Number _____	Fax Number (if applicable) _____		

## B. Determinations

1. I request the \_\_\_\_\_ make the following determination(s). Check any that apply:  
Conservation Commission

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

\_\_\_\_\_  
Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



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## C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City/Town

\_\_\_\_\_  
Assessors Map/Plat Number

\_\_\_\_\_  
Parcel/Lot Number

- b. Area Description (use additional paper, if necessary):

\_\_\_\_\_

- c. Plan and/or Map Reference(s):

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):



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### C. Project Description (cont.)

- b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).
3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.
- Single family house on a lot recorded on or before 8/1/96
  - Single family house on a lot recorded after 8/1/96
  - Expansion of an existing structure on a lot recorded after 8/1/96
  - Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
  - New agriculture or aquaculture project
  - Public project where funds were appropriated prior to 8/7/96
  - Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
  - Residential subdivision; institutional, industrial, or commercial project
  - Municipal project
  - District, county, state, or federal government project
  - Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.
- b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



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### D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Mailing Address

\_\_\_\_\_  
City/Town

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Representative (if any)

\_\_\_\_\_  
Date



## **Project Narrative: Water Row Improvements.**

### **Existing Conditions:**

Water Row is a north-south corridor in eastern Sudbury between Route 27, Old Sudbury Road, and Lincoln Road. The 1.9-mile road is narrow, averaging only 19 feet, and winding with extensive resource areas on either side. It was last paved in 2005. Unfortunately, the roadway was never built with a proper gravel subbase resulting in many problems propagating to the pavement surface. In addition, the poor subbase has resulted in edges of pavement breaking away from the pavement structure further narrowing the roadway.

Roadway drainage is characterized as open country with 11 culverts facilitating water passage. The culverts vary in size and material from large 4'x4' concrete boxes to 8-inch corrugated metal pipes. Shallow earth berms have built-up over the years in a few low-lying areas contributing to stormwater puddles on the pavement which causes pavement damage during the winter months.

### **Proposed Improvements:**

#### **Milling and Full-Depth Pavement Repairs.**

The Town's 2022 paving program will include milling and paving the entire length of Water Row. Milling the pavement an average of 1.5 inches will be the first step. The millings will be loaded directly into a truck and taken offsite for recycling. The roadway will then be swept with street sweepers for close examination of the remaining pavement.

There will be portions of the milled pavement that will be degraded and not be suitable for paving (See Picture 1). These areas will require a full-depth repair. The repair consists of saw cutting and excavation, installation of a densely graded gravel road base, compaction and paving.

Locations requiring a full-depth repair will be determined following milling and sweeping. The areas where the pavement is severely degraded are in indication of the quantity to be repaired but following pavement milling the areas requiring repair are clearly evident and may be quantified.

Picture 2 is an example where the edge of roadway broke away from the pavement structure. The travel lane width in this location is only 7-feet. As part of the full depth repairs we intend to reestablish the edge of pavement by "carrying the line" of the existing pavement on either side of the broken pavement. "Carrying the line" will reestablish what we believe was the original pavement and it will widen the 7-foot travel lane an additional 12- to 18-inches in width.





**Picture 1:** Area requiring full-depth repair.



**Picture 2:** The travel lane measured 7-foot travel where the pavement drops off. We will “carry the line” of the existing pavement on either side of the broken edge of pavement to widen the roadway to its original width.



### **Drainage Improvements**

In two low-lying areas of the roadway where stormwater ponds the roadway becomes damaged from winter's freeze/thaw action. One area is directly across from the King Philip Woods parking area (Picture 3) and the other is at #173 Water Row (Picture 4). The ponding results from shallow earthen berms along the sides of the roadway which prevent stormwater drainage. The shallow berms are the result of years of organic matter buildup. We intend to excavate this organic matter to reestablish the open country drainage. The earthen berm at the edge of roadway is approximately 3-feet wide and 6-inches high. We intend to excavate this area and install crushed stone to aid stormwater infiltration. The voids in the crushed stone will fill in over time further stabilizing the roadway shoulder. The crushed stone will also prevent scour/erosion of the shoulder into the adjacent waterway/culvert.



**Picture 3:** Across from King Philip Woods Parking Area: Low-lying area where ponding stormwater had contributed to roadway deterioration.





**Picture 4:** 173 Water Row: Earthen berm on edge of roadway contributes to stormwater ponding and roadway deterioration.

**Paving:**

Once the locations requiring a full-depth repair and drainage improvements have been completed an average of 1.5-inches of bituminous top course will be installed for the full 1.9-mile length of roadway.

**Pipe Lining**

Following asphalt paving we will investigate making improvements to three of the 11 culverts along Water Row. The culverts requiring upgrades are aged and corroded corrugated metal pipes. We will be investigating installing pipe linings in each of the following:

- Culvert 50 at 95 Water Row.
- Culvert 111 at Utility Pole 132/20.
- Culvert 113 at Utility Pole 132/18

Pipe lining is a trenchless technology involving chemically impregnated felt which is inflated inside the pipe and cured in place using steam. This application will improve the structural integrity of the deteriorating metal pipes. Pictures of the pipe locations and their conditions follow in Appendix A. This work will be conducted under no flow conditions.

### **Erosion Controls**

As discussed Water Row is in the vicinity of extensive resource area. Maps contained in Appendix B represent Sudbury's MapsOnline of the Water Row area with the State's wetland layer visible. We intend to install straw wattles in the vicinity of the two drainage improvement areas where we will have disturbance. We will also have straw wattles in the vicinity of all full-depth repairs. These locations will be determined following the milling process. Pipe jetting the corrugated metal pipe prior to pipe lining will utilize silt fencing downstream to catch and retain any debris removed from the pipes. Any pipe material collected at the silt fence as a result of pipe jetting will be either vacuumed with a Vactor truck or collected in buckets and removed from the site. All disturbed areas will either be loamed and seeded or stabilized with washed crushed stone immediately following work.

### **Resource Area Impacts**

Most of Water Row is within the buffer zone with portions within the floodplain. The intent of the project is to maintain all grades so that there will be no impacts to wetlands or floodplains. Where we are reducing elevations low-lying areas to enhance open country drainage there will be a reduction of fill in a floodplain. Across from the King Philip Woods the reduction in fill in the floodplain is estimated at 3 cubic yards. At 173 Water Row the reduction in fill is estimated to be 5 cubic yards.

Most of the work qualifies for an exemption under 310 CMR 10.02 (2)(b)2.p. as minor activities within the buffer zone which permits pavement repairs, resurfacing, and reclamation of existing roadways within the right-of-way configuration provided that the roadway and shoulders are not widened, no staging or stockpiling or stockpiling of materials, all disturbed roadway shoulders are stabilized within 72 hours of completion of resurfacing or reclamation, and no work on the drainage system is performed, other than adjustments and/or repairs to respective structures within the roadway.

The Sudbury Wetlands Administration Bylaw does not have this exemption but work will result in no new impacts to the resource areas.



## Appendix A

**PIPE LINING WORK: Pipe Lining for the purpose of stabilizing the corroding corrugated metal pipe.**

Pipe Lining 1: Culvert 50 Located at 95 Water Row:



Picture 1 of 2: Roadside channel leading to culvert.



Picture 2 of 2. Corroded corrugated metal pipe.

Pipe Lining 2: Culvert 111 at Utility Pole 132/20



Picture 1 of 2: Culvert inlet is located close to the white clipboard on the grassy shoulder.



Picture 2 of 2: Corroded corrugated metal pipe.



Pipe Lining 3: Culvert 113 at Utility Pole 132/18.



Picture 1 of 2: Crossing location.



Picture 2 of 2: Corroded and clogged corrugated metal pipe.

## **Appendix B**

Title: Town GIS Maps of Water Row

Date: July 14, 2022

Created by:  
Public Works Department

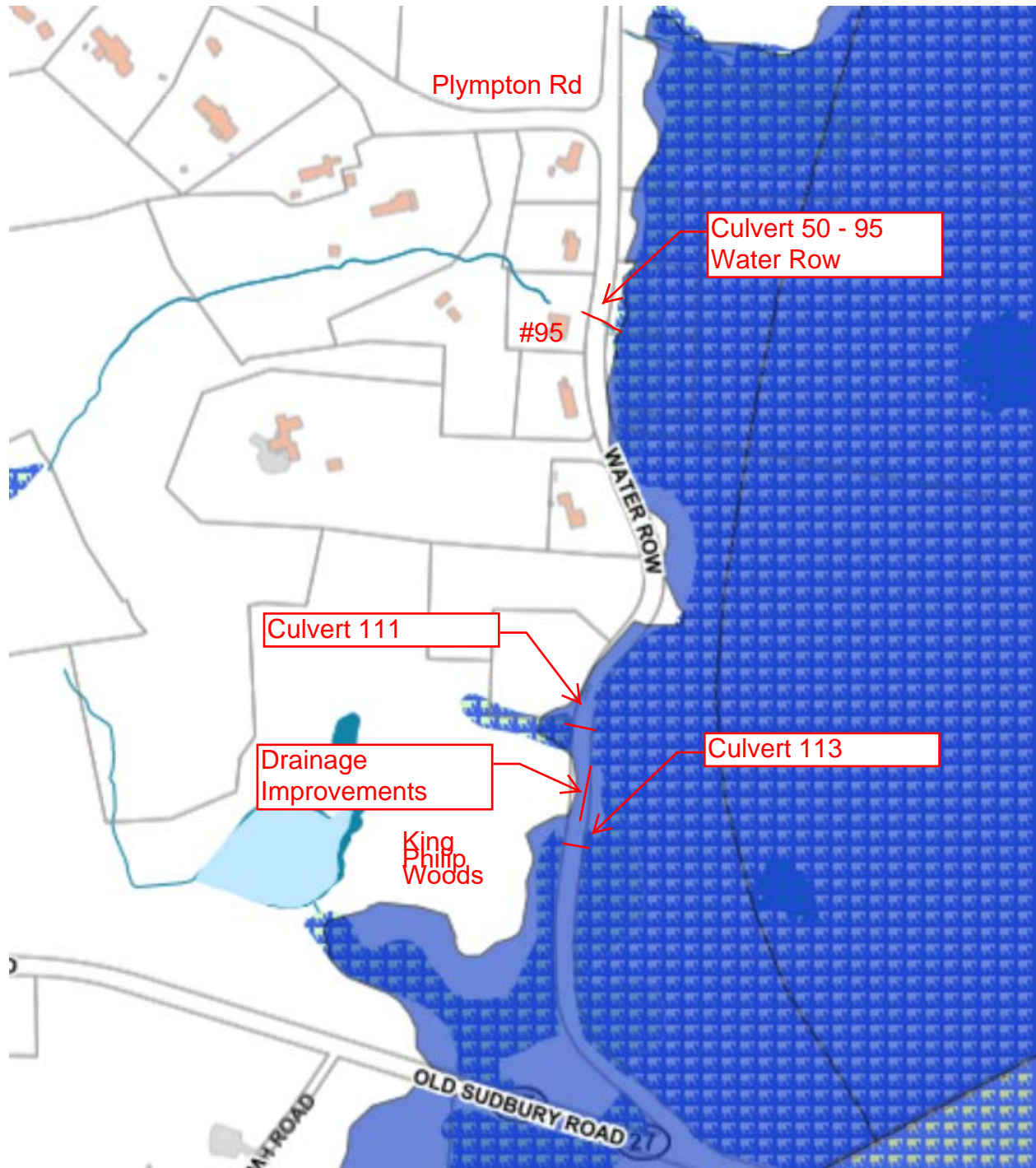


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William F. O'Rourke, P.E.  
Town Engineer/DPW Deputy Director

# Water Row Map 1.

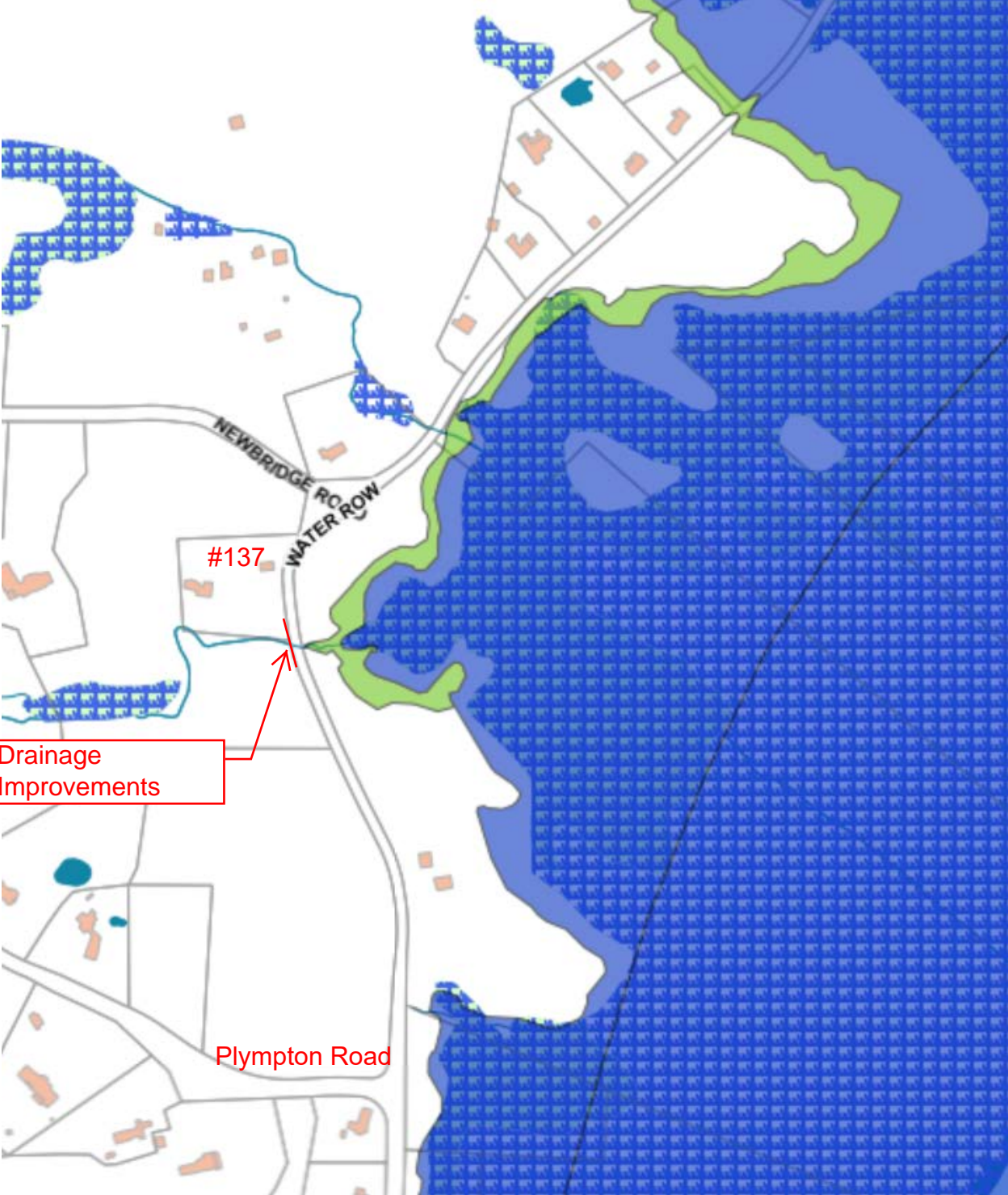
Source: Town of Sudbury MapsOnline. Scale 1 inch = 420 feet +/-.





# Water Row Map 2.

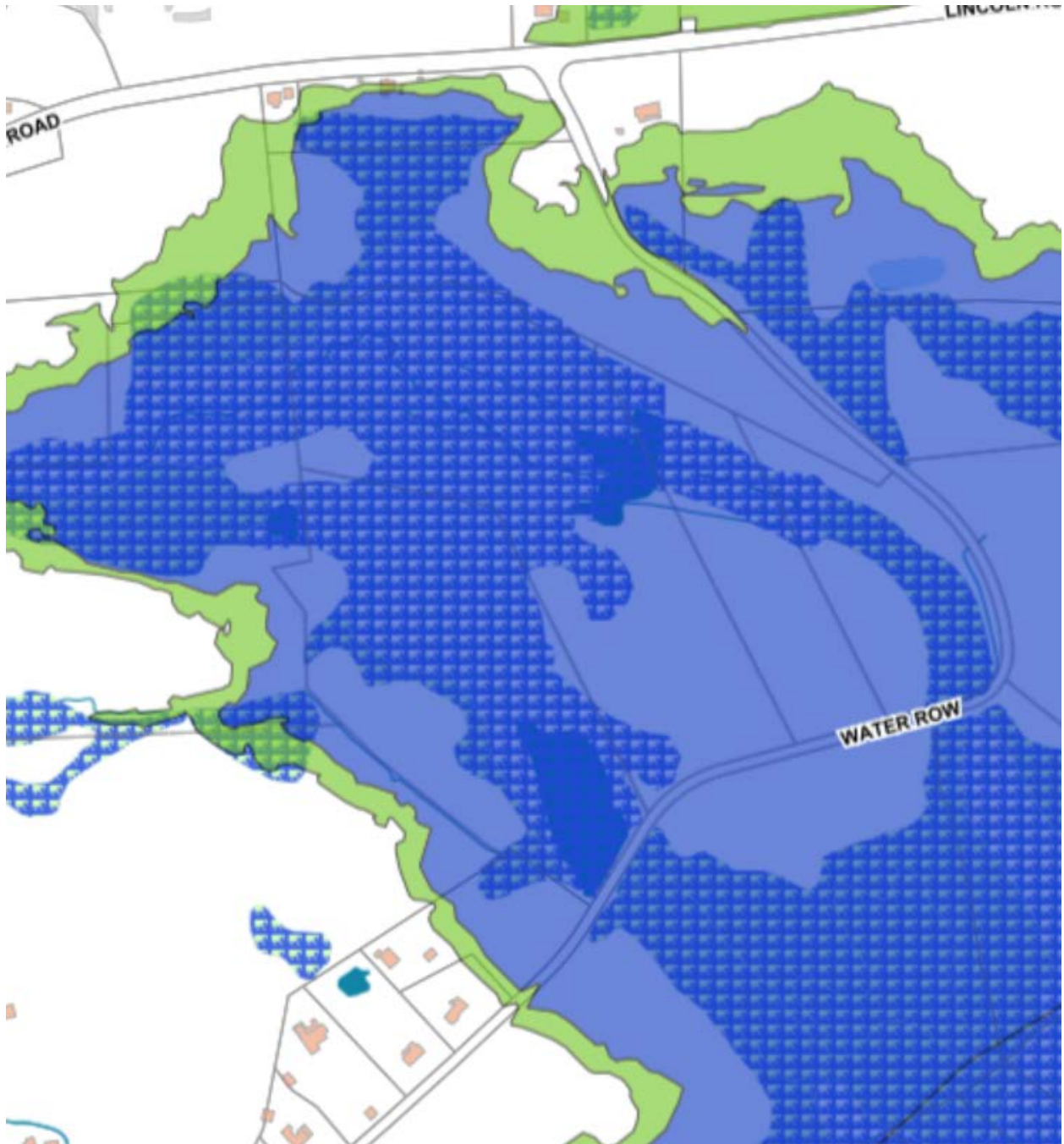
Source: Town of Sudbury MapsOnline. Scale 1 inch = 420 feet +/-.








## Water Row Map 3.

Source: Town of Sudbury MapsOnline. Scale 1 inch = 420 feet +/-.







Hatching Legend:

▲  **Digital Flood Insurance Rate Map (DFIRM)**

-  *Zone A*
-  *Zone AE*
-  *0.2% Annual Chance Flood Hazard*

▲  **Wetlands, DEP - 1/2009**

-  *Marsh/Bog*
-  *Wooded marsh*
-  *Open Water*
-  *Reservoir (with PWSID)*