

Town of Ayer CONSERVATION COMMISSION

Town Hall ♦ One Main Street ♦ Ayer, MA 01432

Phone 978-772-8220 ext. 143 ♦ Fax 978-772-8208 ♦ concom@ayer.ma.us



MEETING AGENDA (In Person) Thursday, August 24, 2023

RECEIVED
AUG 21 2023

TOWN OF AYER
TOWN CLERK

3:10 PM

7:00 PM GENERAL BUSINESS / OPEN SESSION

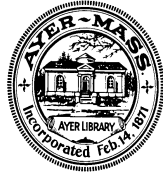
- Approval of Meeting Minutes for August 10, 2023
- Public Input

Request for Determination of Applicability – 91 Littleton Road

CONSERVATION OFFICE AND MEMBER UPDATES

9:00 PM ADJOURN

Next Scheduled Meeting: 7 PM, September 14, 2023



Town of Ayer Conservation Commission

Town Hall * One Main Street * Ayer, MA 01432 * 978-772-8220, ext. 143
Minutes for **8/10/2023**

Location: Ayer Town Hall, 1st Floor

Present: Jon Schmalenberger (Chair), Mark Phillips (Vice-Chair), George Bacon (Member), Jen Amaya (Member), Jessica Gugino (Member/Clerk), Heather Hampson (Conservation Agent)

APAC taped: YES

**All Public Hearings are opened under the Wetlands Protection Act (MCL Ch. 131, section 40)
and under the Ayer Wetlands Bylaw (Article XXVI)**

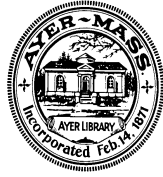
7:00 PM – Open Meeting

- **Confirmation of Agenda**
 - **VOTE:** G. Bacon moved to confirm the agenda as posted; M. Phillips 2nd.
 - Motion approved unanimously 5-0.

- **Approval of Meeting Minutes**
 - **VOTE:** G. Bacon moved to accept minutes for 7/27/2023 as written; M. Phillips 2nd.
 - Motion approved unanimously 5-0.

- **Public Input**
 - None received.

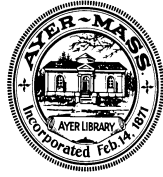
- **Discussion: Wetland Violation – 129 Oak Ridge Drive**
 - Property owner Euripides Guillen was present in response to H. Hampson’s letter of potential violation.
 - After receiving a complaint from a neighbor, H. Hampson contacted Mr. Guillen about his felling of 3 multi-trunked trees that were dropped directly into Flannagan Pond.
 - Mr. Guillen, new to Ayer, was not aware of the Wetlands Protection Act or local bylaw.
 - His property abuts the pond at a relatively narrow passage in the pond that opens up on either side to much wider areas.
 - The trees were leaning and showed evidence of rot, leading Mr. Guillen to think they presented a falling hazard to boaters traveling by.
 - He tried to prevent the trees from falling into the pond when he felled them but miscalculated.
 - As of today, all but one of the 8 trunks (ranging from 5-10 inches in diameter) has been removed; the 8th trunk is home to a yellow jacket nest which has delayed its removal.
 - Mr. Guillen gave H. Hampson permission to go onto his property the next day to check current conditions, including the soil line on the bank.
 - The tree stumps will have to stay given they protect the bank from erosion.
 - For any future work, Mr. Guillen now knows to contact H. Hampson.
 - Mr. Guillen was very sorry for his lack of knowledge that wetlands are protected resources, but J. Schmalenberger reassured him that he wasn’t alone in this and thanked him for cooperating and coming in so quickly to meet with the Commission.



Town of Ayer Conservation Commission

Town Hall * One Main Street * Ayer, MA 01432 * 978-772-8220, ext. 143
Minutes for 8/10/2023

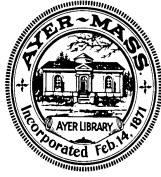
- **Public Meeting: Request for Determination of Applicability – Pirone Park “Kiddie Junction” Playground Rebuild, Ayer Parks Department**
 - Randy Collins, Vice President of BETA Group Inc., was present.
 - Mr. Collins is acting as project manager and landscape architect for the project.
 - Per the requirement of MassDEP, the original arsenic-contaminated playground was demolished in 2022, with 4-6 inches of contaminated soil removed as part of the remediation.
 - Most of the trees were also removed except for 3 oaks in the center that were saved and are hoped to survive the construction disruption.
 - The re-design of the playground has opened the play area up a bit to create more distance from the oaks.
 - The project has also tried to keep as many of the improvements as possible outside of the 100-ft. Buffer Zone to Grove Pond, including the elimination of playground fencing on the pond side.
 - Work in the Buffer Zone includes some grading in an area where a slide will be installed as well as removing and relocating a portion of the Pirone Park Perimeter Path that passes through the area.
 - Erosion controls will continue to be used and replaced where necessary.
 - Mr. Collins said they could add in more plantings and trees to increase the vegetated buffer to Grove Pond.
 - A rain garden had been considered but the proximity to first base at a nearby baseball field would make it a hazard to players.
 - BETA is not anticipating much stormwater runoff from the playground area once grass has been re-established.
 - H. Hampson noted the playground, from its center, slopes down to the pond, and in the area where the slide will go, the change in grade goes from 227 ft. elevation to 223 ft.
 - J. Schmalenberger said the big pile of debris that the Parks Department stores at the edge of the pond must be removed permanently and Parks advised accordingly.
 - The Commission, having done numerous site walks in the area in the past, did not feel the need for another site walk.
 - **VOTE:** G. Bacon moved to issue a Negative Determination of Applicability with the conditions of the permanent removal of the debris pile, restorative plantings to create a vegetated buffer, and inspection of erosion controls; M. Phillips 2nd.
 - Motion approved unanimously 5-0.
 - Mr. Collins said equipment for the new playground has been ordered but will take up to 26 weeks for delivery (around December).
 - He expected contracted work to put in new soil, relocate the perimeter path walkway, and grade the area to take place in October-November.
 - The project will likely continue into spring 2024 before completion.
- **Public Hearing (cont’d.): Notice of Intent – 201-205 West Main Street, DMG Investments LLC, MassDEP # 100-0485**



Town of Ayer Conservation Commission

Town Hall * One Main Street * Ayer, MA 01432 * 978-772-8220, ext. 143
Minutes for **8/10/2023**

- Drew Garvin, of Bohler Engineering, and Kian Hamill, of DMG Investments, were present on behalf of the application.
- This project proposes a mixed-use residential development, “West Ayer Village,” and is currently before the Planning Board for Site Plan Review, Special Permitting, and a variance for parking.
 - The Commission and H. Hampson did a site walk on 7/29.
- In response to questions previously raised by H. Hampson, Mr. Garvin said the 2 proposed snow storage areas total 1500 sq. ft.
 - The amount of open pavement (i.e. not extending underneath the building) that would need to be plowed is currently 28,200 sq. ft.
 - Some plowed snow would therefore have to be trucked off site.
 - J. Schmalenberger and H. Hampson said the Commission’s concern was that snow from previously treated pavement would still drain from the storage areas toward and into the flood plain and nearby Buffer Zone and wetlands, even if the storage areas themselves are not jurisdictional.
 - Mr. Hamill said snow storage procedures will be included in the Operations & Maintenance plan being developed.
 - J. Schmalenberger asked if trucking off plowed snow could just be the standard practice in the O&M plan and Mr. Hamill said yes.
- As for the Commission moving forward on the application, H. Hampson said the Planning Board was still making a decision about the extent of the project to be covered by a third-party peer review.
 - It is possible the Planning Board review might result in a change in layout that could affect the area under ConCom review; its next meetings are 8/22 and 9/12.
 - In addition, the project has yet to hear back from NHESP (Natural Heritage & Endangered Species Program).
 - It was felt best that the Commission not take this up again until its 9/14 meeting.
 - In the meanwhile, H. Hampson will have a provisional draft Order of Conditions ready by 9/11 for Mr. Garvin to review in advance.
- **VOTE:** G. Bacon moved to continue the Public Hearing for the West Main Street project, 100-0485, to 9/14/2023; M. Phillips 2nd.
 - Motion approved unanimously 5-0.
- **Discussion: Proposed Minor Changes to Wetlands Bylaw, Ayer Bylaws Chapter 300 (formerly Article XXVI)**
 - H. Hampson has been working on some minor revisions to the wetlands bylaw.
 - The bylaw was passed at Fall Town Meeting, 10/28/2019 (Article 7) and re-adopted with a new numbering system at Annual Town Meeting, 6/15/2020 (Article 32).
 - The revisions proposed by H. Hampson include:
 - strengthening the jurisdictional areas, including extending the Buffer Zone to vernal pools to 150 ft.;
 - adding in application fees for some permitting categories;



Town of Ayer Conservation Commission

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Minutes for **8/10/2023**

- beefing up the Definitions section.
- H. Hampson provided commissioners with a copy of the bylaw with red-inked edits and additions, along with relevant samples supporting the revisions from other towns.
 - Commissioners should provide H. Hampson with feedback by 8/21.
- H. Hampson hopes to be able to schedule a Public Hearing on these revisions for 9/14 in order to include them in the October Special Town Meeting Warrant.
- **Conservation Commission Office and Member Updates**
 - Tree-cutting
 - DPW Director Dan Van Schalkwyk contacted H. Hampson about a possible tree-cutting violation in the Buffer Zone at 138 Washington Street.
 - It is hard to tell where the tree cutting took place exactly so H. Hampson sent the property owner a copy of the plot plan and the Town's tree policy and asked the owner to contact her.
 - Conservation Restrictions (CR)
 - **Shaker Mill Pond subdivision**
 - H. Hampson heard back from developer Dan Aho's attorney, Alan Shockett, and has emailed him a copy of Town Counsel's previous notes on the CR draft.
 - When she has a final CR draft from Mr. Shockett, she will circulate it to the Commission for review.
 - Meanwhile, she is also waiting to hear back from Mr. Shockett about the status of the needed Baseline Documentation.
 - **John Carroll Reserve/Curley Circle subdivision**
 - The CR was recorded several years ago.
 - Meanwhile, the developer is working on completing the Baseline Documentation for the CR and hopes to have it complete in time to seek street acceptance at Fall Town Meeting.
 - **Panther Place subdivision**
 - H. Hampson has not heard back yet from the subdivision's attorney.
 - She is also verifying that Planning Board requirements included provision that no Occupancy Permits be issued until the CR is complete.
 - Waterways Signs Project
 - M. Phillips reminded H. Hampson about contacting Liddell Co. to provide replacement signs for the Sandy and Flannagan Pond signs that were stolen.
- **8:15 PM: Adjourn**
 - **VOTE:** G. Bacon moved to adjourn; M. Phillips 2nd.
 - Motion approved unanimously 5-0.

Minutes Recorded and Submitted by Jessica G. Gugino, Clerk

Date / Signature of Approval: _____

Request for a Determination of Applicability

**91 Littleton Road
Ayer, MA**

August 2023

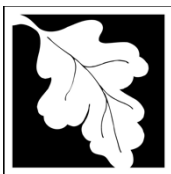
**Submitted to:
Town of Ayer
Conservation Commission
1 Main Street
Ayer, MA 01432**

**Submitted by:
Christopher Morin
150 Goldsmith Street
Littleton, MA 01460**

**Prepared by:
Goldsmith, Prest & Ringwall, Inc.
39 Main Street, Suite 301
Ayer, MA 01432**

**Project No:
221059**





Massachusetts Department of Environmental Protection
 Bureau of Water Resources - Wetlands

WPA Form 1- Request for Determination of Applicability Ayer

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

Municipality

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:
 Christopher _____ Morin _____
 First Name Last Name
 150 Goldsmith Street _____
 Address
 Littleton _____ MA _____ 01460 _____
 City/Town State Zip Code
 978-758-6040 _____ cmm426@gmail.com _____
 Phone Number Email Address

2. Property Owner (if different from Applicant):

 First Name Last Name

 Address

 City/Town State Zip Code

 Phone Number Email Address (if known)

3. Representative (if any)

 First Name Last Name

 Company Name
 39 Main Street, Suite 301 _____
 Address
 Ayer _____ MA _____ 01432 _____
 City/Town State Zip Code
 978-772-1590 _____ Itiv@gpr-inc.com _____
 Phone Number Email Address (if known)

B. Project Description

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

91 Littleton Road _____ Ayer _____
 Street Address City/Town
 42.54796 _____ -71.55167 _____
 Latitude (Decimal Degrees Format with 5 digits after decimal e.g. XX.XXXXX) Longitude (Decimal Degrees Format with 5 digits after decimal e.g. -XX.XXXXX)
 36 _____ 20 _____
 Assessors' Map Number Assessors' Lot/Parcel Number

[How to find Latitude and Longitude](#)

[and how to convert to decimal degrees](#)

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

Proposed work area is limited to the existing paved parking area for the existing building on site.

c. Plan and/or Map Reference(s): (use additional paper if necessary)

"Ridge View Heights" Plan No. L-5020 by David E. Ross Associates, Inc. _____ March 1999 _____
 Title Date

 Title Date



B. Project Description (cont.)

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

The project proposed to decommission existing septic system within the limit of 100-ft wetland buffer limit and 200-ft Riverfront Area, and install new water and sewer services from existing mains located on Littleton Road. The proposed services shall be located outside of the 200-ft Riverfront Area but will still remain within the 100-ft wetland buffer limit.

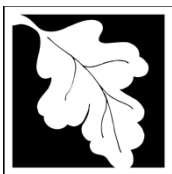
b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

310 CMR 10.53(3)(d) & 310 CMR 10.58(6)(b)

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.)



WPA Form 1- Request for Determination of Applicability Ayer

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

Municipality

C. Determinations

1. I request the Town of Ayer make the following determination(s). Check any that apply:
Conservation Commission

- a. whether the **area** depicted on plan(s) and/or map(s) referenced above 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 above are accurately delineated.
- c. whether the **Activities** depicted on plan(s) referenced above is subject to the Wetlands Protection Act and its regulations.
- d. whether the area and/or Activities depicted on plan(s) referenced above is subject to the jurisdiction of any **municipal wetlands' ordinance** or **bylaw** of:

Ayer

Name of Municipality

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

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.

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

NARRATIVE
to accompany
Request for a Determination of Applicability
91 Littleton Road, Ayer, MA

GENERAL

The purpose of this project is to abandon the existing on-site water and septic system and connect to the municipal sewerage disposal system and water service off Littleton Road.

The project site is a 0.76 ac lot known as Map 36, Parcel 20 under the Ayer's assessor's department. There is an existing retail building located on the subject site, with paved parking areas located on both sides of the existing building adjacent to Littleton Road. The project site is located north adjacent to the Shaker Mill Pond and Bennetts Brook. There is existing septic system is located downgradient of the existing dwelling, and close to the resource areas and their associated buffer limits.

The project proposes to decommission and abandon the existing septic system by pumping out the septic tank, rupturing the bottom, plugging the inlet and filling the tank with clean sand. The project also proposes to connect to the municipal water service on Littleton Road and connecting to the municipal sewer service by installing a E-One grinder pump and provide a force main connection across Littleton Road and into an existing E-One pump located on Hickory Way.

The new services shall be located outside of the 200-ft Riverfront Area and will be located within an already disturbed paved parking area that is within the 100-ft wetland buffer limit of the Shaker Mill Pond.

JURISDICTION

The primary resource areas are the Shaker Mill Pond and Bennetts Brook located south of the subject site. The proposed scope of work is limited to the buffer limits associated with the resources areas as mentioned.

Land Under Water Bodies and Waterways (310 CMR 10.56)

The proposed limit of work is located within the 100-ft wetland buffer limit of the Shaker Mill Pond. The existing septic tank is located approximately 47.1 ft away from the resource area and the existing approximate location of the leaching field is approximately 20 ft away from the resource area. The proposed grinder pump system shall be installed approximately 38.2 ft away from the resource area, in an already disturbed paved parking area of the project site.

The proposed scope of work is also limited to the installation of utilities for an existing building, which may be permitted under 310 CMR 10.53(3)(d).

200-Riverfront Area Redevelopment (310 CMR 10.58)

The proposed scope of work within the 200-ft Riverfront Area of the Bennetts Brook on site is limited to the decommissioning of the existing septic system. Said scope of work is temporary in

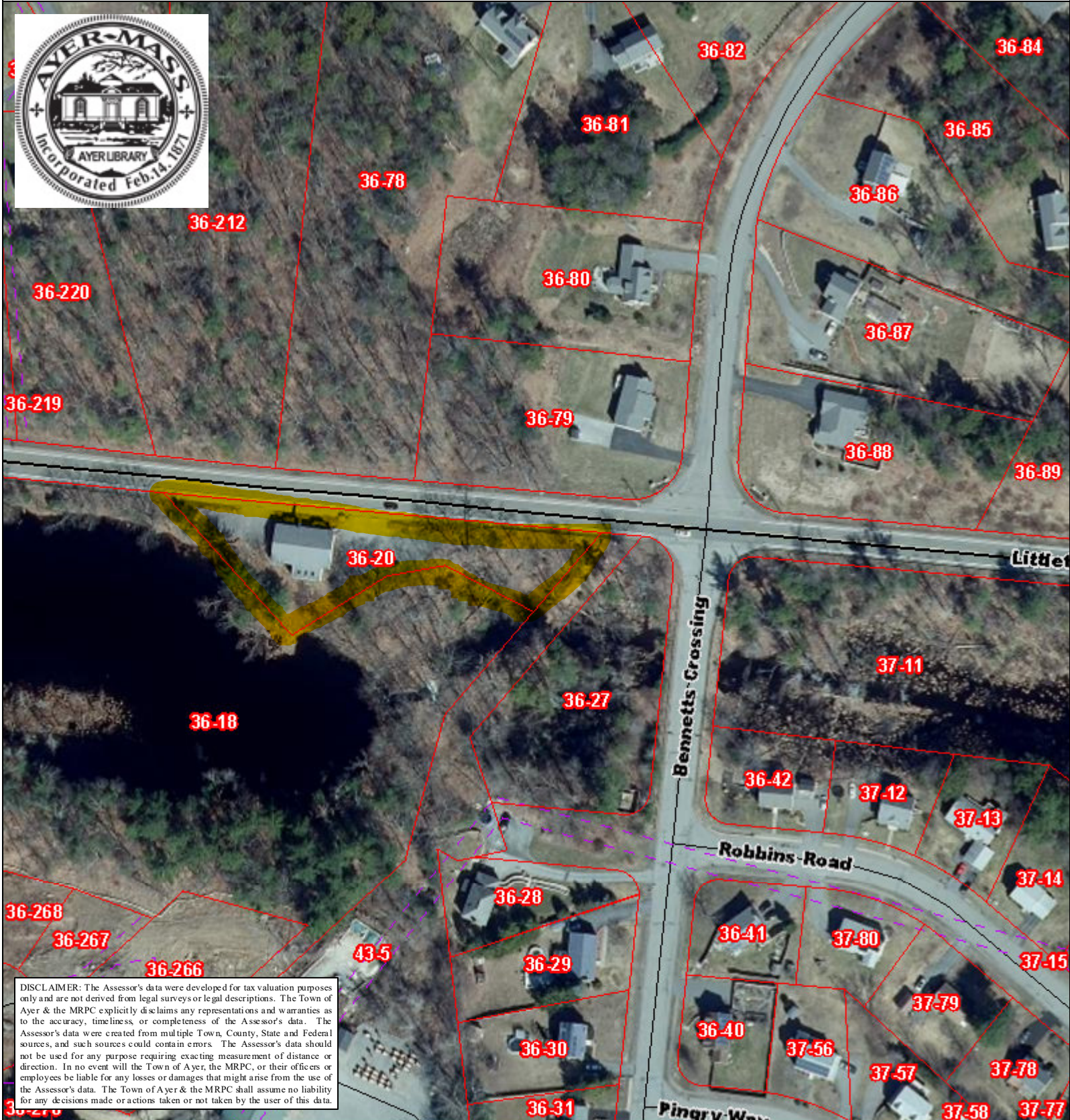
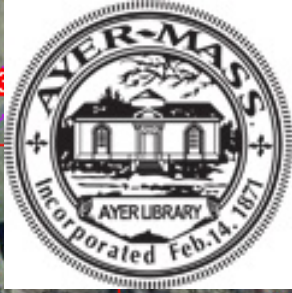
nature and should be considered as a Minor Activity under 310 CMR 15.02(b)(2)(g), therefore should be exempted from the requirements for the Riverfront Area per 310 CMR 10.58(6)(b).

CONCLUSION

The project as a whole represents a substantial improvement in terms of environmental protection for the resource areas and their associated buffer limits on site. By decommissioning and abandoning the existing septic system close to the resource area, it will ensure that there will be no future disturbance associated with maintenance work within said area. The proposed service connections will be within an already disturbed area of the project site and will remain outside of the 200-ft Riverfront Area.

As the project is temporary in nature and limited to the construction of utility services as permitted under the sections as listed under 310 CMR 10, we request that the Board will make a negative determination whether the proposed scope of work would be subjected to the Massachusetts's Wetland Protection Acts and its regulations and the Town of Ayer's Wetland Bylaw.

MRMapper WebMap

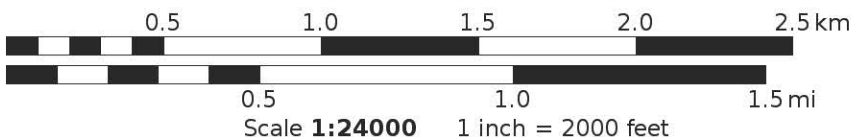


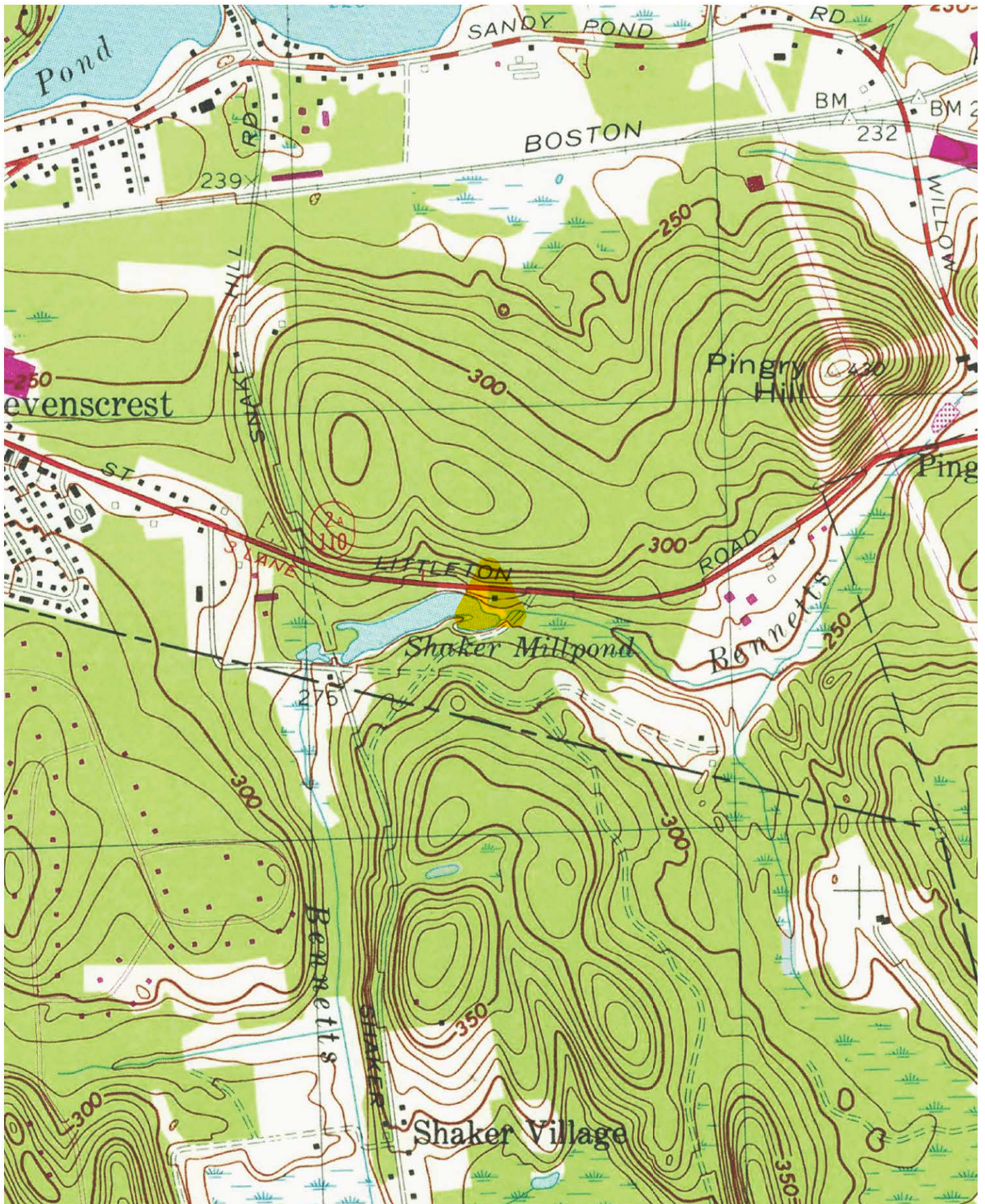
DISCLAIMER: The Assessor's data were developed for tax valuation purposes only and are not derived from legal surveys or legal descriptions. The Town of Ayer & the MRPC explicitly disclaims any representations and warranties as to the accuracy, timeliness, or completeness of the Assessor's data. The Assessor's data were created from multiple Town, County, State and Federal sources, and such sources could contain errors. The Assessor's data should not be used for any purpose requiring exacting measurement of distance or direction. In no event will the Town of Ayer, the MRPC, or their officers or employees be liable for any losses or damages that might arise from the use of the Assessor's data. The Town of Ayer & the MRPC shall assume no liability for any decisions made or actions taken or not taken by the user of this data.

Parcel Boundaries	Island	Interstate Routes	MBTA Commuter Rail Stations
Other Legal Features	Traffic Island	Interstate Routes	Active Rail Lines
Easements	Water	US & State Routes	Commuter Rail Line
Miscellaneous Features	MRPC Communities	US & State Routes	Other Active Rail Lines
Former Shore	Surrounding Communities	Other Roadways	
Future Lot		Other Roadways	



Mercator Projection
 WGS84
 UTM Zone 19T
 CALTOPO





Mercator Projection
 WGS84
 UTM Zone 19T
 CALTOPO

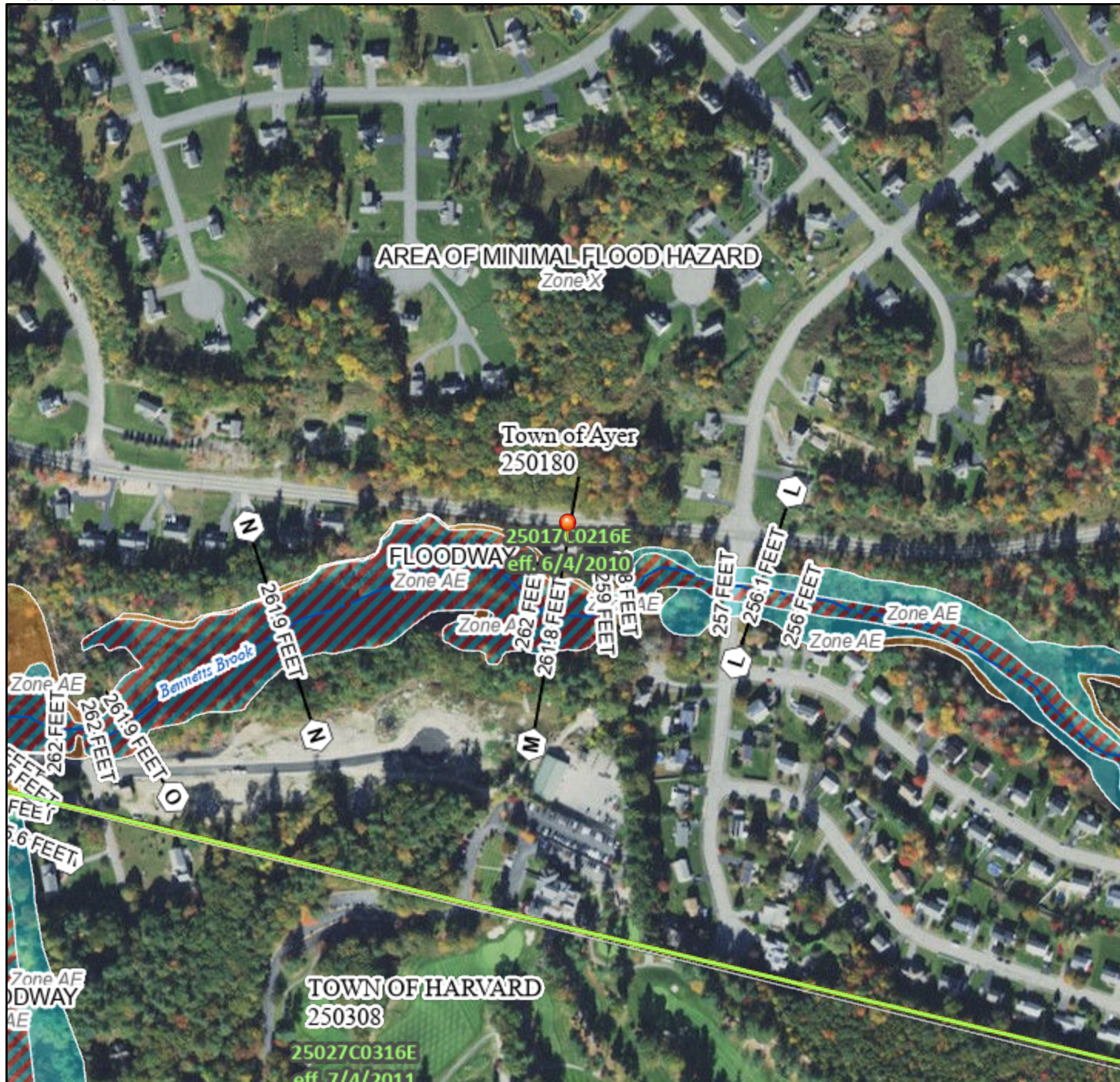


↑
 MN
 -14.0°

National Flood Hazard Layer FIRMMette



71°33'25"W 42°33'6"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway	

OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X	Future Conditions 1% Annual Chance Flood Hazard Zone X	Area with Reduced Flood Risk due to Levee. See Notes. Zone X	Area with Flood Risk due to Levee Zone D

OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X	Effective LOMRs	Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer	Levee, Dike, or Floodwall

OTHER FEATURES	Digital Data Available	No Digital Data Available	Unmapped

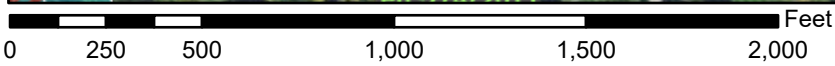
MAP PANELS

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/31/2023 at 11:27 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



1:6,000 71°32'47"W 42°32'39"N

Basemap Imagery Source: USGS National Map 2023

August 1, 2023

**Subject: 91 Littleton Road, Ayer, MA
Tax Map 36, Parcel 20**

To Whom It May Concern:

I hereby authorize Goldsmith, Prest & Ringwall, Inc., 39 Main Street, Suite 301, Ayer, MA, 978.772.1590, to act as my agent in administrative and civil engineering matters pertaining to the proposed utility service connections at the subject site. This authorization covers the execution of application forms, presentation of plans and designs, and communication with involved parties.

Respectfully,

A handwritten signature in black ink, appearing to read "Chris", with a long horizontal flourish extending to the right.

Christopher Morin
150 Goldsmith Street
Littleton, MA 01460

Copy: Goldsmith, Prest & Ringwall, Inc.
221059

EROSION AND SEDIMENT CONTROL REQUIREMENTS

PART 1 - GENERAL

- 1.01 SUMMARY
 A. FURNISH, INSTALL, AND MAINTAIN TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS, BUT NOT NECESSARILY LIMITED TO, HAY BALE AND SILT FENCE BARRIERS, RIPRAP, DIVERSION CHANNELS AND BERMS, CHECK DAMS, STRATEGICALLY LOCATED STOCKPILES, SEDIMENT BASINS, MULCH, AND SEED MIX (HEREINAFTER "CONTROL MEASURES") ADEQUATE TO PREVENT THE CONVEYANCE OF EROSION PRODUCTS (E.G. SOIL, MULCH, SOD) OFF SITE, OR INTO ENVIRONMENTALLY SENSITIVE AREAS, OR INTO AREAS WHERE WORK WILL BE ADVERSELY IMPACTED. ENVIRONMENTALLY SENSITIVE AREAS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, WETLANDS, TRIBUTARIES TO WETLANDS, WETLAND BUFFER ZONES, INTERMITTENT AND PERENNIAL STREAMS / RIVERS, AND THEIR ATTENDANT BUFFER ZONES.
 1. REFER TO DRAWINGS FOR LOCATION AND DETAILS OF CONTROL MEASURES REQUIRED TO COMMENCE WORK. THESE CONTROL MEASURES WILL BE ADEQUATE ONLY FOR VEGETATION CLEARING. THE DRAWINGS ARE NOT INTENDED TO GRAPHICALLY DEPICT ALL CONTROL MEASURES THAT WILL BE REQUIRED TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A.
 2. DEVISE AND EMPLOY CONTROL MEASURES THROUGHOUT THE DURATION OF PROJECT, OVER ALL AREAS DISTURBED OR UNDISTURBED BY CONSTRUCTION, AS NECESSARY TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A.
 3. DEVISE AND EMPLOY TEMPORARY CONTROL MEASURES AS NECESSARY TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A, WHILE ALLOWING WORK TO PROCEED IN AN EFFICIENT, COST EFFECTIVE MANNER.
 4. DEVISE, EMPLOY AND MAINTAIN CONTROL MEASURES UNTIL SUCH TIME AS THE ENTIRE SITE IS PERMANENTLY STABILIZED BY ESTABLISHED VEGETATION, FINISH LANDSCAPE MATERIALS, PAVED SURFACES, AND/OR ROOF AREA.
 5. ONCE THE SITE IS PERMANENTLY STABILIZED AND CERTIFIED AS SUCH BY ENGINEER, REMOVE TEMPORARY CONTROL MEASURES WHILE PROTECTING STABILIZED SURFACES.

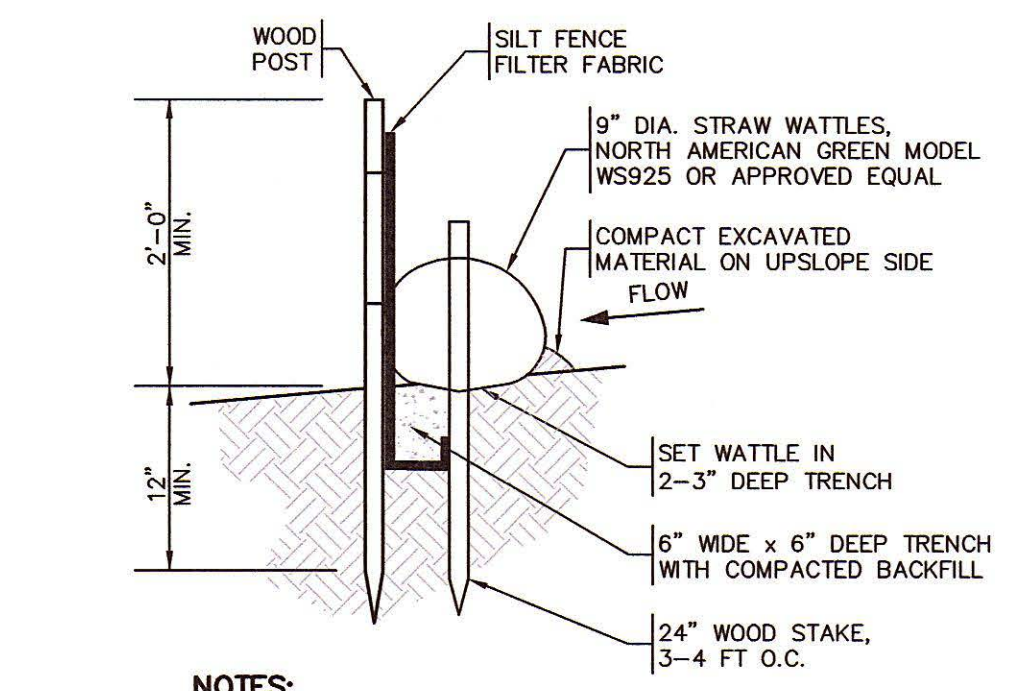
PART 2 - PRODUCTS

- 2.01 MATERIALS
 A. STRAW WATTLES: 100% WHEAT STRAW WITH NATURAL BIO-DEGRADABLE JUTE NETTING. MINIMUM 9-INCH DIAMETER AND 10 FEET LONG. USE 12-INCH OR 20-INCH DIAMETER WATTLES TO PROTECT LARGER UNSTABLE AREAS.
 B. SILT FENCE: NON-WOVEN, UV-RESISTANT, POLYPROPYLENE FABRIC, FLOW RATED AT 10 GPM/SF MINIMUM, GRAB TENSILE RATED AT 124 POUNDS MINIMUM, WITH INTEGRAL STAKE LOOPS, AND HARDWOOD STAKES. USE NO. 2130 BY AMOCO FABRICS & FIBERS, OR APPROVED EQUAL.
 C. MULCH: ORGANICS INCLUDING HAY, PROCESSED PINE / HEMLOCK TWIGS AND NEEDLES.
 D. SEED MIXES: PERENNIAL RYEGRASS, KENTUCKY BLUEGRASS, AND / OR FINE FESCUE, DISEASE RESISTANT. NON-MAINTAINED AREA OPTION - ANNUAL RYEGRASS COMBINED WITH MEDIUM RED CLOVER.
 E. EXCELSIOR BLANKET: CURLED WOOD FIBER ON PHOTODEGRADABLE EXTRUDED PLASTIC MATRIX, BOX OF FIBERS 6-INCHES LONG OR LONGER, WEIGHT 0.975 POUNDS / SY, CONTAINING NO CHEMICAL ADDITIVES. USE CURLEX I BLANKET BY AMERICAN EXCELSIOR COMPANY, OR APPROVED EQUAL.
 F. ROCK RIPRAP: SOUND, ANGULAR, 6-INCH MINUS PROCESSED ROCK, BLAST ROCK, OR TALINGS.
 G. CRUSHED STONE: SOUND, ANGULAR, 2-INCH MINUS PROCESSED CRUSHED STONE

PART 3 - EXECUTION

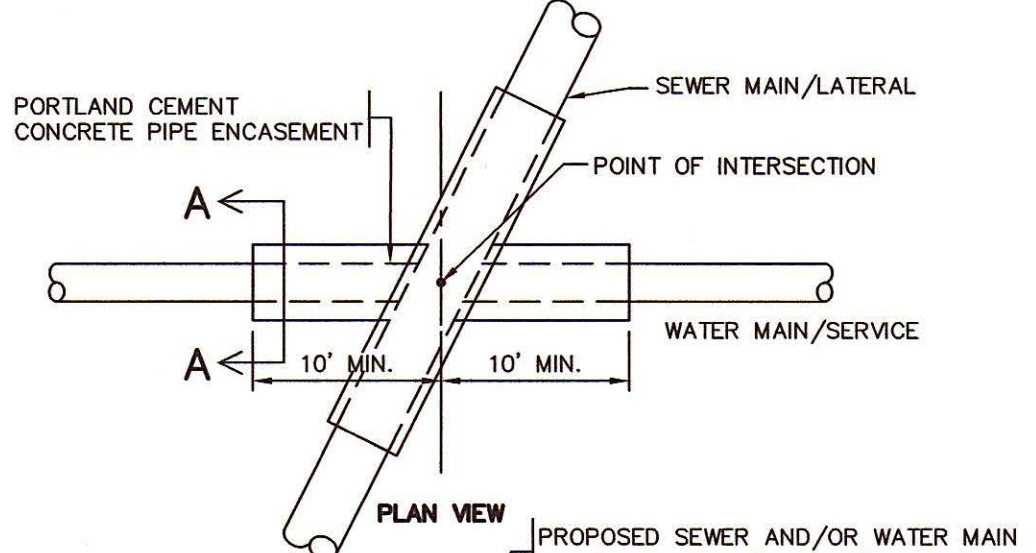
- 3.01 THROUGHOUT CONSTRUCTION
 A. DEVISE WORK SEQUENCE SO AS TO LIMIT DRAINAGE AREA THAT IS TRIBUTARY TO DISTURBED AREAS. DEVISE, EMPLOY, AND MAINTAIN CONTROL MEASURES SUCH AS DIVERSION CHANNELS AND BERMS, STRATEGICALLY LOCATED STOCKPILES, AND SEDIMENT BASINS TO SUBDIVIDE DRAINAGE AREAS INTO SMALL, MANAGEABLE SUBAREAS, THEREBY MINIMIZING RUNOFF AND THE POTENTIAL FOR EROSION.
 B. MAINTAIN BARRIER AT LIMIT OF WORK AND PROTECT EXISTING VEGETATION / FACILITIES OUTSIDE OF LIMIT OF WORK.
 C. MAINTAIN SPARE MATERIAL STOCKPILES FOR IMMEDIATE EMPLOYMENT / REPAIR / EXPANSION OF CONTROL MEASURES. AT A MINIMUM, SUCH MATERIALS SHALL INCLUDE HAY BALES, SILT FENCE AND STAKES, AND CRUSHED STONE.
- 3.02 SITE PREPARATION AND ACCESS
 A. WALK SITE AND IDENTIFY LOCATIONS OF LIMIT OF WORK AND ENVIRONMENTALLY SENSITIVE AREAS. ESTABLISH CONSTRUCTION STAGING AREA, LOCATED BEYOND ENVIRONMENTALLY SENSITIVE AREAS.
 B. INSTALL CONTROL MEASURES AS SHOWN ON THE DRAWINGS, INCLUDING THOSE DEFINING THE LIMIT OF WORK.
 C. LIMIT VEHICULAR TRAFFIC TO AND FROM SITE TO MINIMIZE TRANSPORT OF SEDIMENT.
 3.03 CLEARING, GRUBBING, AND STRIPPING
 A. SCHEDULE GRUBBING AND STRIPPING TO OCCUR IMMEDIATELY PRIOR TO EARTH DISTURBANCE, DEPENDING ON SITE AREA, CONSIDER MULTIPLE GRUBBING PHASES, SEQUENCED TO TAKE ADVANTAGE OF THE EROSION PREVENTION POTENTIAL OF EXISTING VEGETATIVE COVER.
 B. MINIMIZE THE AREA OF EXISTING VEGETATION REMOVED WHEREVER POSSIBLE.
 C. LOCATE AND SIZE STOCKPILES TO MINIMIZE EROSION POTENTIAL, TAKING ADVANTAGE OF TERRAIN SLOPE AND ASPECT, WHERE APPROPRIATE.
 D. PROTECT VEGETATION, INCLUDING ROOT SYSTEMS, BEYOND LIMIT OF CLEARING.
 E. PROCESS TIMBER, STUMPS, SLASH, AND BRUSH SO AS TO PROTECT ENVIRONMENTALLY SENSITIVE AREAS AND INSTALLED CONTROL MEASURES. PROPERLY DISPOSE OF EXCESS OFF SITE. BURIAL OF STUMPS ON SITE IS PROHIBITED.
 3.04 EXCAVATION FOR BUILDING FOUNDATIONS AND UTILITIES
 A. DEVISE AND INSTALL CONTROL MEASURES ADEQUATE TO HANDLE DISCHARGES AND TRAP SEDIMENT FROM FOOTING SUMP AND WELL POINT PUMPS PRIOR TO EXCAVATION.
 B. ARMOR SUMP PUMP DISCHARGE LOCATIONS TO PREVENT EROSION AT POINT OF DISCHARGE AND AREAS DOWNSTREAM.
 C. IF FOUNDATION EXCAVATIONS GRADE TO DAYLIGHT ON THE LOW SIDE, DEVISE AND INSTALL CONTROL MEASURES TO HANDLE SURFACE AND GROUNDWATER FLOW FROM EXCAVATION LOW POINT.
 D. STOCKPILE EXCAVATED MATERIALS TO BAFFLE OVERLAND RUNOFF, AVOIDING THE CREATION OF LENGTHY PATHS OF CONCENTRATED RUNOFF.
 E. BACKFILL UTILITY TRENCHES AS SOON AS PRACTICABLE TO PREVENT FLOODING, SLOUGHING, POTENTIAL OVERFLOW, AND REPETITIVE EARTH DISTURBANCE.
 3.05 SITE GRADING
 A. WHERE APPLICABLE, FOLLOW EXCAVATION AND FILL PRACTICES SHOWN ON DRAWINGS TO LOCALIZE AND MINIMIZE EROSION.
 B. MONITOR SEDIMENT VOLUME IN TEMPORARY SEDIMENT BASINS AND AT DIVERSION BERMS AND CHECK DAMS. IN ALL AREAS EXCEPT THOSE THAT DO NOT PRESENT POTENTIAL PROBLEMS WITH REGARD TO FUTURE SOIL STABILITY, DRAINAGE, OR BEARING CAPACITY, REMOVE AND PROPERLY DISPOSE OF TRAPPED SEDIMENT BEFORE BRINGING SITE TO FINAL SUBGRADE.
 3.06 LANDSCAPING
 A. COMPLETE LANDSCAPING AS SOON AS POSSIBLE AFTER COMPLETION OF FINAL SUBGRADE.
 B. IMMEDIATELY AFTER PLACEMENT OF TOPSOIL, STABILIZE WITH CONTROL MEASURES INCLUDING, BUT NOT NECESSARILY LIMITED TO, SEED MIX, MULCH, AND / OR BLANKET.

- D. INSPECT AND MAINTAIN EFFECTIVENESS OF CONTROL MEASURES BY REPAIRING AS NECESSARY TO ENSURE INTENDED FUNCTION; BY SUPPLEMENTING AS NECESSARY FOR ADEQUATE EXTENT; BY REMOVING TRAPPED PRODUCTS OF EROSION AS NECESSARY TO MAINTAIN EFFECTIVE TRAP VOLUME.
 E. LIMIT EXTENT OF WORK AREA SO THAT ALL DISTURBED AREAS CAN BE STABILIZED WITH CONTROL MEASURES WITHIN A 24-HOUR PERIOD.
 F. INSTALL CONTROL MEASURES AS SOON AS PRACTICABLE AFTER EACH MANAGEABLE PORTION OF EARTHWORK IS COMPLETE. EMPLOY TEMPORARY MEASURES AS NECESSARY TO STABILIZE DISTURBED AREAS, EVEN WHERE SUBSEQUENT CONSTRUCTION OPERATIONS MAY REQUIRE RE-DISTURBANCE.
 G. WHEN INTENSE RAINFALL IS EXPECTED, CONSIDER, DEVISE, AND EMPLOY REINFORCING CONTROL MEASURES PRIOR TO THE RAINFALL EVENT TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A. IF NECESSARY, EMPLOY TEMPORARY CONTROL MEASURES ON MATERIAL STOCKPILES TO COUNTERACT POTENTIAL SEDIMENT TRANSPORT DURING INTENSE RAINFALL.
 H. WHEN VEHICLE REFUELING IS REQUIRED ON SITE, CONDUCT REFUELING OPERATIONS OUTSIDE OF ENVIRONMENTALLY SENSITIVE AREAS.
 I. PROPERLY DISPOSE OF DEBRIS, SOLID WASTE, TRASH, AND CONSTRUCTION WASTE / BYPRODUCTS OFF SITE.
 J. SWEEP ON-SITE PAVED AREAS AND OFF-SITE STREETS AS NECESSARY TO PREVENT SILT AND DEBRIS ORIGINATING ON SITE FROM ENTERING CLOSED DRAINAGE SYSTEMS AND / OR ENVIRONMENTALLY SENSITIVE AREAS.

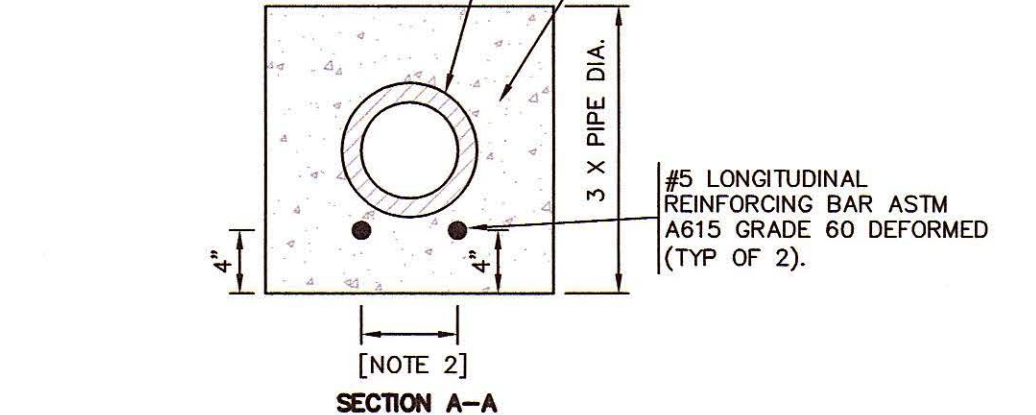


NOTES:
 [1] INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
 [2] TRAPPED SEDIMENT SHALL BE REMOVED TO A NON-SENSITIVE UPLAND AREA.

STRAW WATTLE / SILT FENCE BARRIER
 TYPICAL CROSS SECTION
 NOT TO SCALE

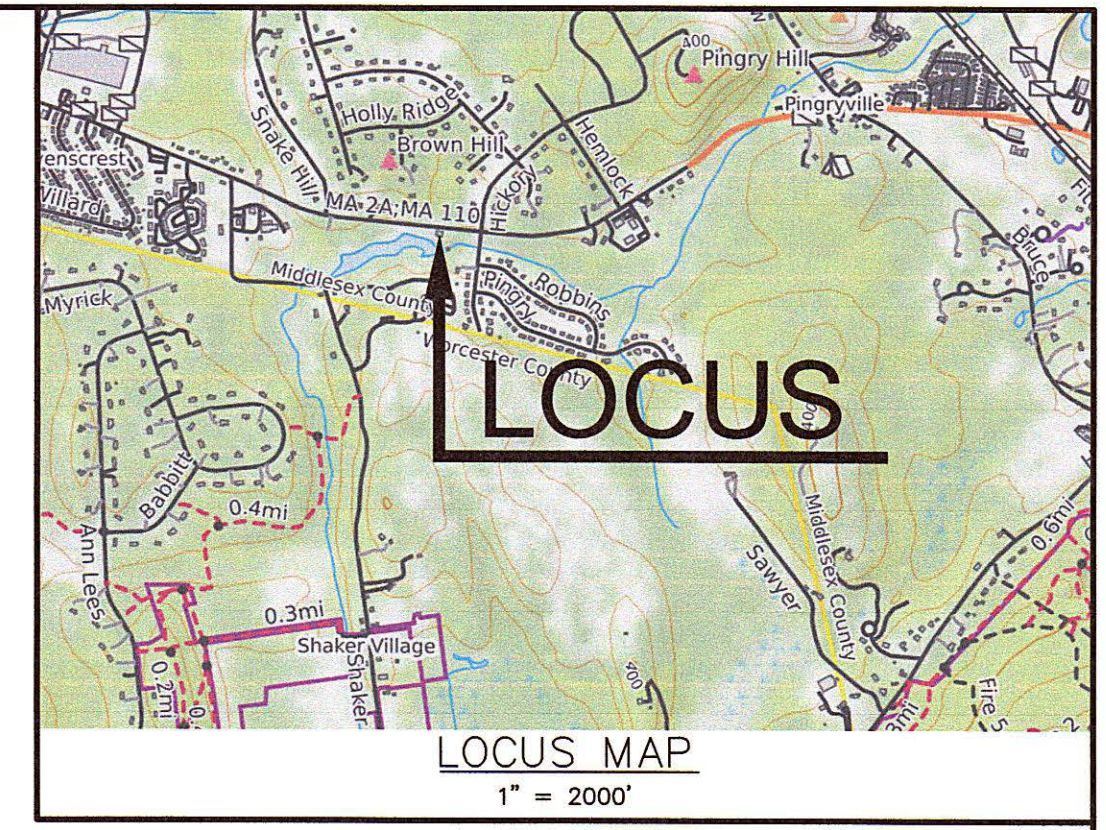


PIPE ENCASEMENT
 NOT TO SCALE



NOTES:
 [1] CONCRETE PIPE ENCASEMENT TO EXTEND 10 FT ALONG SEWER LINE AND WATER LINE FROM POINT OF INTERSECTION.
 [2] DISTANCE EQUAL TO PIPE DIAMETER.
 [3] CONCRETE PIPE ENCASEMENT REQUIRED WHENEVER PROPOSED SEWER MAIN/LATERAL IS WITHIN 10' OF PROPOSED WATER MAIN/SERVICE.

WATER SERVICE CONNECTION DETAIL
 TOWN OF AYER DEPARTMENT OF PUBLIC WORKS TYPICAL CROSS SECTION
 NOT TO SCALE



ELEVATION DATUM
 DATUM: NAVD 1988

ASSESSORS REFERENCE:
 ASSESSORS MAP 36, PARCEL 20
 PROPERTY OWNER: CHRISTOPHER MORIN
 150 GOLDSMITH STREET
 LITTLETON, MA 01460

EXISTING CONDITIONS NOTES:

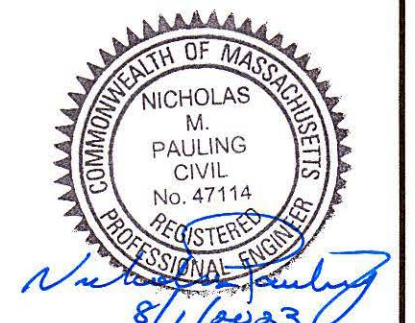
- EXISTING CONDITION INFORMATION BASED ON AN ON-THE-GROUND TOPOGRAPHIC PERFORMED BY GOLDSMITH, PREST & RINGWALL, INC. DATED 5/24/22, 6/10/22, AND 9/26/22.
- EXISTING UTILITY INFORMATION SHOWN HEREON BASED ON PLAN REFERENCE NO. 2 AND HAVE BEEN ADJUSTED TO NAVD88 ELEVATION DATUM.
- 100-YR FEMA FLOODPLAIN SHOWN HEREON BASED ON FLOOD INSURANCE RATE MAP, MAP NUMBER 25017C0216E, EFFECTIVE DATE JUNE 4, 2010.
- LIMIT OF WETLAND AREA WAS FIELD SURVEYED BASED ON EDGE OF SHAKER MILL POND ON 5/24/22.
- LIMIT OF RIVERFRONT AREA SHOWN HEREON BASED ON OVERLAYING AVAILABLE ONLINE TOWN OF AYER GIS MAP.

PLAN REFERENCES

- "RIDGE VIEW HEIGHTS." DEFINITIVE SUBDIVISION OF LAND IN AYER, MASS. SHEET 39 OF 55, PLAN NO. L-5020. PREPARED FOR CRABTREE DEVELOPMENT CORPORATION. PREPARED BY DAVID E. ROSS ASSOCIATES, INC. DATED MARCH 1999.
- "AS-BUILT PLAN OF HICKORY WAY, AT PINGRY HILL (FORMERLY RIDGE VIEW HEIGHTS) SUBDIVISION IN AYER, MASSACHUSETTS." SHEET 5 OF 5, PLAN NO. 2-D-65. PREPARED FOR CRABTREE DEVELOPMENT, LLC. PREPARED BY S.J. MULLANEY ENGINEERING, INC. DATED 8/27/2014.
- "PRESSURE SYSTEM DESIGN REPORT FOR 91 LITTLETON ROAD, AYER, MA." PREPARED BY F.R. MAHONY & ASSOCIATES, INC. LAST REVISED JULY 31, 2023.

DRAWING ISSUED FOR:

- CONCEPT CONSTRUCTION
 PERMIT CONSTRUCTION RECORD



THIS DRAWING MAY NOT SHOW CONSTRUCTION DETAILS AND SPECIFICATIONS FOR ALL PROPOSED IMPROVEMENTS, AND MAY NOT IDENTIFY ALL CONSTRUCTION WORK ITEMS/AREAS OF CONTRACTOR JURISDICTION.

PER 250 CMR 5.03(13), THE FOLLOWING ARE EXCLUDED FROM THE PROFESSIONAL ENGINEER'S RESPONSIBILITY: ALL BOUNDARY INFORMATION; LOCATION OF EXISTING STRUCTURES, TREES, UTILITIES, TOPOGRAPHY OR SIMILAR FEATURES; DESIGN OF RETAINING WALLS, PROPRIETARY EQUIPMENT. SEE EXISTING CONDITION NOTES.

NO.	DATE	BY	APP.	REVISION DESCRIPTION

GPR Engineering Solutions for Land & Structures
GOLDSMITH, PREST & RINGWALL, INC.
 39 MAIN STREET, SUITE 301, AYER, MA 01432
 CIVIL ENGINEERING • LAND SURVEYING • LAND PLANNING
 VOICE: 978.772.1590 FAX: 978.772.1591
 www.gpr-inc.com

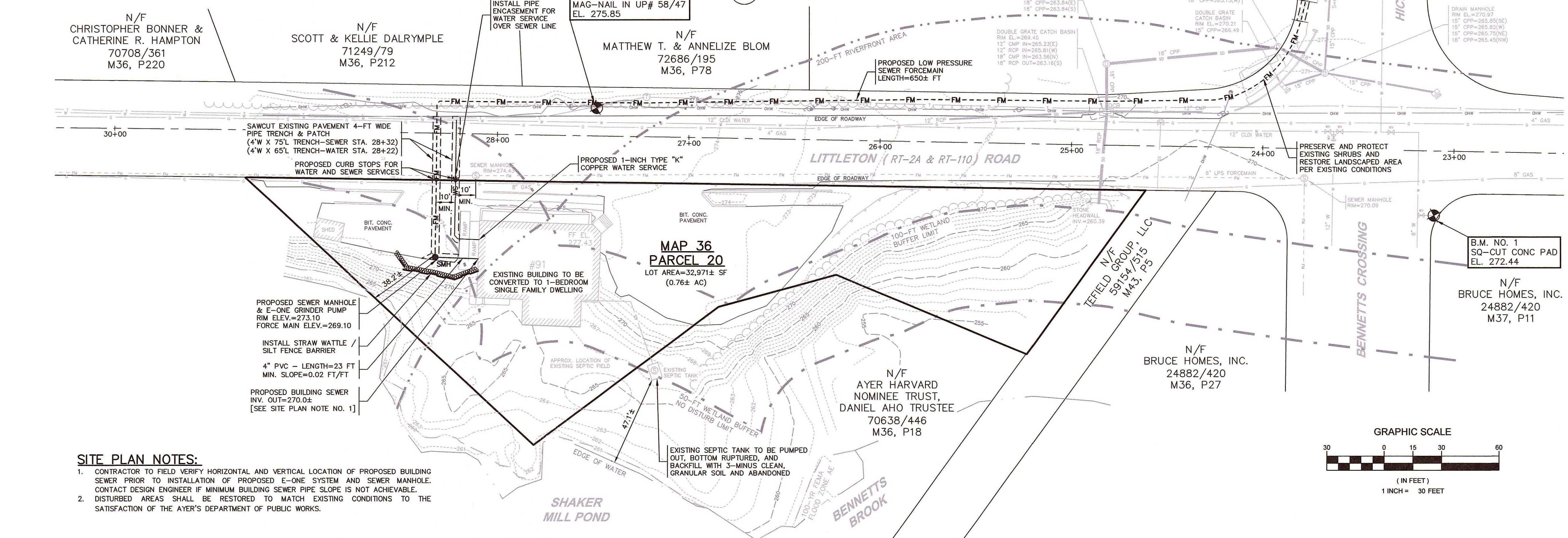
RESIDENTIAL DEVELOPMENT UTILITY CONNECTIONS

SITE PLAN

**91 LITTLETON ROAD
 AYER, MA**

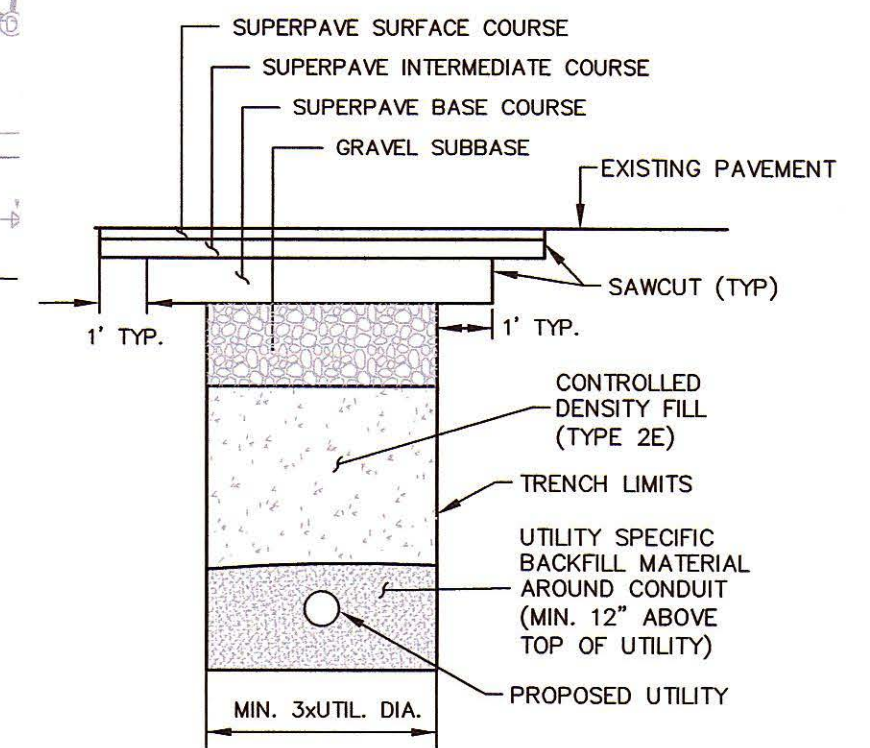
PREPARED FOR:
 CHRISTOPHER MORIN
 150 GOLDSMITH STREET
 LITTLETON, MA 01460

DES. BY: LT	DATE: AUGUST 2023	JOB 221059	1 OF 2
CHK. BY: NMP			



SITE PLAN NOTES:
 1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF PROPOSED BUILDING SEWER PRIOR TO INSTALLATION OF PROPOSED E-ONE SYSTEM AND SEWER MANHOLE. CONTACT DESIGN ENGINEER IF MINIMUM BUILDING SEWER PIPE SLOPE IS NOT ACHIEVABLE.
 2. DISTURBED AREAS SHALL BE RESTORED TO MATCH EXISTING CONDITIONS TO THE SATISFACTION OF THE AYER'S DEPARTMENT OF PUBLIC WORKS.

- TEMPORARY TRAFFIC CONTROL NOTES:**
- EXISTING UTILITIES SHOWN HEREON SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
 - PHASE ONE OF THE TEMPORARY TRAFFIC CONTROL SHALL BE LIMITED TO THE INSTALLATION OF NEW FORCE MAIN AND WATER SERVICE WITHIN THE LIMIT OF THE PAVEMENT SAWCUT. PHASE ONE PAVEMENT SAWCUT WILL BE PATCHED WITH TEMPORARY PAVEMENT AND/OR STEEL PLATES TO ALLOW TRAFFIC ACCESS DURING LANE CLOSURE OF PHASE TWO TEMPORARY TRAFFIC CONTROL.
 - PHASE TWO OF THE TEMPORARY TRAFFIC CONTROL SHALL CONTINUE THE INSTALLATION OF THE NEW SERVICES FROM PHASE ONE.
 - ONCE THE FORCE MAIN HAS BEEN INSTALLED WITHIN THE LIMIT OF ROADWAY, PERMANENT PAVEMENT SHALL BE INSTALLED.



- PAVEMENT NOTES***
- PAVEMENT MIX DEPTH SHALL MATCH OR EXCEED THE EXISTING DEPTH OF HMA.
 - 1.75" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5)
 - 2.25" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)
 - 3.5" SUPERPAVE BASE COURSE 37.5 (SBC-37.5)
 - MINIMUM 12" GRAVEL SUB-BASE (MAXIMUM 3" AGGREGATE SIZE)
- *TRENCHES ON FREEWAYS SHALL REQUIRE A PAVEMENT DESIGN TO BE SUBMITTED FOR APPROVAL.
- ALL HOT MIX ASPHALT SHALL BE PRODUCED WITH A WARM MIX ADDITIVE.

- NOTES:**
- IF A TEMPORARY PATCH IS TO BE USED, THE CDF SHALL BE PLACED TO THE ELEVATION OF THE ADJOINING SUBGRADE. THEN GRAVEL SHALL BE PLACED AND COMPACTED TO WITHIN 3 1/2 INCHES OF THE FINISHED GRADE. THE LAST 3 1/2 INCHES SHALL BE HOT MIX ASPHALT PLACED IN TWO LAYERS: 1 1/2" SURFACE COURSE OVER 2" INTERMEDIATE COURSE.
 - MATERIAL WHICH MEETS THE SPECIFICATION FOR GRAVEL BORROW TYPE C (M1.03.0 TYPE C), PLACED AND COMPACTED IN LAYERS NO GREATER THAN 6", MAY BE USED IN PLACE OF THE CDF WITH APPROVAL FROM THE DISTRICT HIGHWAY DIRECTOR.
 - THE EXPOSED EDGES OF ALL LONGITUDINAL AND TRANSVERSE SAW CUT JOINTS SHALL BE TREATED WITH HOT FLOURED RUBBERIZED ASPHALT JOINT SEALANT MEETING MASSDOT SPECIFICATIONS.
 - YELLOW METAL FOIL MARKING TAPE SHALL BE PLACED 18" OVER THE CONDUIT (METAL MARKING TAPE/WIRE SHOULD BE USED FOR NON-METALLIC CONDUIT).
 - FOR ROADS WITH AN EXISTING CEMENT CONCRETE BASE, A REINFORCED, HIGH EARLY STRENGTH AIR ENTRAINED, CLASS "F" CEMENT CONCRETE SLAB SHALL BE CAST IN PLACE TO MEET THE EXISTING PAVEMENT, SPECIFIC JOINT DETAILS WITH THE EXISTING PAVEMENT SHALL BE APPROVED DEPENDENT ON THE EXISTING SITE CONDITIONS.
 - ALL TRENCH DIMENSIONS SHALL BE IN ACCORDANCE WITH SUB-SECTION 140.80 OF THE MASSDOT STANDARDS AND SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.

UTILITY TRENCH - PERMANENT PAVEMENT REPAIR
MASSDOT STANDARD
NOT TO SCALE

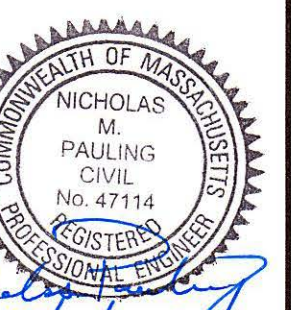
TEMPORARY TRAFFIC CONTROL FEATURES

- Ⓜ POLICE OFFICER
- ▲ TEMPORARY WARNING SIGN
- TRAFFIC CONE

DRAWING ISSUED FOR:

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- CONSTRUCTION
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GPR Engineering Solutions for Land & Structures

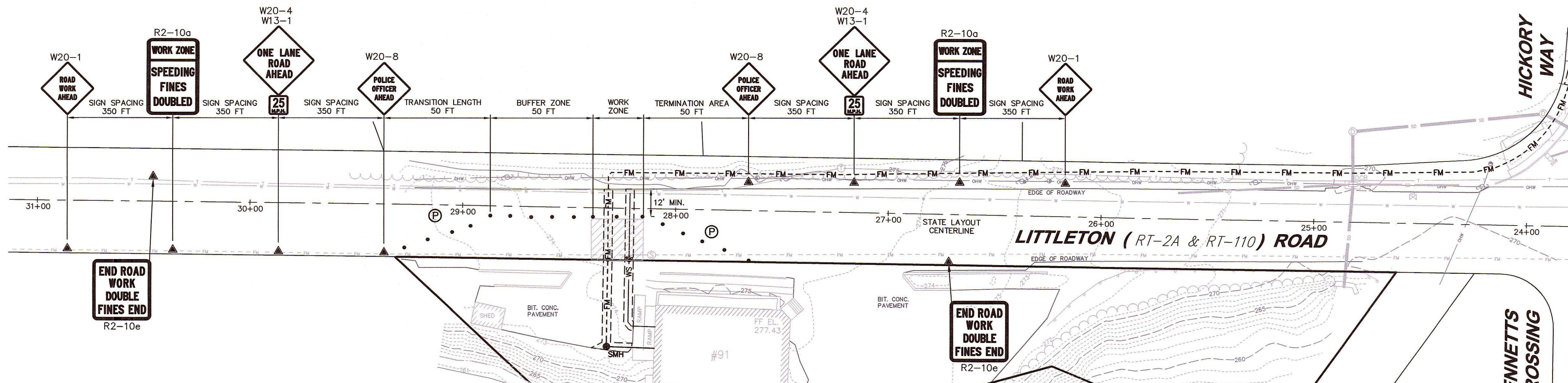
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RESIDENTIAL DEVELOPMENT
UTILITY CONNECTIONS
TRAFFIC MANAGEMENT &
CONSTRUCTION DETAILS

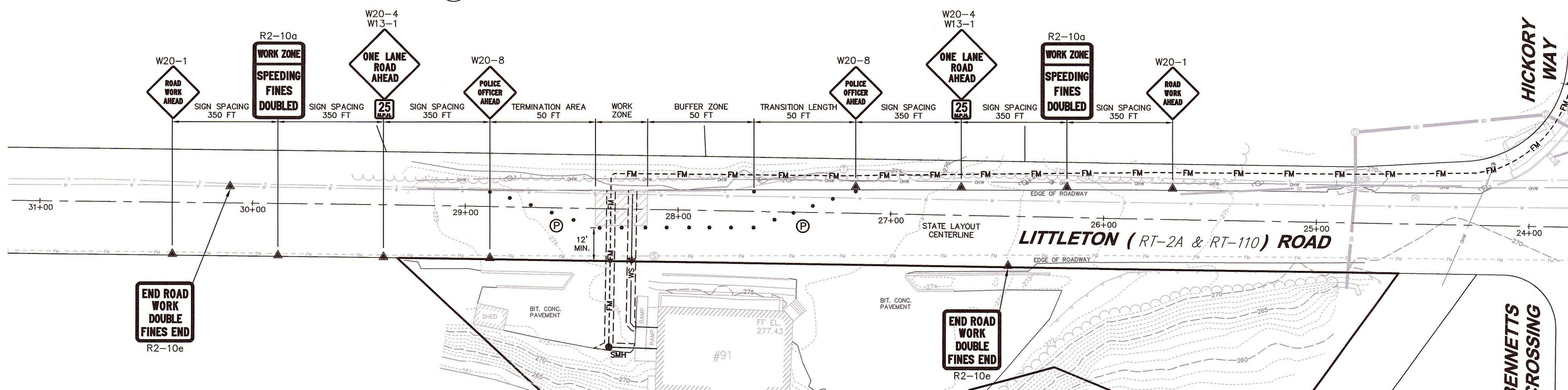
91 LITTLETON ROAD
AYER, MA

PREPARED FOR:
CHRISTOPHER MORIN
150 GOLDSMITH STREET
LITTLETON, MA 01460

DES. BY: LT	DATE: AUGUST 2023	JOB 221059	2 OF 2
CHK. BY: NMP			



TEMPORARY TRAFFIC CONTROL - PHASE ONE
NOT TO SCALE



TEMPORARY TRAFFIC CONTROL - PHASE TWO
NOT TO SCALE

GRINDER PUMP SPECIFICATIONS

ALL SYSTEM COMPONENTS (310 CMR 15.221)
1. ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE ONCE BURIED.

- PIPE** (310 CMR 15.221)
1. BUILDING SEWER: 4-INCH DIA. SCH 40 PVC, MIN. SLOPE 1/4 IN. PER FT.
2. FORCE MAIN, LATERAL FORCE MAINS: 1 1/2-INCH DIA. HDPE.
3. BED, HAUNCH, AND BACKFILL ALL PIPE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. ALL JOINTS SHALL BE WATERTIGHT.
4. SOLVENT WELD ALL PVC JOINTS AND PRESSURE TEST ALL PIPES FOR WATER TIGHTNESS PER PIPE MANUFACTURERS SPECIFICATION.
5. FORCE MAINS SHALL BE TESTED AT 150% ABOVE MAXIMUM OPERATING PRESSURE OR 150 PSI, WHICHEVER IS GREATER. TESTING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARD C600. TESTS SHALL BE PERFORMED IN THE PRESENCE OF ENGINEER AND/OR LOCAL APPROVING AUTHORITY ON ALL PRESSURE PIPING PRIOR TO SYSTEM OPERATION.
6. VENT BUILDING SEWER THROUGH MAIN STACK IN BUILDING SERVED BY IT.

GRINDER PUMP STATION (310 CMR 15.221, 15.231, 15.254)

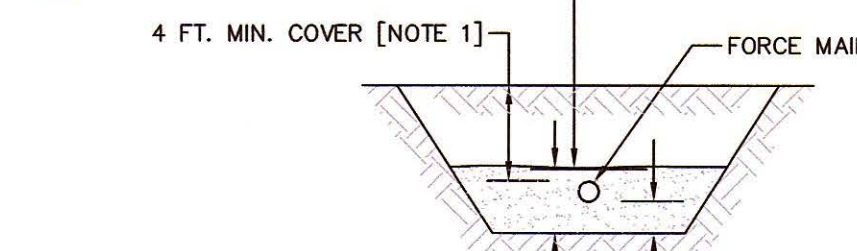
- MODEL NO. DH071-93. STATION RATED FOR H-20 LOADING. MANUFACTURER: E/ONE SEWER SYSTEMS, NISKAYUNA, NY, OR EQUAL. DISTRIBUTED BY FR MAHONY & ASSOCIATES, ROCKLAND, MA (781) 982-9300.
- STATION TYPICALLY DELIVERED IN 2 SECTIONS. CONTRACTOR TO NOTE STATION HEIGHT AND CUT HOPE ACCESSWAY ACCORDINGLY PRIOR TO ASSEMBLING FIELD JOINT.
- REFER TO INSTALLATION INSTRUCTIONS PROVIDED BY MANUFACTURER FOR COMPLETE INSTRUCTIONS AND SPECIFICATIONS.
- PERFORM ALL ELECTRICAL WORK IN ACCORDANCE WITH CODE REQUIREMENTS.
- INSTALL NEMA 3 CONTROL PANEL ENCLOSURE, WITH WALL MOUNT CABINET, INCLUDING THE FOLLOWING: A VISIBLE AND AUDIBLE ALARM TO SIGNAL HIGH WATER, POWERED BY A SEPARATE, DEDICATED CIRCUIT, LOCATED IN THE BUILDING IT SERVES.
- INSTALL A REDUNDANT CHECK VALVE ASSEMBLY (E/ONE PART NO. P002510X) BETWEEN THE PUMP DISCHARGE AND THE RIGHT OF WAY PROPERTY BOUNDARY.

- NOTES:**
- GRINDER PUMP STATION TO BE DH071-93.
 - POURED IN PLACE CONCRETE BALLAST TO BE 20 IN. FROM BOTTOM OF STATION. REFER TO TYPICAL INSTALLATION INSTRUCTIONS FROM MANUFACTURER.

GRINDER PUMP STATION

TYPICAL CROSS SECTION
NOT TO SCALE

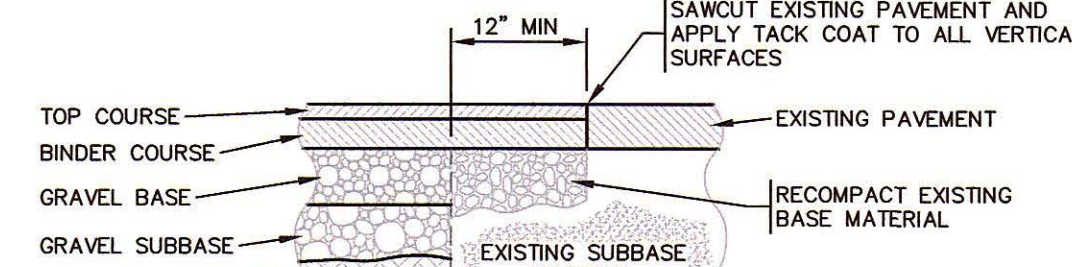
2" POLYETHYLENE INSULATION, 2' WIDE, 6" ABOVE FORCE MAIN WHERE COVER OVER FORCE MAIN IS LESS THAN 4 FEET



NOTES:
[1] 2.5 FEET MIN. WITH INSULATION.

FORCE MAIN TRENCH

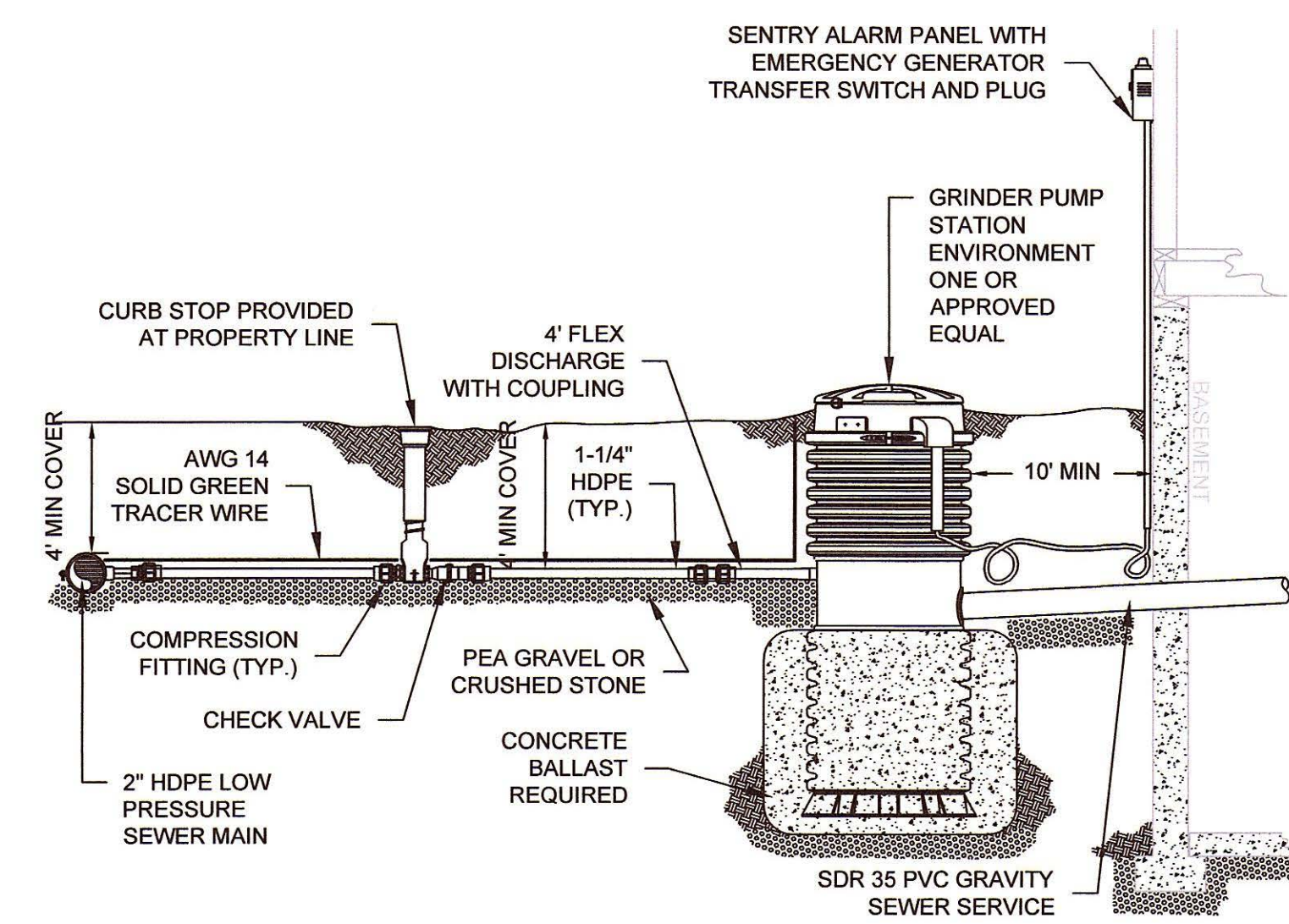
TYPICAL CROSS SECTION
NOT TO SCALE



- NOTES:**
- FLEXIBLE PAVEMENT REMOVAL SHALL BE INITIATED BY MAKING A FULL-DEPTH VERTICAL SAWCUT AT THE LOCATIONS INDICATED ON THE PLANS. SAWCUTS SHALL BE ACCOMPLISHED USING A STANDARD DIAMOND-TYPE BLADE SAW.
 - IF SAWCUT IS WITHIN THREE (3) FEET OF AN EXISTING BUILDING, CURB LINE OR EXISTING FENCE, COMPLETELY REMOVE EXISTING PAVEMENT AND REPLACE ACCORDING TO THE REQUIREMENTS OF THE BITUMINOUS CONCRETE PAVEMENT SECTION.

FLEXIBLE PAVEMENT SAWCUT DETAIL

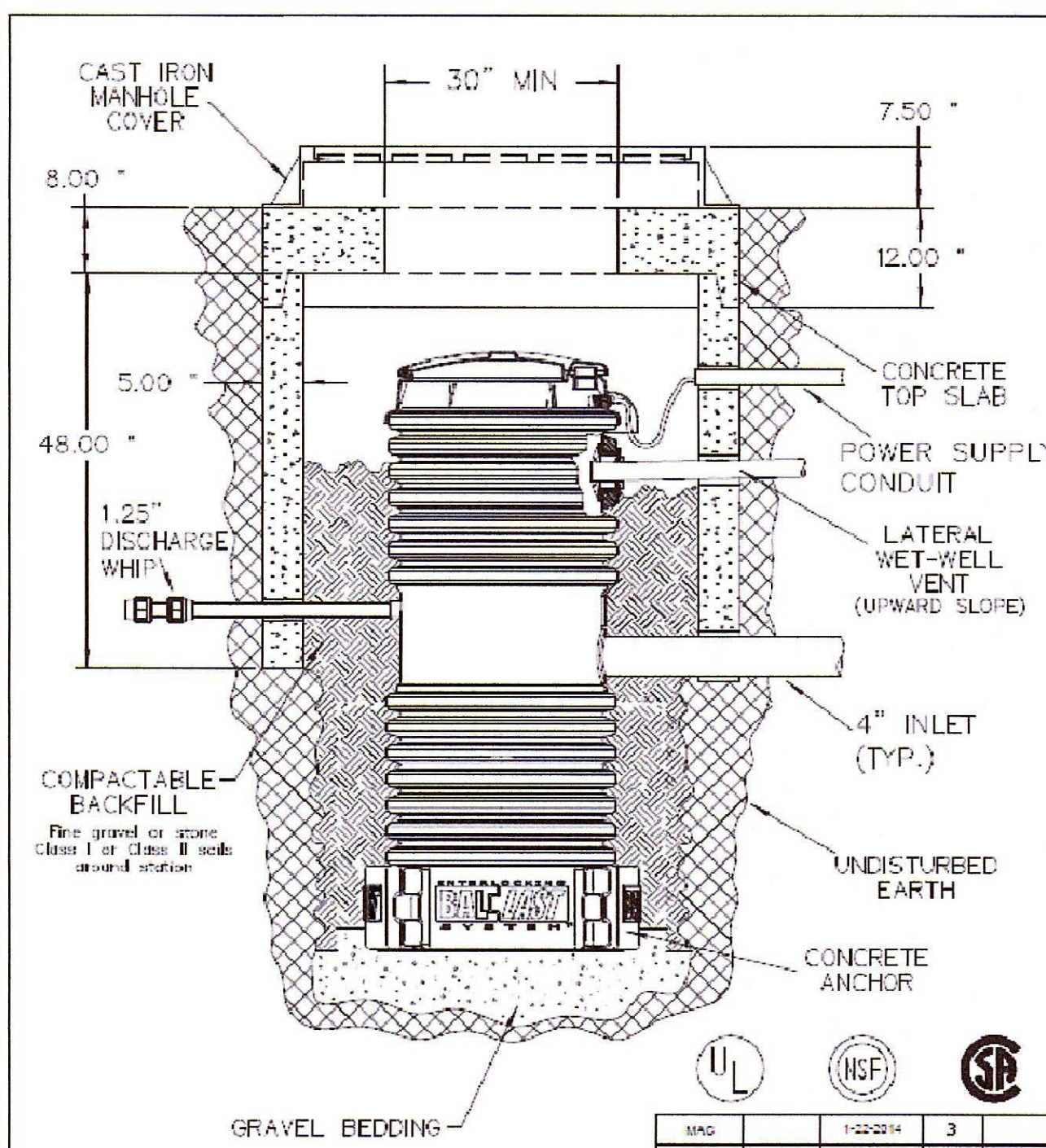
TYPICAL CROSS SECTION
NOT TO SCALE



- NOTES:**
- LOW PRESSURE FORCE MAIN SHALL BE SLOPED CONTINUOUSLY UPWARD.
 - TRACER WIRE SHALL BE INSTALLED OVER THE ENTIRETY OF THE PROPOSED FORCE MAIN.

LOW-PRESSURE SEWER CONNECTION DETAIL

TOWN OF AYER DEPARTMENT OF PUBLIC WORKS TYPICAL CROSS SECTION
NOT TO SCALE



NOTE:
TRAFFIC BEARING APPLICATION TO BE SPECIFIED AND APPROVED BY LOCAL ENGINEER

DIMENSIONS SHOWN ARE FOR REF ONLY

THERE IS TO BE NO LOAD FROM THE TRAFFIC OR THE MANHOLE TRANSFERRED TO THE STATION

TRAFFIC BEARING APPLICATION TO BE SPECIFIED AND APPROVED BY LOCAL ENGINEER

H-20 Traffic Detail DH071

2019 or DH071 IN A MANHOLE LATERAL VENTING

F.R. Mahony & Associates, Inc.