

Memorandum

To:	Mr. Greg Wands Chair, Ashland Conservation Commission	Project Number:	24142
From:	Will Park, PE	Date:	12/23/2025
Project Name:	61 Waverly Street – Notice of Intent		
RE:	Response to Comments - Hearing 1/5		
Distribution:	Israel Lopez - The Gutierrez Company, Mark Arnold - Goddard Consulting, Luke Norton & Corinne Disenhof - Sanborn Head & Associates		

On behalf of the Applicant, The Gutierrez Company, SMMA, in collaboration with Sanborn Head & Associates (geotechnical engineer) and Goddard Consulting, (wetland scientist) is submitting this memo with supporting documents to (i) provide additional information and analysis regarding the project site's hydrological soil group classification and peak discharge rate; (ii) provide the Conservation Commission with more detailed information regarding the scale and potential impacts of blasting at the site as requested by the Commission; and (iii) provide an outline for a "dewatering plan" during construction as requested. ∴

Enclosed with this memo is a "Supplemental Wetland Border Report" (WBR) prepared by Goddard Consulting (Goddard) dated 12/19/2025 and a letter entitled "Geotechnical Comments Regarding Hydrologic Soil Group and Blasting" prepared by Sanborn, Head & Associates, Inc. (SHA) dated 12/22/2025.

Hydrologic Soil Group (HSG) and Updated Peak Discharge Rate Summary

The Conservation Commission has expressed concern regarding the presence of bedrock on the project site and specifically, whether stormwater runoff is discharging from the site over the bedrock slope along Waverly Street. Additionally, we received written comments from the Conservation Agent regarding the hydrological soil group classification used in the stormwater model. The project team has taken these concerns into consideration and re-examined the Hydrologic Soil Group (HSG) of the onsite soils. Refer to the enclosed letter from SHA regarding an area of the site where the previously submitted USDA Web Soil Survey soil series of "Narragansett Silt Loam" with a HSG A is now more accurately classified as HSG A/D. Enclosed are updated Existing and Proposed Hydrology Maps that identify these areas noted with an asterisk on the plan and legend.

The existing hydrology model has been updated with a conservative HSG B designation as HydroCAD does not have a HSG A/D option. As a result, the existing peak discharge rates have increased slightly. No other changes to the stormwater model have been made

at this time. Complete HydroCAD models and supporting calculations will be submitted after responses to the Conservation Commission’s peer reviewer comments have been addressed.

Refer to the tables below of the previously submitted and currently proposed Peak Discharge Rate Summary.

Table 1 - Peak Discharge Rate Summary - previously submitted in Notice of Intent

Design Point	2-year		10-year		100-year	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
DP-1*	0.00	0.02	0.08	0.12	2.72	2.71
DP-2	0.00	0.00	0.00	0.00	0.21	0.21
DP-3**	0.00	0.00	0.00	0.01	0.06	0.16

Table 2 - Peak Discharge Rate Summary - currently proposed

Design Point	2-year		10-year		100-year	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
DP-1*	0.00	0.01	0.16	0.10	4.19	2.34
DP-2	0.00	0.00	0.00	0.00	0.21	0.21
DP-3**	0.00	0.00	0.00	0.01	0.06	0.14

The proposed peak discharge rates continue to match or decrease compared to the existing peak discharge rates and the project is in compliance with the Massachusetts Stormwater Manual Standard 2. The DP-1 2-year, 24-hour and DP-3 10-year, 24-hour peak discharge rates negligible increases of 0.01 cfs (equal to roughly one gallon of water every fifteen seconds leaving the site) are due to the runoff from driveway entrances (equal to one to two car lengths) that cannot be physically collected, treated, and detained onsite. Adjustments to the recharge volume, phosphorus loads, and nitrogen load have been provided to compensate for these small areas.

The proposed stormwater management system will reduce the runoff to both the bedrock slope along Waverly Street and the existing 12” RCP pipe beneath Waverly Street.

It is our professional opinion that the HydroCAD program peak discharge rate outputs are not accurate to the 0.01 cfs level of precision. The ZBA's third-party peer reviewer, Hancock Associates, agreed with this opinion.

Bedrock Removal

Refer to the enclosed letter from SHA regarding the bedrock observed on the project site, anticipated areas of limited bedrock removal, and possible means of removal.

Enclosed is Exhibit: Bedrock Elevation Plan/Profile (Approx.) that shows the limited bedrock removal. Profile "A" demonstrates the more typical project earthwork scenario where bedrock removal is not anticipated. Profile "B" demonstrates the "worst case" through the bedrock ridge as described by SHA.

Dewatering

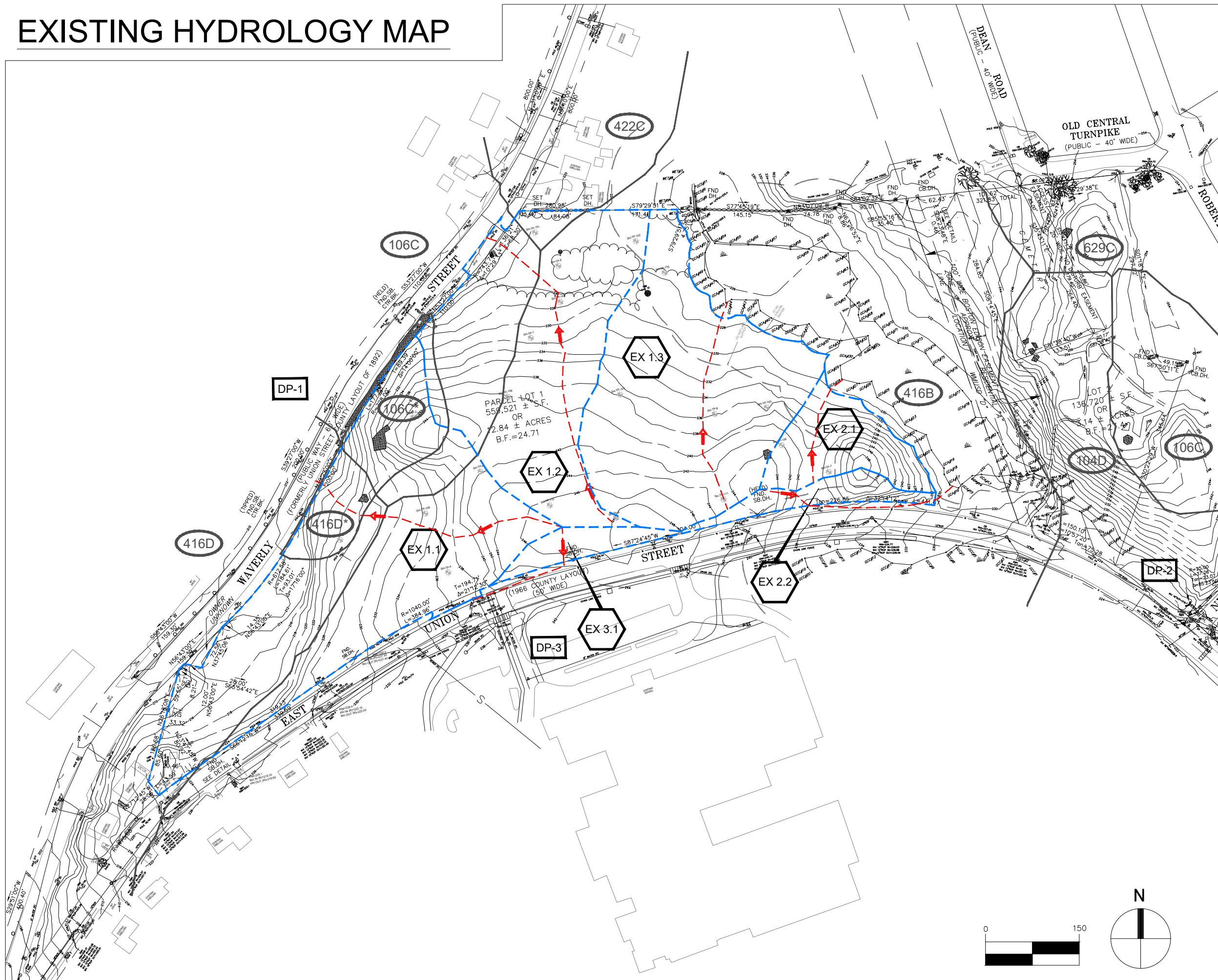
The letter from SHA describes how the limited surface bedrock removal is not anticipated to alter the groundwater flow patterns. The project Construction Documents will include the specification **31 23 19 Construction Dewatering** that will require the contractor to submit a Dewatering Plan with drawings and supporting engineering calculations for the proposed surface water control and dewatering systems including locations, methods, sizing, equipment, power and standby power, etc.

The project will obtain coverage under 2022 NPDES Construction General Permit (CGP) that will require preparation of a **Stormwater Pollution Prevention Plan (SWPPP)** including project and site specific dewatering methods. Dewatering methods shall include, but are not limited to:

- pumping through silt bags,
- pumping to temporary sediment basins,
- adding flocculant to basins if needed to accelerate settlement, and
- use of frac tanks if needed for additional storage for settlement.

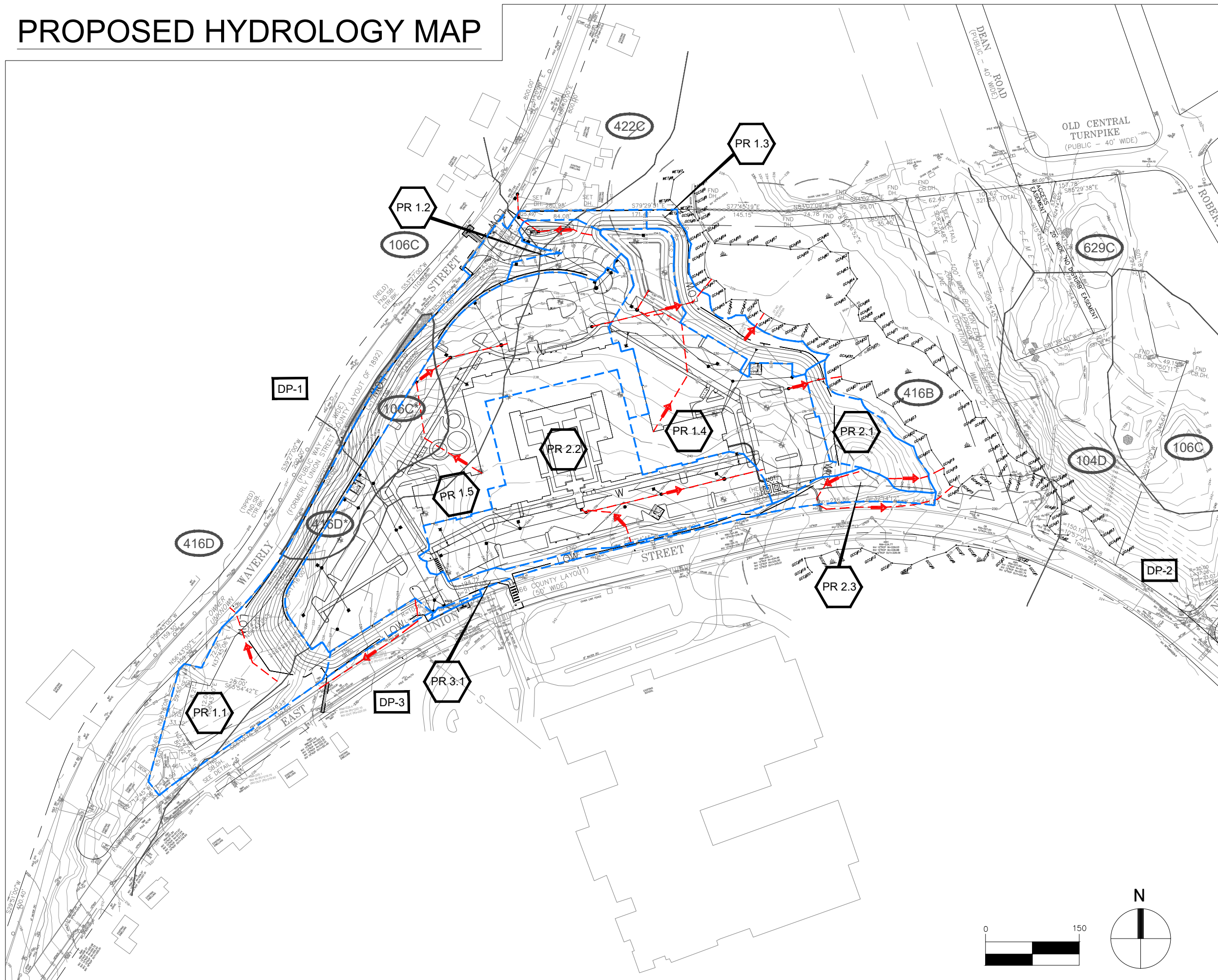
The Applicant will submit the SWPPP and proof of NPDES CGP coverage to the Town prior to construction.

EXISTING HYDROLOGY MAP



LEGEND		
	SUBCATCHMENT LIMITS	
	PROPERTY LINE	
	WETLAND	
	100' WETLAND BUFFER	
	TIME OF CONCENTRATION PATH	
	EX 1.1	SUBCATCHMENT AREA (1.1)
	DP-1	DESIGN POINT (1)
	SOIL LIMITS	
	73	SOIL TYPE (73)
SOIL	NAME	HYDROLOGICAL SOIL GROUP
104	HOLLIS-ROCK OUTCROP - CHARLTON COMPLEX, 15 TO 25 PERCENT SLOPES	D
106	NARRAGANSETT-HOLLIS - ROCK OUTCROP COMPLEX, 3 TO 15 PERCENT SLOPES	A
416	NARRAGANSETT SILT LOAM, 3 TO 25 PERCENT SLOPES, VERY STONY	A
422	CANTON FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES, EXTREMELY STONY	B
629	CANTON - CHARLTON - URBAN LAND COMPLEX, 3 TO 15 PERCENT SLOPES	A
106*	NARRAGANSETT-HOLLIS - ROCK OUTCROP COMPLEX, 3 TO 15 PERCENT SLOPES, BEDROCK ≤ 4' BELOW GROUND SURFACE, SUBSOIL ≥ 3' BELOW GROUND SURFACE, SUBSOIL CONTAINS >20% SILT	A/D
416*	NARRAGANSETT SILT LOAM, 3 TO 25 PERCENT SLOPES, VERY STONY, BEDROCK ≤ 4' BELOW GROUND SURFACE, SUBSOIL ≥ 3' BELOW GROUND SURFACE, SUBSOIL CONTAINS >20% SILT	A/D

PROPOSED HYDROLOGY MAP



LEGEND

- — — — — SUBCATCHMENT LIMITS
- - - - - PROPERTY LINE
- - - - - WETLAND
- - - - - 100' WETLAND BUFFER
- — — — — TIME OF CONCENTRATION PATH
- EX 1.1 SUBCATCHMENT AREA (1.1)
- DP-1 DESIGN POINT (1)
- — — — — SOIL LIMITS
- 73 SOIL TYPE (73)

SOIL	NAME	HYDROLOGICAL SOIL GROUP
104	HOLLIS-ROCK OUTCROP - CHARLTON COMPLEX, 15 TO 25 PERCENT SLOPES	D
106	NARRAGANSETT-HOLLIS - ROCK OUTCROP COMPLEX, 3 TO 15 PERCENT SLOPES	A
416	NARRAGANSETT SILT LOAM, 3 TO 25 PERCENT SLOPES, VERY STONY	A
422	CANTON FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES, EXTREMELY STONY	B
629	CANTON - CHARLTON - URBAN LAND COMPLEX, 3 TO 15 PERCENT SLOPES	A
106*	NARRAGANSETT-HOLLIS - ROCK OUTCROP COMPLEX, 3 TO 15 PERCENT SLOPES, BEDROCK ≤ 4' BELOW GROUND SURFACE, SUBSOIL ≥ 3' BELOW GROUND SURFACE, SUBSOIL CONTAINS >20% SILT	A/D
416*	NARRAGANSETT SILT LOAM, 3 TO 25 PERCENT SLOPES, VERY STONY, BEDROCK ≤ 4' BELOW GROUND SURFACE, SUBSOIL ≥ 3' BELOW GROUND SURFACE, SUBSOIL CONTAINS >20% SILT	A/D

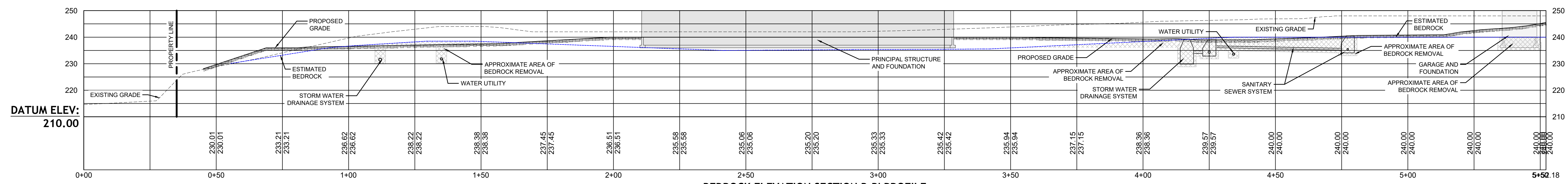
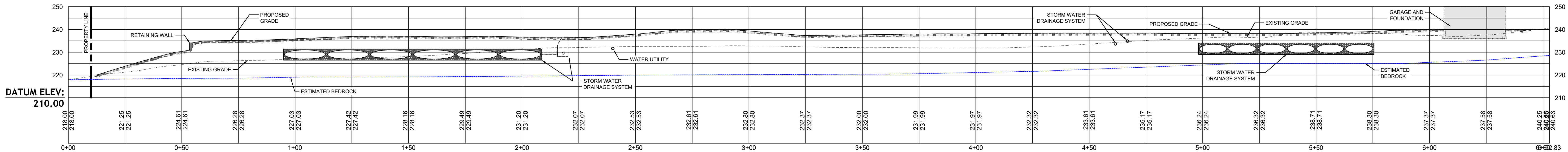
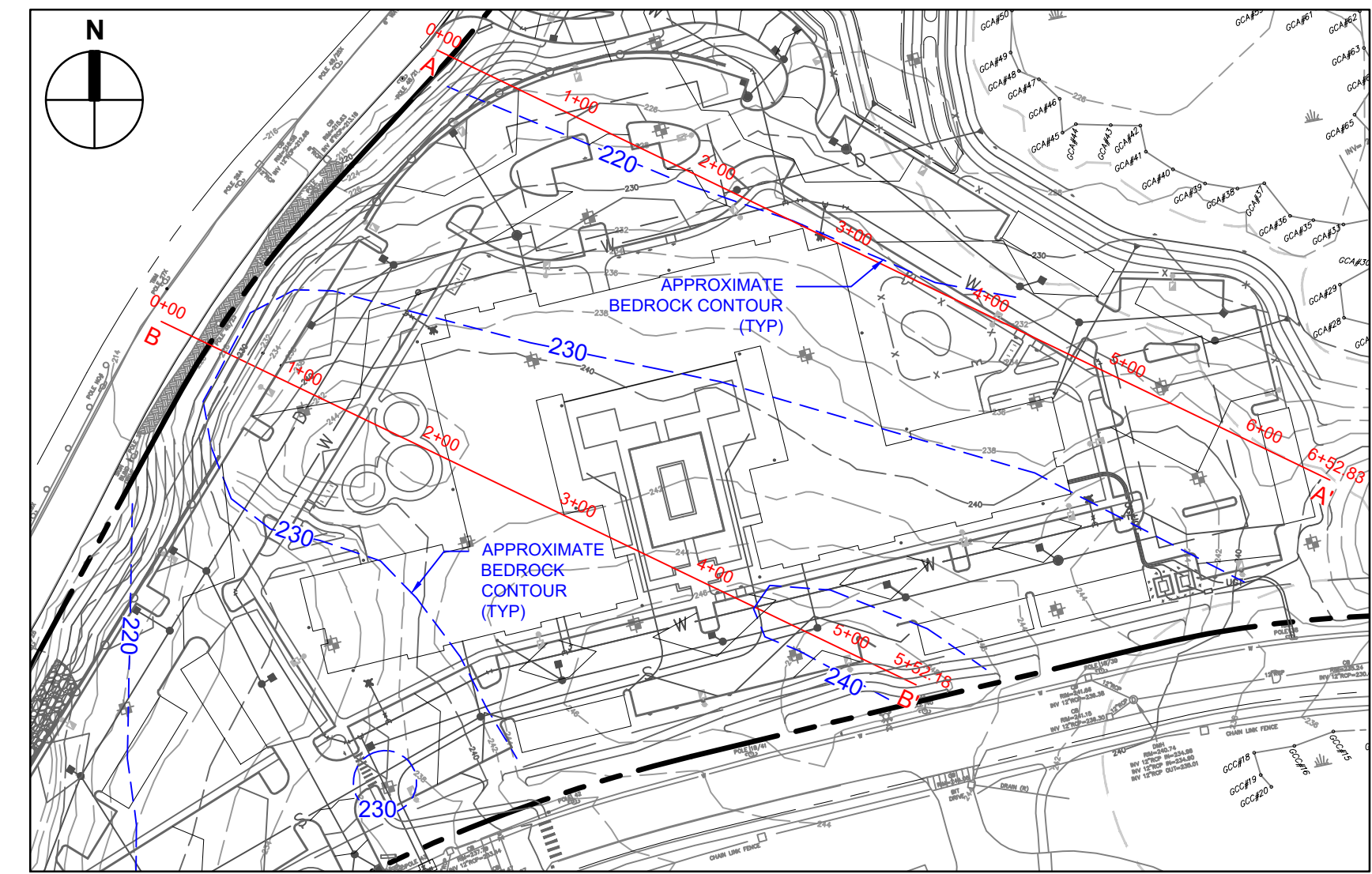


EXHIBIT: BEDROCK ELEVATION PLAN/PROFILE (APPROX.)

THE RESIDENCES AT ASHLAND
61 WAVERLY STREET
ASHLAND, MA

smma

SMMA
1000 Massachusetts Ave.
Cambridge, MA 02138
Phone: 617.547.5400
Fax: 617.507.7885

Mr. Greg Wands, Chair
Ashland Conservation Commission

December 22, 2025
File No. 6470.001

Attention: Becca Solomon, Conservation Agent
Town of Ashland
101 Main Street
Ashland, MA 01721

Re: Geotechnical Comments Regarding Hydrologic Soil Group and Blasting
61 Waverly Street
Ashland, Massachusetts

Sanborn, Head & Associates, Inc. (Sanborn Head) has prepared this letter on behalf of The Gutierrez Company (Applicant) to respond to geotechnical and stormwater-related comments from the Town of Ashland Conservation Commission regarding the proposed development at 61 Waverly Street, Ashland, Massachusetts (Site). This letter is subject to the limitations stated in Attachment A of our Subsurface Evaluation dated January 31, 2025.

HYDROLOGIC SOIL GROUP

The primary soil series present at the Site, based on the United States Department of Agriculture's Web Soil Survey¹, is 'Narragansett Silt Loam,' which has a common profile consisting of upper Silt Loam textures in the topsoil and subsoil, underlain by Loamy Sand. The Typical Pedon, reproduced from the Narragansett Series Official Series Description², consists of:

Typical Pedon: Narragansett Silt Loam - forested.

(Colors are for moist soil.)

- **Ap**--0 to 6 inches; dark brown (10YR 3/3) silt loam; weak medium granular structure; very friable; common medium roots; very strongly acid; clear wavy boundary. (4 to 10 inches thick)
- **Bw1**--6 to 15 inches; dark yellowish brown (10YR 4/6) silt loam; weak medium subangular blocky structure; very friable; common medium roots; very strongly acid; gradual wavy boundary.
- **Bw2**--15 to 24 inches; yellowish brown (10YR 5/6) silt loam; weak medium subangular blocky structure; very friable; common medium roots; strongly acid; clear wavy boundary.
- **Bw3**--24 to 28 inches; yellowish brown (10YR 5/6) gravelly silt loam; weak medium subangular blocky structure; very friable; few fine roots; 15 percent gravel; strongly acid; clear wavy boundary. (Combined thickness of the Bw horizons is 16 to 34 inches)
- **2C**--28 to 60 inches; light olive brown (2.5Y 5/4) very gravelly loamy coarse sand; single grain; loose; 45 percent gravel and cobbles; strongly acid.

¹ [Web Soil Survey - Home](#), accessed December 8, 2025.

² [Official Series Description - NARRAGANSETT Series](#), National Cooperative Soil Survey, U.S.A., accessed December 11, 2025.



Sanborn Head's 2024 and 2025 explorations on the Site are in general agreement with the series description. While the predominant soil texture across the site for stormwater drainage system infiltration would correspond to Loamy Sand (HSG A), this is appropriate for locations where the overburden soil is significantly thick to allow for the lower natural strata to develop. Where the bedrock is close to the surface, and only the upper topsoil and subsoil exist without the lower natural strata, the upper Silt Loam texture dominates the drainage characteristics. We have therefore identified portions of the Site where the hydrologic soil group (HSG) can be classified as A/D, as described in the memo dated December 23, 2025 by SMMA.

As noted in the Official Series Description, the 'DRAINAGE AND PERMEABILITY' rating for surface runoff can vary between Slow to Rapid surface runoff generation. Based on extrapolation from Sanborn Head's test pit explorations, we believe the area we have identified for HSG A/D classification meets the later Rapid category where the upper Silt Loam texture is the dominating characteristic using the following criteria:

- Depth to bedrock is estimated to be at or less than 4 feet
- Thickness of the topsoil and subsoil horizons are at least 3 feet thick
- Topsoil and subsoil horizons are at least 20 percent fines (silts and/or clay particles)

We also note that the area identified is also generally characterized with steeper slopes, further increasing runoff potential, with some portions of exposed bedrock.

POTENTIAL BLASTING

Based on the depth to bedrock in Sanborn Head's explorations of the Site, it is our observation that the bedrock on the Site is shaped as an east-to-west ridge, and the bedrock approximately follows the Site topography. Bedrock elevations encountered in test pits varied along the ridge line from approximately elevation (El.) 240 feet at the highest observation in the southeast to El. 238.5 feet at the highest observation in the west, and sloping down to both the northeast and southwest to approximately El. 225 to 236 feet, below the proposed building, and deeper than El. 215 feet to the north. Based on a proposed finished floor elevation of 240 feet and assumed bottom of foundation elevation of 236 feet, we do not anticipate that blasting will be required below the building.

Bedrock at the crest of the ridge line between approximate El. 232 and 240 feet in the western and southeastern parking areas is anticipated to require removal to install the pavement sections, utilities, and garage foundations at the proposed or anticipated elevations based on the Grading and Drainage Plan prepared by SMMA and dated January 27, 2025. We have identified approximate areas where we anticipate blasting could be used for this purpose, as described in the memo dated December 23, 2025 by SMMA. However, depending on the actual conditions encountered in the field, bedrock removal by hammering or other mechanical means may be possible in portions of these areas where the depth of removal is limited.

Bedrock removal on this Site is expected to reduce high points of the bedrock ridge or cut a trench to allow the installation of the proposed structures. Based on the proposed Site plan, we do not anticipate a new bedrock face ("rock cut") will be exposed on the Site, nor do we



anticipate that the existing rock face along Waverly Street will be disturbed by the rock removal activities. Groundwater was generally encountered in Sanborn Head's explorations at elevations below approximately El. 226 feet, which is below the depth where rock removal for utilities is anticipated; therefore, we do not anticipate changes to the groundwater flow patterns from limited rock removal.

We trust this letter meets the needs of the project at this time. If you have any questions, please call Luke Norton at 978-577-1030.

Very truly yours,
SANBORN, HEAD & ASSOCIATES, INC.



Corinne R. Disenhof
Project Manager



Luke Norton, PE
Vice President

CRD/LDN:crd

cc: Israel Lopez, The Gutierrez Company
Will Park, SMMA
Katrina Correa, SMMA
Mark Arnold, Goddard Consulting

P:\6400s\6470.001\Source Files\Dec 2025 HSG and Blasting Memo\20251222 HSG and Blasting Letter.docx



Supplemental Wetland Border Report

Site Locus: 61 Waverly St, Ashland MA 01721

Prepared for: The Gutierrez Company (the “Applicant”)

Prepared by: Goddard Consulting LLC, 291 Main St, Suite 8, Northborough, MA 01532

Date: 12/19/25

BACKGROUND

On November 20th, 2024, wetland resources were delineated for the Applicant on land located at 61 Waverly Street in Ashland, MA (refer to enclosed locus maps). The wetland borders were delineated using the criteria in the most recent edition of the Massachusetts Wetlands Protection Act (WPA), the Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands, Second Edition published by MassDEP in September 2022 (the Delineation Handbook), and Regulations 310 CMR 10.00 et al. The wetland delineation was conducted in accordance with the Delineation Handbook, specifically following the procedures outlined in Section 5.5.1, including evaluating vegetation, soils, and hydrology to establish the boundary of Bordering Vegetated Wetlands.

A Bordering Vegetated Wetland (BVW) was delineated in the eastern portion of the site with wetland flag series GCA1 - GCA95. The BVW has a topographical highpoint near flag GCA #32 such that water to the north of this flag generally flows north and water to the south of this flag generally flows south. At the northern end of the BVW, near wetland flag GCA #52, water flows north into a drainage ditch on the project side of the site that connects to a 12” PVC pipe. The pipe outlets to a drainage ditch on the non-project side that flows offsite and connects to a culvert under Waverly Street. The culvert daylight north of Waverly Street. Bank of the drainage ditch on project side of the 12” pipe was flagged with GCA #51, 52, 53 and 54 and on the non-project side of the pipe with GCS #1 through 11. The sampling point for the BVW was located near flag GCA81.

On October 24, 2025, in anticipation of the Applicant’s NOI application, Goddard conducted another site visit to ensure the flags remained present and visible. No changes to the wetland line were noted during this visit.

On November 23, 2025, Goddard walked the site with the Town of Ashland Conservation Agent, and two members of the Ashland Conservation Commission to inspect the delineation. In addition to observing the delineation on the subject development site, the Commission and Goddard also observed the drainage ditch on the abutting property at 63-65 Waverly Street.

UPDATED DELINEATION

The following changes were made as a result of the site walk conducted with the Conservation Commission Agent and members on November 23, 2025:

- As requested by the Conservation Agent & Commission, additional vegetation and soil sample data were collected on the project-side of the wetland for both upland and wetland sides of the line. These samples were taken near flags GCA #36-37, and GCA #46. The forms confirm that the delineation is accurate per the DEP Delineation Manual. The delineation forms for the wetland sample points are attached as **Exhibit 1**. These points meet the requirements of the Delineation Handbook Appendix B - Assessing the Vegetative Community – Observation Plots.
- Goddard reviewed a 2014 wetland delineation for the 63-65 Waverly Street property as it pertains to the bank of the ditch where it abuts 61 Waverly Street. That delineation differs slightly from the delineation Goddard conducted on November 20, 2024. However, Goddard will respect that delineation and will tie into it where the line crosses onto the subject site. As such, Goddard has adjusted its November 2024 wetland line delineation on the project-side. Specifically, wetland flags WET #10 and 11 from the 2014 delineation will be retained. WET #11 will connect to GCA#4. This will require minor grading adjustments to the site to respect the 25-foot No Disturbance Buffer Zone. **Exhibit 2** is the updated

Existing Conditions Plan C-101 reflecting this change

- Wetland flag GCA#34 was eliminated and wetland flag GCA#33 was connected to GCA#35, thereby shifting the wetland line further upland. This area was questionable in whether it was upland or wetland but it was considered best to just eliminate GCA#33 to protect the area and delineate it as part of the wetland. Attached as **Exhibit 2** is the updated Existing Conditions Plan C-101 reflecting this change
- Attached as **Exhibit 2** is the Existing Conditions Plan C-101 with the updated delineation.

Sincerely,

Goddard Consulting, LLC



Tom Schutz, WPIT, WSA

Lead Wetland Scientist

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: 61 Waverly Street City/Town: Ashland Sampling Date: 12/2/25
 Applicant/Owner: Israel Lopez, Gutierrez Company Sampling Point or Zone: GC46
 Investigator(s): Tom Schutz, WPIT Latitude/Longitude: 42.26380, -71.44571
 Soil Map Unit Name: Narragansett silt loam NWI or DEP Classification: PFO1E

UPGRADIENT

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? (If yes, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc

Wetland vegetation criterion met?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soils criterion met?	Yes _____	No <u>X</u>			
Wetlands hydrology present?	Yes _____	No <u>X</u>			

Remarks, Photo Details, Flagging, etc.:

Mild Drought - Level 1

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes _____	No <u>X</u>	Depth (in) _____
Water Table Present?	Yes _____	No <u>X</u>	Depth (in) _____
Saturation Present (including capillary fringe)?	Yes _____	No <u>X</u>	Depth (in) _____

Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
<input type="checkbox"/> Water-stained leaves	<input type="checkbox"/> Hydrological records	<input type="checkbox"/> Direct observation of inundation
<input type="checkbox"/> Evidence of aquatic fauna	<input type="checkbox"/> Free water in a soil test hole	<input type="checkbox"/> Drainage patterns
<input type="checkbox"/> Iron deposits	<input type="checkbox"/> Saturated soil	<input type="checkbox"/> Drift lines
<input type="checkbox"/> Algal mats or crusts	<input type="checkbox"/> Water marks	<input type="checkbox"/> Scoured areas
<input type="checkbox"/> Oxidized rhizospheres/pore linings	<input type="checkbox"/> Moss trim lines	<input type="checkbox"/> Sediment deposits
<input type="checkbox"/> Thin muck surfaces	<input type="checkbox"/> Presence of reduced iron	<input type="checkbox"/> Surface soil cracks
<input type="checkbox"/> Plants with air-filled tissue (aerenchyma)	<input type="checkbox"/> Woody plants with adventitious roots	<input type="checkbox"/> Sparsely vegetated concave surface
<input type="checkbox"/> Plants with polymorphic leaves	<input type="checkbox"/> Trees with shallow root systems	<input type="checkbox"/> Microtopographic relief
<input type="checkbox"/> Plants with floating leaves	<input type="checkbox"/> Woody plants with enlarged lenticels	<input type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)
<input type="checkbox"/> Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	% Dominant
1	Red Maple	Acer rubrum	FAC	20.5%	X	X	49.4%
2	Red Oak	Quercus rubra	FACU	10.5%	X		25.3%
3	White Pine	Pinus strobus	FACU	10.5%	X		25.3%
4							
5							
6							
7							
8							
9							

41.5% =Total Cover

Shrub/Sapling Stratum Plot size 15'

	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	% Dominant
1	Red Maple	Acer rubrum	FAC	10.5%	X	X	33.3%
2	Common Buckthorn	Rhamnus cathartica	FAC	10.5%	X	X	33.3%
3	Highbush Blueberry	Vaccinium corymbosum	FACW	10.5%	X	X	33.3%
4							
5							
6							
7							
8							
9							

31.5% =Total Cover

Herb Stratum Plot size 5'

	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	% Dominant
1	Hay Scented Fern	Dennstaedtia punctilobula	UPL	10.5%	X		63.6%
2	White Pine	Pinus strobus	FACU	3.0%			18.2%
3	Tall Goldenrod	Solidago altissima	FACU	3.0%			18.2%
4							
5							
6							
7							
8							
9							
10							
11							
12							

16.5% =Total Cover

VEGETATION – continued.

Woody Vine Stratum							
Plot size <u>30'</u>							
	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	% Dominant
1							
2							
3							
4							
				0.0%	=Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?		Yes		No	X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species?			
	7	4	Yes	X	No	
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result		
	OBL species	0%	x1	=	0%	
	FACW species	11%	x2	=	21%	
	FAC species	42%	x3	=	125%	
	FACU species	27%	x4	=	108%	
	UPL species	11%	x5	=	53%	
	Column Totals (A)	90%		(B)	306%	
	Prevalence Index	B/A=	3.42	Is the Prevalence Index ≤ 3.0?		
				Yes	No	X
Wetland vegetation criterion met?	Yes	No	X			

Definitions of Vegetation Strata

- Tree Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height
- Shrub/Sapling Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall
- Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall
- Woody vines All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.00%
6-15 %	10.50%
15-25 %	20.50%
26-50 %	38.00%
51-75 %	63.00%
76-95 %	85.50%
96-100 %	98.00%

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Location ²		
A 0-5"	10YR3/2	100					FSL	
B1 5-13"	10YR5/6	100					FSL	
B2 13-18"	10YR5/3	100					FSL	

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

Hydric Soil Indicators (Check all that apply)	Indicators for Problematic Hydric Soils
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Polyvalue Below Surface (S8)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Thin Dark Surface (S9)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Dark Surface (F7)
<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Depleted Dark Surface (F8)
	<input type="checkbox"/> Iron-Manganese Masses (F12)
	<input type="checkbox"/> Mesic Spodic (A17)
	<input type="checkbox"/> Red Parent Material (F21)
	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
	<input type="checkbox"/> Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks

Hydric Soils criterion met? Yes No X

DOWNGRADIENT

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? (If yes, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc

Wetland vegetation criterion met?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soils criterion met?	Yes <u>X</u>	No _____			
Wetlands hydrology present?	Yes <u>X</u>	No _____			
Remarks, Photo Details, Flagging, etc.:					
Mild drought - Level 1					

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes	No <u>X</u>	Depth (in)
Water Table Present?	Yes	No <u>X</u>	Depth (in)
Saturation Present (including capillary fringe)?	Yes	No <u>X</u>	Depth (in)
Wetland Hydrology Indicators			
Reliable Indicators of Wetlands	Indicators that can be Reliable with	Indicators of the Influence of Water	
<u>X</u> Water-stained leaves	<u>X</u> Hydrological records	_____ Direct observation of inundation	
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	<u>X</u> Drainage patterns	_____ Drift lines
_____ Iron deposits	_____ Saturated soil	_____ Scoured areas	_____ Sediment deposits
_____ Algal mats or crusts	<u>X</u> Water marks	_____ Surface soil cracks	<u>X</u> Sparsely vegetated concave surface
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	_____ Microtopographic relief	_____ Geographic position (depression, toe of slope, fringing lowland)
_____ Thin muck surfaces	_____ Presence of reduced iron		
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots		
_____ Plants with polymorphic leaves	<u>X</u> Trees with shallow root systems		
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels		
_____ Hydrogen sulfide odor			
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):			

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Sampling Point GC46

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

	Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indicator?	% Dominant
1	Red Maple	Acer rubrum	FAC	38.0%	X	X	100.0%
2							
3							
4							
5							
6							
7							
8							
9							

38.0% =Total Cover

Shrub/Sapling Stratum Plot size 15'

	Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indicator?	% Dominant
1	Common Buckthorn	Rhamnus cathartica	FAC	20.5%	X	X	46.1%
2	Sweet Pepperbush	Clethra alnifolia	FAC	10.5%	X	X	23.6%
3	Winterberry	Ilex verticillata	FACW	10.5%	X	X	23.6%
4	Highbush Blueberry	Vaccinium corymbosum	FACW	3.0%		X	6.7%
5							
6							
7							
8							
9							

44.5% =Total Cover

Herb Stratum Plot size 5'

	Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indicator?	% Dominant
1	Cinnamon Fern	Osmundastrum cinnamomeum	FACW	10.5%	X	X	100.0%
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

10.5% =Total Cover

VEGETATION – continued.

Woody Vine Stratum							
Plot size <u>30'</u>							
	Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indicator?	% Dominant
1							
2							
3							
4							
				0.0%	=Total Cover		

Rapid Test:		Do all dominant species have an indicator status of OBL or FACW?		Yes	X	No	
Dominance Test:	Number of dominant species	Number of dominant species that are		Do wetland indicator plants make			
	5	5		Yes	X	No	
Prevalence Index:		Total % Cover	Multiply by:	Result			
	OBL species	0%	x1	=	0%		
	FACW species	24%	x2	=	48%		
	FAC species	69%	x3	=	207%		
	FACU species	0%	x4	=	0%		
	UPL species	0%	x5	=	0%		
Column Totals (A)		93%		(B) 255%			
Prevalence Index		B/A=	2.74	Is the Prevalence Index ≤ 3.0?			
				Yes	X	No	
Wetland vegetation criterion met?		Yes	X	No			

Definitions of Vegetation Strata

- Tree Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height
- Shrub/Sapling Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall
- Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall
- Woody vines All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.00%
6-15 %	10.50%
15-25 %	20.50%
26-50 %	38.00%
51-75 %	63.00%
76-95 %	85.50%
96-100 %	98.00%

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Location ²		
0-8"	10YR2/2	100					FSL	
8-16"	7.5YR3/4	100					FSL	

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

Hydric Soil Indicators (Check all that apply)		Indicators for Problematic Hydric Soils	
<input checked="" type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input checked="" type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Polyvalue Below Surface (S8)	<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9)	<input type="checkbox"/> Polyvalue Below Surface (S8)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Thin Dark Surface (S9)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input checked="" type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Mesic Spodic (A17)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Dark Surface (S7)		<input type="checkbox"/> Other (Include Explanation in Remarks)	
Restrictive Layer (if observed) Type: _____		Depth (inches): _____	
Remarks _____			
Hydric Soils criterion met?		Yes	X No

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: 61 Waverly Street City/Town: Ashland Sampling Date: 12/2/25
 Applicant/Owner: Israel Lopez, Gutierrez Company Sampling Point or Zone: GC36
 Investigator(s): Tom Schutz, WPIT Latitude/Longitude: 42.26380, -71.44571
 Soil Map Unit Name: Narragansett silt loam NWI or DEP Classification: PFO1E

UPGRADIENT

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? (If yes, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc

Wetland vegetation criterion met?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soils criterion met?	Yes _____	No <u>X</u>			
Wetlands hydrology present?	Yes _____	No <u>X</u>			

Remarks, Photo Details, Flagging, etc.:

Mild Drought - Level 1

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes _____	No <u>X</u>	Depth (in) _____
Water Table Present?	Yes _____	No <u>X</u>	Depth (in) _____
Saturation Present (including capillary fringe)?	Yes _____	No <u>X</u>	Depth (in) _____

Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
<input type="checkbox"/> Water-stained leaves	<input type="checkbox"/> Hydrological records	<input type="checkbox"/> Direct observation of inundation
<input type="checkbox"/> Evidence of aquatic fauna	<input type="checkbox"/> Free water in a soil test hole	<input type="checkbox"/> Drainage patterns
<input type="checkbox"/> Iron deposits	<input type="checkbox"/> Saturated soil	<input type="checkbox"/> Drift lines
<input type="checkbox"/> Algal mats or crusts	<input type="checkbox"/> Water marks	<input type="checkbox"/> Scoured areas
<input type="checkbox"/> Oxidized rhizospheres/pore linings	<input type="checkbox"/> Moss trim lines	<input type="checkbox"/> Sediment deposits
<input type="checkbox"/> Thin muck surfaces	<input type="checkbox"/> Presence of reduced iron	<input type="checkbox"/> Surface soil cracks
<input type="checkbox"/> Plants with air-filled tissue (aerenchyma)	<input type="checkbox"/> Woody plants with adventitious roots	<input type="checkbox"/> Sparsely vegetated concave surface
<input type="checkbox"/> Plants with polymorphic leaves	<input type="checkbox"/> Trees with shallow root systems	<input type="checkbox"/> Microtopographic relief
<input type="checkbox"/> Plants with floating leaves	<input type="checkbox"/> Woody plants with enlarged lenticels	<input type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)
<input type="checkbox"/> Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	% Dominant
1	Red Oak	Quercus rubra	FACU	38.0%	X		78.4%
2	Red Maple	Acer rubrum	FAC	10.5%	X	X	21.6%
3							
4							
5							
6							
7							
8							
9							

48.5% =Total Cover

Shrub/Sapling Stratum Plot size 15'

	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	% Dominant
1	White Pine	Pinus strobus	FACU	20.5%	X		43.2%
2	Deerberry	Vaccinium stamineum	FACU	10.5%	X		22.1%
3	Highbush Blueberry	Vaccinium corymbosum	FACW	10.5%	X	X	22.1%
4	Red Maple	Acer rubrum	FAC	3.0%		X	6.3%
5	Sweet Pepperbush	Clethra alnifolia	FAC	3.0%		X	6.3%
6							
7							
8							
9							

47.5% =Total Cover

Herb Stratum Plot size 5'

	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	% Dominant
1	Cinnamon Fern	Osmundastrum cinnamomeum	FACW	10.5%	X	X	77.8%
2	White Pine	Pinus strobus	FACU	3.0%	X		22.2%
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

13.5% =Total Cover

VEGETATION – continued.

Woody Vine Stratum Plot size <u>30'</u>							
	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	% Dominant
1							
2							
3							
4							
				0.0%	=Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?		Yes		No	X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up $\geq 50\%$ of dominant plant species?			
	7	3	Yes		No	X
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result		
	OBL species	0%	x1	=	0%	
	FACW species	21%	x2	=	42%	
	FAC species	17%	x3	=	50%	
	FACU species	72%	x4	=	288%	
	UPL species	0%	x5	=	0%	
	Column Totals (A)	110%		(B)	380%	
	Prevalence Index	B/A=	3.47	Is the Prevalence Index ≤ 3.0 ?		
				Yes	No	X
Wetland vegetation criterion met?	Yes	No	X			

Definitions of Vegetation Strata

- Tree Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height
- Shrub/Sapling Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall
- Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall
- Woody vines All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.00%
6-15 %	10.50%
15-25 %	20.50%
26-50 %	38.00%
51-75 %	63.00%
76-95 %	85.50%
96-100 %	98.00%

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-6"	7.5YR2.5/3	100				FSL	
6-12+"	10YR4/4	90	10YR4/4	10	C=Concentration	FSL	

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

Hydric Soil Indicators (Check all that apply)	Indicators for Problematic Hydric Soils
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Polyvalue Below Surface (S8)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Thin Dark Surface (S9)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Dark Surface (F7)
<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Depleted Dark Surface (F8)
	<input type="checkbox"/> Iron-Manganese Masses (F12)
	<input type="checkbox"/> Mesic Spodic (A17)
	<input type="checkbox"/> Red Parent Material (F21)
	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
	<input type="checkbox"/> Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____
 Remarks _____

Hydric Soils criterion met? Yes No X

DOWNGRADIENT

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? (If yes, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc

Wetland vegetation criterion met?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soils criterion met?	Yes <u>X</u>	No _____			
Wetlands hydrology present?	Yes <u>X</u>	No _____			
Remarks, Photo Details, Flagging, etc.:					
Mild drought - Level 1					

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes	No <u>X</u>	Depth (in)
Water Table Present?	Yes	No <u>X</u>	Depth (in)
Saturation Present (including capillary fringe)?	Yes	No <u>X</u>	Depth (in)
Wetland Hydrology Indicators			
Reliable Indicators of Wetlands	Indicators that can be Reliable with	Indicators of the Influence of Water	
<input checked="" type="checkbox"/> Water-stained leaves	<input checked="" type="checkbox"/> Hydrological records	<input type="checkbox"/> Direct observation of inundation	
<input type="checkbox"/> Evidence of aquatic fauna	<input type="checkbox"/> Free water in a soil test hole	<input checked="" type="checkbox"/> Drainage patterns	
<input type="checkbox"/> Iron deposits	<input type="checkbox"/> Saturated soil	<input type="checkbox"/> Drift lines	
<input type="checkbox"/> Algal mats or crusts	<input checked="" type="checkbox"/> Water marks	<input checked="" type="checkbox"/> Scoured areas	
<input type="checkbox"/> Oxidized rhizospheres/pore linings	<input type="checkbox"/> Moss trim lines	<input type="checkbox"/> Sediment deposits	
<input type="checkbox"/> Thin muck surfaces	<input type="checkbox"/> Presence of reduced iron	<input type="checkbox"/> Surface soil cracks	
<input type="checkbox"/> Plants with air-filled tissue (aerenchyma)	<input type="checkbox"/> Woody plants with adventitious roots	<input checked="" type="checkbox"/> Sparsely vegetated concave surface	
<input type="checkbox"/> Plants with polymorphic leaves	<input checked="" type="checkbox"/> Trees with shallow root systems	<input type="checkbox"/> Microtopographic relief	
<input type="checkbox"/> Plants with floating leaves	<input type="checkbox"/> Woody plants with enlarged lenticels	<input checked="" type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)	
<input type="checkbox"/> Hydrogen sulfide odor			
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):			

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Sampling Point GC36

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

	Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indicator?	% Dominant
1	Red Maple	Acer rubrum	FAC	38.0%	X	X	100.0%
2							
3							
4							
5							
6							
7							
8							
9							

38.0% =Total Cover

Shrub/Sapling Stratum Plot size 15'

	Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indicator?	% Dominant
1	Sweet Pepperbush	Clethra alnifolia	FAC	10.5%	X	X	33.3%
2	Highbush Blueberry	Vaccinium corymbosum	FACW	10.5%	X	X	33.3%
3	Common Buckthorn	Rhamnus cathartica	FAC	10.5%	X	X	33.3%
4							
5							
6							
7							
8							
9							

31.5% =Total Cover

Herb Stratum Plot size 5'

	Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indicator?	% Dominant
1	Royal Fern	Osmunda spectabilis	OBL	10.5%	X	X	50.0%
2	Cinnamon Fern	Osmundastrum cinnamomeum	FACW	10.5%	X	X	50.0%
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

21.0% =Total Cover

VEGETATION – continued.

Woody Vine Stratum		Plot size <u>30'</u>					
	Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indicator?	% Dominant
1							
2							
3							
4							
				0.0%	=Total Cover		

Rapid Test:		Do all dominant species have an indicator status of OBL or FACW?		Yes	X	No	
Dominance Test:	Number of dominant species	Number of dominant species that are		Do wetland indicator plants make			
	6	6		Yes	X	No	
Prevalence Index:		Total % Cover	Multiply by:	Result			
	OBL species	11%	x1	=	11%		
	FACW species	21%	x2	=	42%		
	FAC species	59%	x3	=	177%		
	FACU species	0%	x4	=	0%		
	UPL species	0%	x5	=	0%		
	Column Totals (A)	91%		(B)	230%		
	Prevalence Index	B/A=	2.54	Is the Prevalence Index ≤ 3.0?			
				Yes	X	No	
Wetland vegetation criterion met?		Yes	X	No			

Definitions of Vegetation Strata

- Tree Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height
- Shrub/Sapling Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall
- Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall
- Woody vines All woody vines greater than 3.3 ft. (1 m) in height

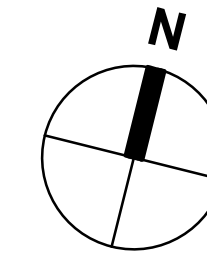
Cover Ranges	
Range	Midpoint
1-5 %	3.00%
6-15 %	10.50%
15-25 %	20.50%
26-50 %	38.00%
51-75 %	63.00%
76-95 %	85.50%
96-100 %	98.00%

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Location ²		
A 0-5"	10YR3/2	100					FSL	
B 5-10"	10YR5/4	100					FSL	
OB 10+"	10YR2/1	100					Muck	

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

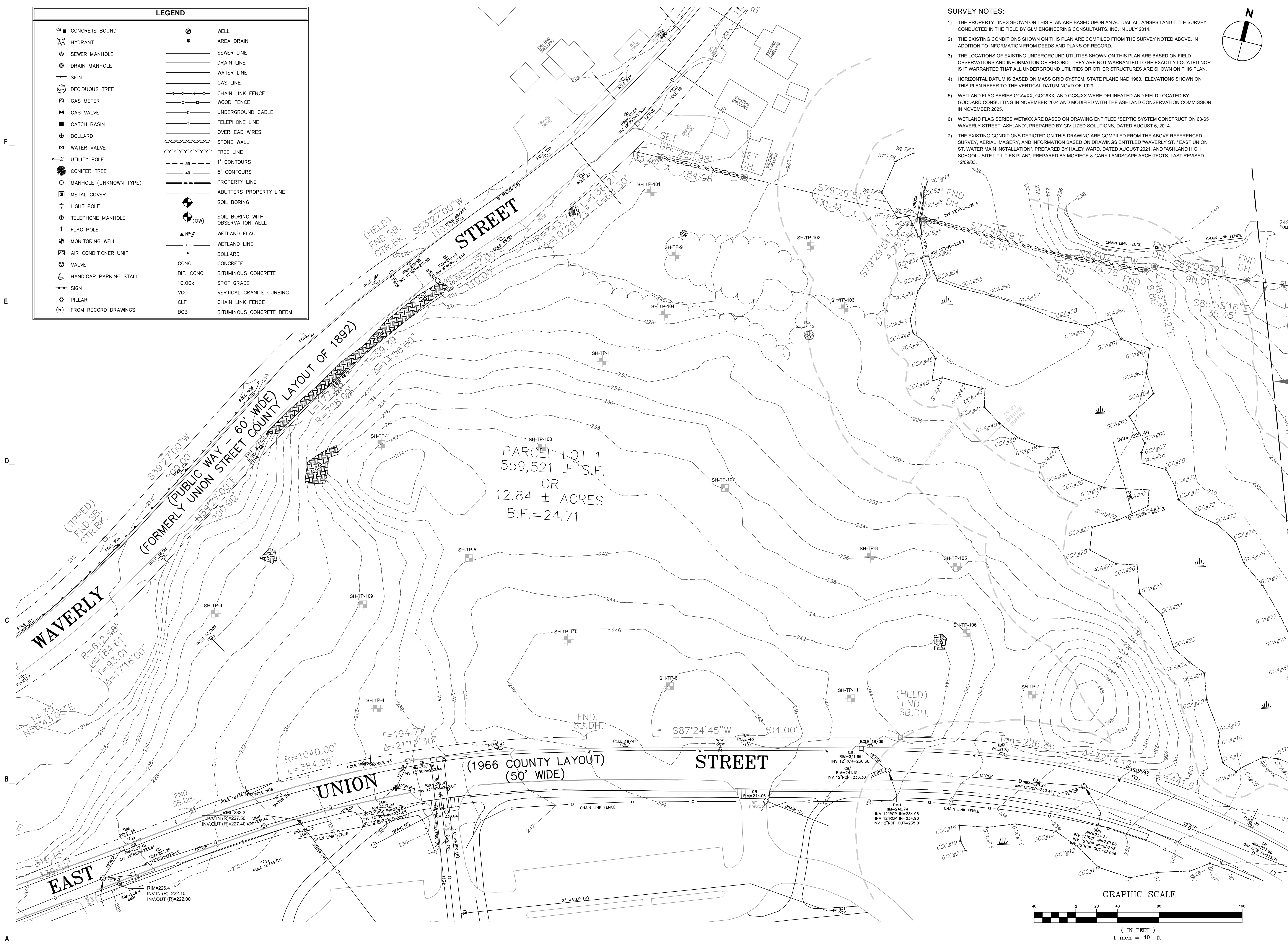
Hydric Soil Indicators (Check all that apply)		Indicators for Problematic Hydric Soils	
<input checked="" type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input checked="" type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Polyvalue Below Surface (S8)	<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9)	<input type="checkbox"/> Polyvalue Below Surface (S8)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Thin Dark Surface (S9)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input checked="" type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Mesic Spodic (A17)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Dark Surface (S7)		<input type="checkbox"/> Other (Include Explanation in Remarks)	
Restrictive Layer (if observed)	Type:	Depth (inches):	
Remarks			
Hydric Soils criterion met?	Yes	X	No



SURVEY NOTES:

- 1) THE PROPERTY LINES SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ALTA/NSPS LAND TITLE SURVEY CONDUCTED IN THE FIELD BY GLM ENGINEERING CONSULTANTS, INC. IN JULY 2014.
- 2) THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE COMPILED FROM THE SURVEY NOTED ABOVE, IN ADDITION TO INFORMATION FROM DEEDS AND PLANS OF RECORD.
- 3) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN.
- 4) HORIZONTAL DATUM IS BASED ON MASS GRID SYSTEM, STATE PLANE NAD 1983. ELEVATIONS SHOWN ON THIS PLAN REFER TO THE VERTICAL DATUM NGVD OF 1929.
- 5) WETLAND FLAG SERIES GCA#XX, GCC#XX, AND GCS#XX WERE DELINEATED AND FIELD LOCATED BY GODDARD CONSULTING IN NOVEMBER 2024 AND MODIFIED WITH THE ASHLAND CONSERVATION COMMISSION IN NOVEMBER 2025.
- 6) WETLAND FLAG SERIES WET#XX ARE BASED ON DRAWING ENTITLED "SEPTIC SYSTEM CONSTRUCTION 63-65 WAVERLY STREET, ASHLAND", PREPARED BY CIVILIZED SOLUTIONS, DATED AUGUST 6, 2014.
- 7) THE EXISTING CONDITIONS DEPICTED ON THIS DRAWING ARE COMPILED FROM THE ABOVE REFERENCED SURVEY, AERIAL IMAGERY, AND INFORMATION BASED ON DRAWINGS ENTITLED "WAVERLY ST. / EAST UNION ST. WATER MAIN INSTALLATION", PREPARED BY HALEY WARD, DATED AUGUST 2021, AND "ASHLAND HIGH SCHOOL - SITE UTILITIES PLAN", PREPARED BY MORICE & GARY LANDSCAPE ARCHITECTS, LAST REVISED 12/09/03.

LEGEND	
CONCRETE BOUND	WELL
HYDRANT	AREA DRAIN
SEWER MANHOLE	SEWER LINE
DRAIN MANHOLE	DRAIN LINE
SIGN	WATER LINE
DECIDUOUS TREE	GAS LINE
GAS METER	CHAIN LINK FENCE
GAS VALVE	WOOD FENCE
CATCH BASIN	UNDERGROUND CABLE
BOLLARD	TELEPHONE LINE
WATER VALVE	OVERHEAD WIRES
UTILITY POLE	STONE WALL
CONIFER TREE	TREE LINE
MANHOLE (UNKNOWN TYPE)	1' CONTOURS
METAL COVER	5' CONTOURS
LIGHT POLE	PROPERTY LINE
TELEPHONE MANHOLE	ABUTTERS PROPERTY LINE
FLAG POLE	SOIL BORING
MONITORING WELL	SOIL BORING WITH OBSERVATION WELL
AIR CONDITIONER UNIT	WETLAND FLAG
VALVE	WETLAND LINE
HANDICAP PARKING STALL	BOLLARD
SIGN	CONC.
PILLAR	BIT. CONC.
(R) FROM RECORD DRAWINGS	10.00x
	VGC
	CLF
	BCB
	CONCRETE
	BITUMINOUS CONCRETE
	SPOT GRADE
	VERTICAL GRANITE CURBING
	CHAIN LINK FENCE
	BITUMINOUS CONCRETE BERM



THE RESIDENCES AT ASHLAND
61 WAVERLY STREET
ASHLAND, MA

DATE	DESCRIPTION
12/16/2025	REVISIONS TO WETLAND FLAGGING
10/29/2025	NOTICE OF INTENT
10/16/2025	PLANS OF RECORD
08/27/2025	RESPONSE TO CURB CUT LAYOUT
08/19/2025	RESPONSE TO COMMENTS
08/09/2025	RESPONSE TO CURB CUT LAYOUT
05/20/2025	RESPONSE TO COMMENTS
02/10/2025	COMPREHENSIVE PERMIT

MARK: DATE: DESCRIPTION:
ISSUE LOG
△ = CLOUDED CHANGE

SCALE	1"=40'
DRAWN BY	JMK
CHECK BY	WVP
PROJ.ARCH.ENGR.	JAH
PROJ.MRG.	SAV
JOB NO.	24142.00

© SYMMES, MAINI & MCKEE ASSOCIATES, INC. 2025

EXISTING CONDITIONS PLAN

