



City of Nashua
Planning Department
229 Main Street
Nashua, New Hampshire 03061-2019

Planning & Zoning 589-3090
Fax 589-3119
WEB www.Nashuanh.gov.

Nashua Conservation Commission
Wetlands Application

Date Application Submitted:

Property Information

1. Property Street Address:
2. Tax Map and Lot #:
3. Existing Use of the Property:
4. Proposed Use of the Property:
5. Name of water body or wetland (area) that may be impacted:
6. Wetland Classification: (See NRO, Article XI Wetlands 190-111 to 190-117):
Prime Wetland: Critical Wetland: Other wetlands >9,000sf:
Other (wetlands (3,000-9,000sf): Vernal Pools:
7. Impacts proposed within the Wetland and the Wetland Buffer: (impacts in square feet):
Wetland: Temporary: Permanent:
Buffer: Temporary: Permanent:
8. Is the site within 250 feet of waters regulated by the NH Shoreland Water Quality Protection Act (SWQPA)? Yes: No:
9. Is the property within the City of Nashua Water Supply Protection District? (NRO 190-24) Yes: No:
10. Are any of the following uses located within 125 feet or sited in such manner so as to pose a serious environmental hazard to a nearby wetland (NRO 190-115 D)?
 - Septic Systems: Yes: No:
 - Underground storage tanks: Yes: No:
 - Junkyards or salvage yard: Yes: No:
 - Stockpiling of any materials: Yes: No:

Fees

Amount enclosed: , Check #: (Make Check payable to City of Nashua).

Owner(s) Information

Name:

Mailing Address:

Phone #:

Email Address:

Signature of Owner(s)/ Date Signed:

Authorized Agent Information

Owner(s) Signature: I hereby certify that the information included on this application and submitted in conjunction with this application is true to the best of my knowledge and that the person(s) listed are authorized to present this application on my behalf to the Nashua Conservation Commission. I also understand that the NCC may schedule a site walk prior to reviewing or acting upon this application. The site walk notice will be posted.

I / We also hereby authorize the Nashua Conservation Commission, it staff and /or agents to enter and inspect the property for action by this application.

Signature of Representative/Agent (Title/Business Name)/Date Signed:

Name of NH Certified Wetland Scientist: , State #:

Expiration Date: Is the stamp and signature included?

Project Description

Please provide a brief description of your proposed project including changes proposed to the topography, natural drainage, equipment to be used and estimated start and completion date for the project. If more space is needed, you may attach additional pages as necessary.

The project involves establishment of a new firefighter training area at the eastern edge of the existing Four Hills Landfill. The new training area will replace the existing training area currently located near the new DPW building and in an area where future improvements to the DPW facilities are being planned. A driveway extending from Teak Drive is proposed to provide access to the new firefighter training area. This driveway will also allow extension of water so that fire hydrants may be located in the training area. The new training area and the majority of the driveway are located outside wetlands and wetland buffers. Wetland and wetland buffer impacts are proposed in the vicinity of Teak Drive to accommodate the access drive.

Special Exception Criteria

The following statements must be completed to assist the Conservation Commission in reviewing the application relative to the special exception criteria which will be reviewed by the Zoning Board of Adjustment (per 190-115B items (1-9)).

- 1) The use or activity proposed and its attendant impacts cannot reasonably be avoided.

 - 2) The least damaging route and methodology have been selected, and that which is being proposed is the best practicable alternative available.

 - 3) That reasonable and acceptable impact mitigation measures have been incorporated where necessary and appropriate to minimize wetland loss or degradation.

 - 4) That the overall impact of encroaching into wetland or buffer areas is necessary for the productive use of adjoining buildable land and, as such, non-encroachment is outweighed by the benefits thereby derived.
-

- 5) That no significant impact on the habitat of rare or endangered species or exemplary communities, as listed by the State of New Hampshire or Federal government, will result.

Copy of New Hampshire Natural Heritage Bureau (NHB) letter attached: Yes: No:

- 6) That the best available adequate erosion and sedimentation control methods are incorporated.

- 7) That the proposed activity or use shall not significantly impair wetland capacity to provide important wildlife and fishery functions, including habitat, food, shelter, breeding, migration and over-wintering.

- 8) That the project shall not impair the stability of a water body's bank.

- 9) That the wetland and buffer functions of hydrologic absorption capacity and storage shall not be impaired.

If additional pages are attached, please identify the project location on each page, and the specific application requirements you are responding to.

NASHUA GIS AERIAL

1" = 1,000'



NO.	REVISION



CITY OF NASHUA
ENGINEERING DEPARTMENT
848 WEST HOLLIS STREET
NASHUA NH 03062
PHONE (603) 589-3137
FAX (603) 589-3169

FIRE TRAINING FACILITY
USGS LOCATION MAP

DRAWN BY: MEF

REVIEWED BY: DH

DATE: 6/17/2025

DRAWING NO.: 1 OF 1



Figure 1: On Gosselin Road facing west toward Teak Drive intersection



Figure 2: On Teak Drive facing south toward Gosselin Road intersection



Figure 3: Teak Drive at Gosselin Road intersection facing west at the conveyance channel carrying vernal pool flow north to wetlands in area of proposed access road

6/17/2025

Proposed Fire Training Facility

Conservation Commission Application Supplemental Photos



Figure 4: Teak Drive at Gosselin Road intersection facing southwest at the vernal pool



Figure 5: #20 Teak Drive facing west at the existing stormwater basin and north edge of proposed access road

6/17/2025

Proposed Fire Training Facility

Conservation Commission Application Supplemental Photos



Figure 6: Near property boundary of #22 and #24 Teak Drive facing west at the existing stormwater basin.

6/17/2025

Proposed Fire Training Facility

Conservation Commission Application Supplemental Photos



Figure 7: Four Hills Landfill southeast limit of clearing facing south at proposed training facility area



Figure 8: Four Hills Landfill southeast limit of clearing facing north across the proposed training facility area



Figure 9: Four Hills Landfill at limit of yard debris piles near cell phone tower, facing east across proposed training facility area



Figure 10: Four Hills Landfill at north limit of proposed training facility area, facing south across the proposed training facility area

REPORT ON WETLANDS

For

Proposed Firefighter Training Area

Teak Drive/Four Hills Landfill
Nashua NH

May 19, 2025



1.0 INTRODUCTION

This report has been prepared in connection with a proposed firefighter training area to be located in the eastern part of the Four Hills Landfill property with access provided from Teak Drive. The project area consists of the approximately 1,000 linear foot alignment of the proposed access driveway and approximately 2 acres within the existing footprint of the landfill facility (the Site). The following sections provide a description of the wetland resources associated with the Site and an assessment of their function. A figure depicting the resource areas discussed in this report has been included in the attachments. Photos of the wetland areas, the vernal pool survey form, and Natural Heritage Bureau data check letter can also be found in the attachments.

2.0 WETLAND DELINEATION

The wetland delineation was performed by Gove Environment Services on 1/6/24 utilizing the following standards:

1. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, (Version 2.0) January 2012, U.S. Army Corps of Engineers.
2. *Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils*, Version 8.2. United States Department of Agriculture (2018).
3. *New England Hydric Soils Technical Committee. 2019 Version 4, Field Indicators for Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.
4. *U.S. Army Corps of Engineers National Wetland Plant List, version 3.5*. (2020)

Wetland boundary flagging was surveyed by the City of Nashua Engineering Department for use on project plans.

3.0 WETLAND DESCRIPTIONS

The project Site consists of two distinctly different areas. The proposed location of the proposed firefighter training area is located at the edge of the landfill in a cleared and graded area currently used for material storage, recycling, and composting. The area extending east to Teak Drive through which the access driveway is proposed consists of is mature forest dominated by oaks. The wetland resources identified on the Site have been identified as Wetlands A, B, and C on the attached Wetland Overview Figure and described in the following sections.

Wetland A

This wetland lies directly adjacent to Teak Drive occupying a conspicuous depression situated between the road and higher grades to the west. The wetland consists of a shallow pond with a perimeter of scrub shrub wetland dominated by buttonbush and highbush blueberry. Water levels in the pond and adjacent vegetated wetland appear to fluctuate significantly throughout the year as seen on history of aerial photography and over the course of field work. The presence of buttonbush, a species which is well adapted to grow in near permanent inundation, suggests at least a portion of this wetland maintains a semi-permanent hydrology. The classification of this wetland is PUBF/PSS1F.

The hydrology of the wetland appears to be entirely supported by groundwater as no contributing wetlands, streams, or pipes were identified. The wetland does drain west into Wetland B via a narrow wetland connection. This hydrology in this location is not wetland semi-permanent like the pond, nor does it exhibit development of a channel as would be the case with frequent discharge. It's likely that the pond discharges only during the highest seasonal water levels. During inspection in April of 2025 this area was flooded up to the narrow wetland connection with no outflow.

Wetland B

Wetland B is located within a basin that appears to have been created for the purpose of managing roadway drainage which enters the area from several outfalls. The majority of this basin does not meet wetland criteria. The narrow drainage path between the main outfall and the outlet pipe has, however, developed sufficient wetland characteristics to qualify as a wetland. The wetland is sparsely vegetated with a mix of young gray birch, silky dogwood, and graminoid species. The classification of this wetland is PEM2/PSS1Br

Wetland C

Wetland C lies downgradient from both wetland A and B which both drain to this wetland. It is a forested wetland dominated by red maple. An intermittent stream channel develops in the wetland downslope of Wetland A and the outlet pipes from Wetland B. The wetland continues outside the project area to the west. The classification of this wetland is PFO1E/R4SB4/5.

3.0 VERNAL POOLS

A vernal pool survey was conducted on 4/10/25. All wetland areas on the Site were inspected to identify suitable areas of standing water which were then surveyed with a focus on primary vernal pool indicators. The survey was conducted by walking along the edges or slowly wading through the water while wearing polarized glasses for a better view below the surface. Egg mass species identification was made using the professional experience of the biologist in conjunction with the publication “Identification and Documentation of Vernal Pools in New Hampshire”¹. Adult amphibians and other vernal pool indicator species were noted during surveys if present. Other factors which contribute to the significance of a vernal pool were also recorded including ponding depth, canopy cover, the character of the surrounding upland, and the presence of predator species.

A single vernal pool was identified occupying the majority of Wetland A. The limit of the “full pool” extends up to a point in the narrow connection to Wetland B between wetland flags #27 and #77 where there was no longer any surface ponding. No egg masses were identified in this pool but the pool did contain an abundance of fairy shrimp which is a primary vernal pool indicator species. The depth of the pool, exceeding 4 feet in the center, and the dense buttonbush edge made survey of the pool difficult. It is therefore likely that additional indicator species are present in this pool but were not recorded by the survey. The data form and photographs collected during the survey are attached.

4.0 WETLAND FUNCTION AND VALUE ASSESSMENT

A wetland assessment was conducted using the US Army Corps Highway Methodology guidelines which considers 13 functions and values:

- 1. Groundwater recharge/discharge:** This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. Recharge should relate to the potential for the wetland to contribute water to an aquifer. Discharge should relate to the potential for the wetland to serve as an area where ground water can be discharged to the surface.

¹ *Identifying and Documenting Vernal Pools in New Hampshire Third Edition*, Michael Marchand, Published by New Hampshire Fish and Game Department – Nongame and Endangered Wildlife Program.

- 2. Floodflow Alteration:** This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events.
- 3. Fish and Shellfish Habitat:** This function considers the effectiveness of seasonal or permanent water bodies associated with the wetland in question for fish and shellfish habitat.
- 4. Sediment/Toxicant/Pathogen Retention:** This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants or pathogens.
- 5. Nutrient Removal/Retention/Transformation:** This function relates to the effectiveness of the wetland to prevent adverse effects of excess nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers or estuaries.
- 6. Production Export:** This function relates to the effectiveness of the wetland to produce food or usable products for human, or other living organisms.
- 7. Sediment/Shoreline Stabilization:** This function relates to the effectiveness of a wetland to stabilize stream banks and shorelines against erosion.
- 8. Wildlife Habitat:** This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and or migrating species must be considered.
- 9. Recreation:** This value considers the effectiveness of the wetland and associated watercourses to provide recreational opportunities such as canoeing, boating, fishing, hunting and other active or passive recreational activities. Consumptive opportunities consume or diminish the plants, animals or other resources that are intrinsic to the wetland, whereas non-consumptive opportunities do not.
- 10. Educational/Scientific Value:** This value considers the effectiveness of the wetland as a site for an “outdoor classroom” or as a location for scientific study or research.
- 11. Uniqueness/Heritage:** This value relates to the effectiveness of the wetland or its associated water bodies to produce certain special values. Special values may include such things as archeological sites, unusual aesthetic quality, historical events, or unique plants, animals, or geological features.
- 12. Visual Quality/Aesthetics:** This value relates to the visual and aesthetic qualities of the wetland.
- 13. Threatened or Endangered Species Habitat:** This value relates to the effectiveness of the wetland or associated water bodies to support threatened or endangered species.

The results of the functional assessment are summarized below.

Wetland A

The principal function of this wetland is wildlife habitat due to the fact that it supports vernal pool breeding habitat. Its semi-permanent hydrology also supports wetland specific habitat for other species, particularly amphibians and turtles. The value of the habitat supported in this wetland is somewhat compromised by its location directly adjacent to Teak Drive and mostly lack of effective buffer on that side.

Wetland B

Due to nature of this area as a stormwater conveyance with an overall disturbed quality, this wetland is functionally limited. Its principal functions are clearly related to stormwater by way of sediment trapping and retention of water during higher flows. Retention of runoff in this area also supports some flood attenuation function. These functions are also supported, apparently by design, in the larger area of upland that comprises the basin surrounding the wetland.

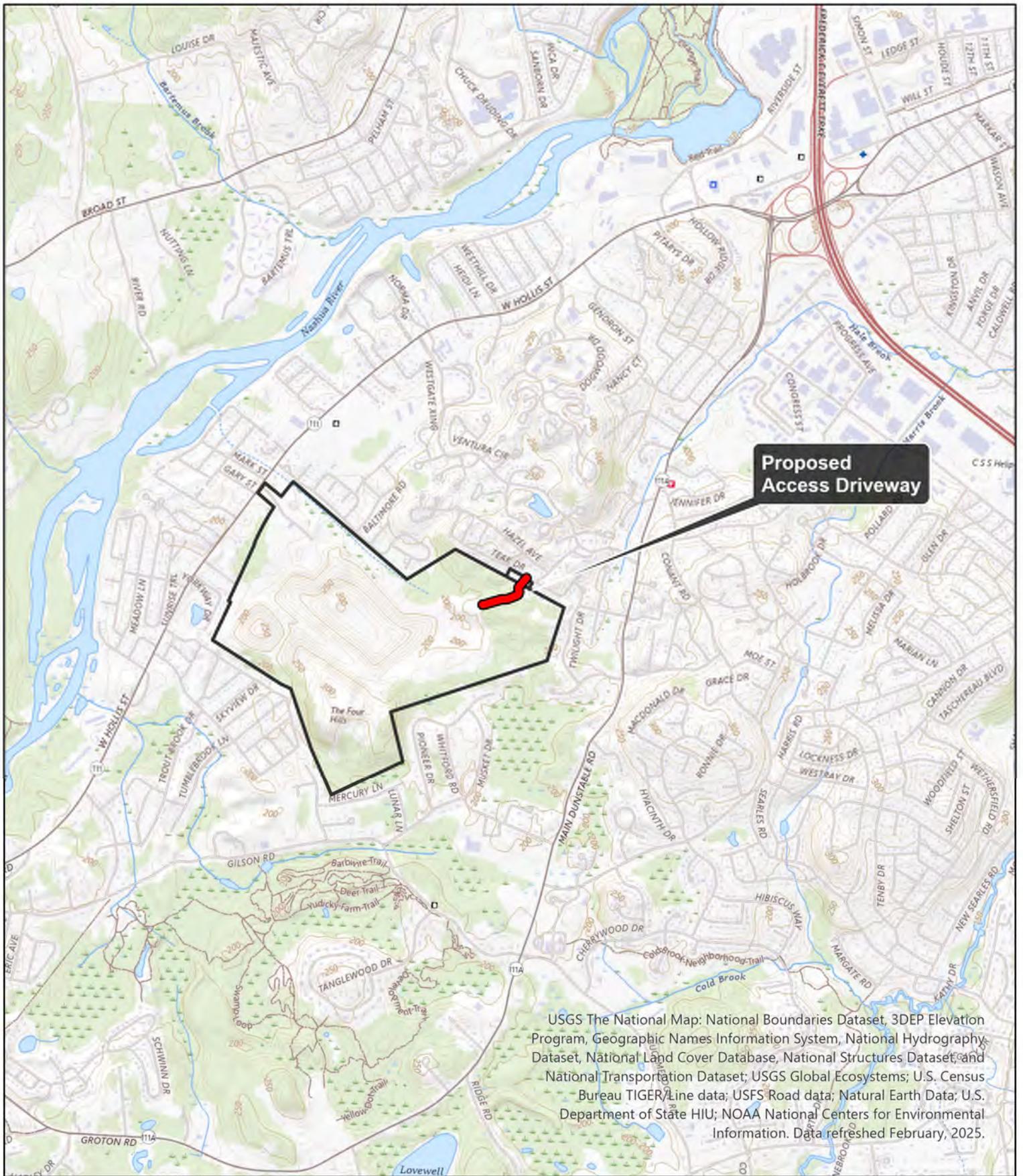
Wetland C

The principal functions of Wetland C are wildlife habitat and the protection of water quality. These are derived through a combination of the wetlands association with an intermittent stream and the connectivity with upstream and downstream wetlands. These functions are enhanced by a largely intact forested buffer.

5.0 RARE, THREATENED & ENDANGERED SPECIES

The NHB report does not identify any rare plants, exemplary natural communities or ecological systems within the project limits or in the immediate vicinity of the proposed work. The report does identify records of several animal species near the project. Note that the map has been redacted from the public submission as requested by the Natural Heritage Bureau. The closest of these records is situated on the capped areas of the landfill and involves Eastern Meadowlark. This species is a grassland bird and its potential habitat in this area is limited to the artificial "grasslands" created on the landfill. There is no habitat for this species in the mature forest or in the proposed training area which is essentially developed. The report also contains records of Eastern Box Turtle and Hognose snake, occurring about a mile south of the project location. Although these records do not occur in the project area, the forested upland and wetland in the vicinity of the proposed access driveway may provide suitable habitat for both species. This does not mean the habitat is exemplary or that the proposed work poses a particular threat to these species. The fact that the proposed work involves only a low use access driveway is likely to be a mitigating factor as its footprint is relatively small and should not pose a significant barrier to movement of these species. These questions will be addressed through review of the project by NH Fish & Game in connection with the state wetland permit application.

Attachment 1
Figures



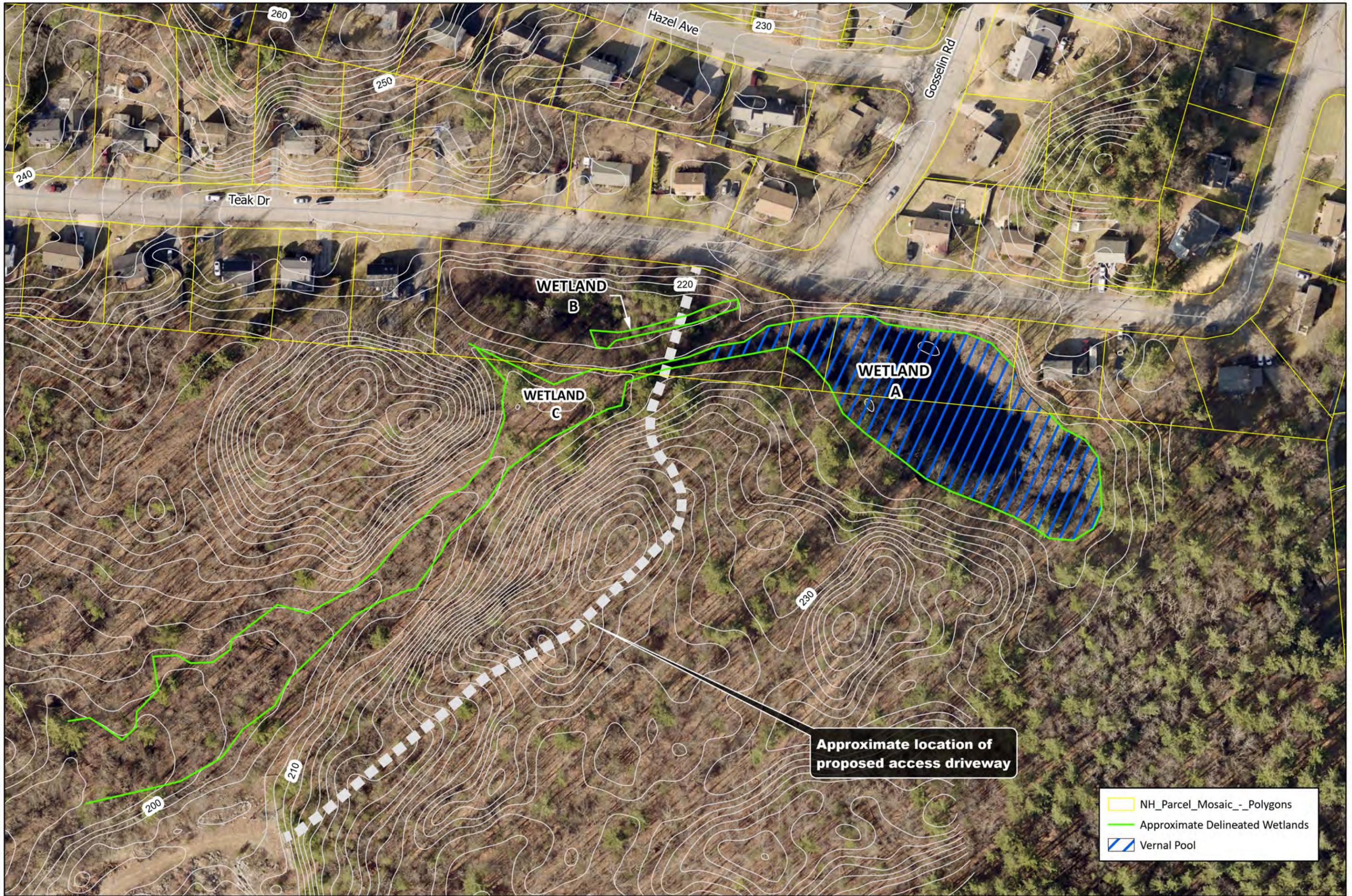
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USGS Locus Map

Firefighter Training Area
25 Teak Drive/Four Hills landfill
Nashua, NH



Gove Environmental Services, Inc.
8 Continental Drive, Bldg 2 Unit H, Exeter NH 03833 603.778.0644



- NH_Parcel_Mosaic_-_Polygons
- Approximate Delineated Wetlands
- Vernal Pool

Approximate location of proposed access driveway

WETLAND B

WETLAND A

WETLAND C

Teak Dr

Hazel Ave

Gosselin Rd

200

210

220

230

250

230

260

240

Attachment 2
Photos



Photo 1 : Main area of Wetland A (vernal pool)



Photo 2: Narrow connection between Wetland A and Wetland C (impact area)



Photo 3: Looking upstream Wetland B (stormwater conveyance/Impact area)



Photo 4 : Downstream end of Wetland B (stormwater conveyance/Impact area)

Attachment 3
Vernal Pool Survey Form

**New Hampshire Vernal Pool Documentation Form**

Purpose: This form is to provide a way to collect appropriate information necessary to document the presence of a vernal pool or potential vernal pool in New Hampshire. It is also appropriate to use this form to document the *absence* of certain physical and, especially, biological characteristics to describe a pool or depression within a wetland that may not meet the definition of a vernal pool.

I. Observer Contact information

Observer name	Brenden Quigley
Observer phone #:	6036860086
Observer email	bquigley@ gesinc.biz
Observer Mailing address:	8 Continental Drive, Building 2, Unit H

II. Location and Owner Identification

Town: Nashua	
Property name (if applicable): Proposed Firefighter Training Area	
Location Description/ Property street address: 25 Teak Drive & 840 West Hollis Street (Four Hills Landfill)	
Vernal Pool Coordinates <i>Coordinates obtained by GPS or other means. Report in degrees minutes seconds or decimal degrees: Latitude 43.2164 Longitude -71.5192. Datum: Use NAD83 or WGS84 for all coordinates</i>	Latitude: 42.7297649 Longitude: -71.5077406
Source of coordinates: (circle one): GPS unit, <u>Google Maps/Google Earth</u> , Topo map, other	Tax map and lot # (if known): C-1320 & D-54
Is observation on public land? NO	Landowner permission obtained? YES
Landowner name (if known) City of Nashua	
Landowner address (if different than property address) 229 Main Street P.O. Box 2019, Nashua, NH 03061	
Landowner phone or email	

Note: Provide a map that shows property and location of vernal pool (tax map/ USGS)

Vernal Pool I.D.: VP1

Project affiliation

- None
 Harris Center/AVEO
 Town _____
 Consultant
 Other _____

III. Survey Information

Date of survey:	4/10/25	Visit # (for season):	1
Survey start time:	1:30 pm	Survey end time:	2:30 pm
Air temperature (F):	~60deg		

Weather/Other Comments: provide any information about precipitation, cloud cover, wind, humidity, ice cover, etc here:

IV. Vernal Pool Description

Photos: 1-3 photographs of vernal pool taken and provided with datasheet YES

Pool characteristics

Vernal pool type (choose most appropriate description)

- Upland-isolated pool (not associated with a larger wetland)
 Wetland complex (pool within or associated with a larger wetland habitat, such as red maple swamp, marsh pond edge.
 Floodplain pool

Comments:

Natural pool possibly altered by construction of Teak Drive

Origin of pool (select one)

- Unknown
 Natural depression
 Natural, but altered
 Small pond / constructed pond
 Quarry/sand pit excavation
 Ditch along road or rut from vehicle
 Created wetland/ pool (such as for wetland mitigation purposes)
 Other: _____

Pool size (dimensions): 300 feet X 100 feet (Area of open water in the pool depression)

If round, measure diameter; if long and narrow, provide length and width dimensions.

(check one): Measured Paced Estimated Other: GIS _____

How long does the vernal pool hold water? (Hydroperiod)

- Seasonal (drying out entirely in most years)
 Semi-permanent (drying partially in most years)
 Permanent (Typically maintains water)
 Unknown

Maximum water depth on survey date

- < 6 inches (ankle deep)
 6 inches – 1 foot (shin deep)
 1 - 2 feet (knee deep)
 2 - 3 feet (hip deep)
 3 - 4 feet (chest deep)
 > 4 feet

max depth unknown

Pool Outlet: Did you observe water flowing out of the pool on this date? YES

Overstory/Shading of vernal pool depression

(Overstory is trees, shrubs, and associated limbs and leaves that block sunlight from penetrating the pool surface)

- Mostly shaded by trees (> 50%)
 Less shaded by trees (< 50%)
 Shaded only by vegetation in the pool (such as shrubs)

Vegetation in Pool (vernal pool depression)

Check (X) **Vegetation type and proportion of vegetation in the pool** (percent coverage) that can provide egg attachment or offer concealment to aquatic or developing larvae.

Vegetation type	Percent coverage of pool by vegetation in the pool		
	<10%	10-50%	>50%
Shrubs			X
Emergent vegetation (Grasses, sedges, rushes, cattails)			
Submergent vegetation			

Are dead branches and downed woody material (branches/twigs) available in pool for egg attachment?
(Select one category) None 1 - 10 greater than 10

Pool substrate (select all that apply)

- Leaf litter
 Sand/gravel
 Muck
 Bedrock
 Other: substrate in deepest part UK

**Disturbance to vernal pool observed (select all that apply)**

Observe any disturbance to the pool (direct or indirect by siltation, for example)

- Dumping
 Ditching/draining
 Ruts from wheeled vehicles
 Runoff /siltation from human sources
 Other: _____
 None

Comments:

There is a fair amount of trash and residential debris in the pool

Surrounding habitat (within 100 feet of the pool) Check

habitat type and select/select appropriate percentage

- Forest >50%
 Open (shrublands, agriculture, grassland, etc.)
 Wetlands <10%
 Open water (lakes/ponds, rivers/streams)
 Residential (lawn, little amount of pavement/structures) <10%
 Industrial/Urban (mostly pavement and structures)
 Paved Roads/driveways 10-50%
 Unpaved roads/driveways

Describe any disturbance observed in the 100 foot area around the pool:

Pool lies directly adjacent to Teak Drive at base of boulder slope

V. Survey for vernal pool fauna (amphibians and macroinvertebrates)

NOTE: Provide photographs when possible.

Species information - Primary Vernal Pool Indicators

Species observed	Adults			Egg masses (#)		Tadpoles, Salamander Larvae and Transforming Juveniles	
	Seen #	Courtship/ amplexus (Y/N)	Heard Y/N	Counted	Estimated	Tadpole/ Larvae estimated	#Transforming juveniles (#)
Wood frog							
Spotted salamander			NA				
Marbled salamander			NA				
Blue spotted/ Jefferson salamander			NA				
Mole salamander (unknown species)			NA				
Fairy shrimp	Abundant	NA	NA	NA	NA	NA	NA

Record **other amphibian and reptile species** observed (such as spring peepers, etc.):

Species observed	Adults			Egg masses (#)		Tadpoles, Salamander Larvae and Transforming Juveniles	
	Seen #	Courtship/ amplexus (Y/N)	Heard Y/N	Counted	Estimated	Tadpole/ Larvae estimated	#Transforming juveniles (#)

Was entire pool surveyed for egg masses? Yes/ **No** If Yes, what percent of the pool? ~30%

(If the entire pool was not surveyed, is any part of the pool on an adjacent property? (Y/N))

Sampling methods used during your survey (check all that apply):

- Visual search
 Audible detection (Recorded?) NO
 Dip net
 Trapping
 None (incidental observation)

Were **spermatophores** observed (see photo right) ? NOWere **fish** observed in the pool? NO

Secondary vernal pool indicators - Invertebrates

During or after amphibian breeding season, there are other organisms whose presence or remains (larval cases, exuviae, or shells) indicate the presence of a vernal pool. These organisms are considered secondary vernal pool indicators.

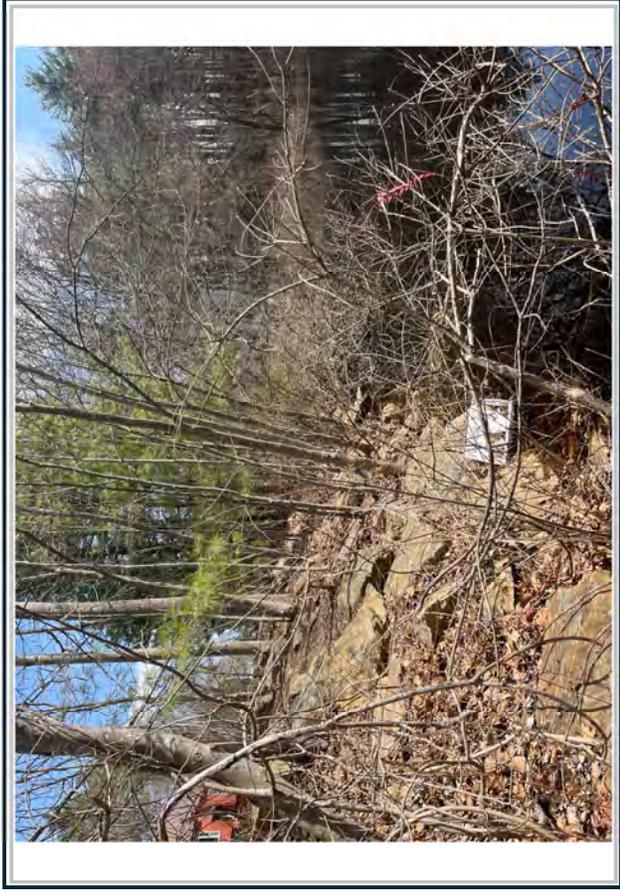
The families or groups listed in the following table are among those **secondary vernal pool indicators** under the New Hampshire wetlands rules (Env-Wt 100). Additional species (family or groups) may qualify as secondary vernal pool indicators, hence blank spaces are provided to enter other species you observe.

Macroinvertebrate Common name of group	Common name of family members	Macroinvertebrate family	Observed? (X)	Photo?
Caddisfly larvae or cases	Unknown type	Unknown type		
	Northern caddisflies	Limnephilidae		
	Giant case makers	Phryganeidae		
	Tube or trumpet caddisflies	Polycentropodidae		
Clam shrimp or shells	Unknown type	Unknown type		
	Clam shrimp	Laevicaudata		
	Clam shrimp	Spinicaudata		
Fingernail clams or shells	Fingernail clams	Sphaeriidae		
Aquatic beetle larvae	Unknown type	Unknown type		
	Diving beetle	Dytiscidae		
	Whirligig beetle	Gyrinidae		
	Crawling water beetle	Halplidae		
	Water scavenger beetle	Hydrophilidae		
Dragonfly larvae or exuviae	Unknown type	Unknown type		
	Darners	Aeshnidae		
	Skimmers	Libellulidae		
Damselfly larvae or exuviae	Unknown type	Unknown type		
	Narrow-winged damselflies	Coenagrionidae		
	Spread-winged dragonflies	Lestidae		
True fly larvae or pupae	Unknown type	Unknown type		
	Mosquitoes	Culicidae		
	Phantom midges	Chaoboridae		
	Non-biting midges	Chironomidae		
Spire-shaped snails or shells	Unknown type	Unknown type		
	Tadpole snails or pouch snails	Physidae		
	Pond snails or limpets	Lymnaeidae		
Flat-spire snails or shells	Wheel snails, orb snail, or ram's horn snails	Planorbidae		
Other*:				
Other*:				

Completed datasheets can be submitted to NH Wildlife Sightings at: <http://nhwildlifesightings.unh.edu> or mailed to NH Fish & Game Department, Nongame & Endangered Wildlife Program, 11 Hazen Drive, Concord NH 03301.



4/10/25--Dense shrub edge



4/10/25--Boulder embankment along Teak Drive



4/10/25--Looking up into the main part of the pool from its intermittent outlet



4/10/25--Fairy Shrimp are abundant in the pool

Attachment 4
NHB Report



NHB DataCheck Results Letter

NH Natural Heritage Bureau

Please note: maps and NHB record pages are **confidential** and shall be redacted from public documents.

To: matthew franz, city of nashua
848 West Hollis St
Nashua, NH 03062
franzm@nashuanh.gov

From: NHB Review
NH Natural Heritage Bureau
Main Contact: Maddie Severance - nhbreview@dncr.nh.gov

cc: NHFG Review

Date: 03/25/2025 (valid until 03/25/2026)

Re: DataCheck Review by NH Natural Heritage Bureau and NH Fish & Game

Permits: MUNICIPAL POR - Nashua, NHDES - Alteration of Terrain Permit, NHDES - Standard Dredge & Fill - Minor, NHDES - Wetland Routine Roadway Registration

NHB ID: NHB25-0677

Town: Nashua

Location: 840 West Hollis Street

Project Description: New Fire Department access road to rear of site from rear of site near Teak Drive at Gosselin Road. New road will constructed over existing culverts that cross wetlands near Teak Drive. The new road will be improved with new water main and new utility poles and wires.

Next Steps for Applicant:

NHB's database has been searched for records of rare species and exemplary natural communities. Please carefully read the comments and consultation requirements below.

NHB Comments: No comments at this time.

NHFG Comments: Please refer to NHFG consultation requirements below.

NHB Consultation

If this NHB DataCheck letter includes records of rare plants and/or natural communities/systems, please contact NHB and provide any requested supplementary materials by emailing nhbreview@dncr.nh.gov.

If this NHB DataCheck letter DOES NOT include any records of rare plants and/or natural communities/systems, no further consultation with NHB is required.



NHB DataCheck Results Letter

NH Natural Heritage Bureau

Please note: maps and NHB record pages are **confidential** and shall be redacted from public documents.

NH Fish and Game Department Consultation

If this NHB DataCheck letter DOES NOT include ANY wildlife species records, then, based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

If this NHB DataCheck letter includes a record for a threatened (T) or endangered (E) wildlife species, consultation with the New Hampshire Fish and Game Department under Fis 1004 may be required. To review the Fis 1000 rules (effective February 3, 2022), please go to <https://www.wildlife.nh.gov/wildlife-and-habitat/nongame-and-endangered-species/environmental-review>. All requests for consultation and submittals should be sent via email to NHFGreview@wildlife.nh.gov or can be sent by mail, and **must include the NHB DataCheck results letter number and "Fis 1004 consultation request" in the subject line.**

If the NHB DataCheck response letter does not include a threatened or endangered wildlife species but includes other wildlife species (e.g., Species of Special Concern), consultation under Fis 1004 is not required; however, some species are protected under other state laws or rules, so coordination with NH Fish & Game is highly recommended or may be required for certain permits. While some permitting processes are exempt from required consultation under Fis 1004 (e.g., *statutory permit by notification, permit by rule, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule*), coordination with NH Fish & Game may still be required under the rules governing those specific permitting processes, and it is recommended you contact the applicable permitting agency. For projects not requiring consultation under Fis 1004, but where additional coordination with NH Fish and Game is requested, please email NHFGreview@wildlife.nh.gov, and include the NHB DataCheck results letter number and "review request" in the email subject line.

Contact NH Fish & Game at (603) 271-0467 with questions.



NHB DataCheck Results Letter

NH Natural Heritage Bureau

Please note: maps and NHB record pages are **confidential** and shall be redacted from public documents.

NHB Database Records:

The following record(s) have been documented in the vicinity of the proposed project.

Please see the map and detailed information about the record(s) on the following pages.

Vertebrate species	State ¹	Federal	Notes
Eastern Box Turtle (<i>Terrapene carolina carolina</i>)	E	--	Contact the NH Fish & Game Dept (see above).
Eastern Hognose Snake (<i>Heterodon platirhinos</i>)	E	--	Contact the NH Fish & Game Dept (see above).
Eastern Meadowlark (<i>Sturnella magna</i>)	T	--	Contact the NH Fish & Game Dept (see above).

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list.

An asterisk (*) indicates that the most recent report for that occurrence was 20 or more years ago.

For all animal reviews, refer to 'IMPORTANT: NHFG Consultation' section above.

Disclaimer: NHB's database can only tell you of known occurrences that have been reported to NHFG/NHB. Known occurrences are based on information gathered by qualified biologists or members of the public, reported to our offices, and verified by NHB/NHFG.

However, many areas have never been surveyed, or have only been surveyed for certain species.

NHB recommends surveys to determine what species/natural communities are present onsite.

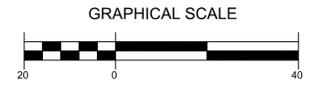


KEYNOTES

- 1 20 FT ACCESS ROAD
- 2 FOREBAY STORMWATER PRETREATMENT AREA
- WETLAND IMPACT AREA - 2,545 SQ-FT
- WETLAND BUFFER IMPACT AREA - 9,533 SQ-FT

LEGEND

EXISTING	PROPOSED	
---	---	PROPERTY LINE
---	---	CONTOUR MAJOR
---	---	CONTOUR MINOR
S	S	SEWER
G	G	GAS
W	W	WATER
---	---	12" HP STORM DRAIN PIPE
---	---	CURB
DW	DW	DELINEATED WETLAND
WB40	WB40	40 FT WETLAND BUFFER
VP	VP	DELINEATED VERNAL POOL
VP100	VP100	100 FT VERNAL POOL BUFFER
---	---	LIMIT OF WORK
---	---	FENCE AND 20 FT SLIDE GATE
---	---	P-TREELINE
---	---	FLOW ARROW
---	---	WETLAND FLAG
---	---	RIP RAP
---	---	WETLAND
---	---	DRAIN MANHOLE
---	---	CATCH BASIN
---	---	INLET CONTROL STRUCTURE



NO.	DESCRIPTION	DATE	BY

DRAFT
NOT FOR CONSTRUCTION

CITY OF NASHUA NEW HAMPSHIRE
ENGINEERING DEPARTMENT
848 WEST HOLLIS STREET
NASHUA, NEW HAMPSHIRE 03062
DESIGNED BY: MEF
DRAWN BY: MEF
REVIEWED BY: DH
DATE: JUNE 2025

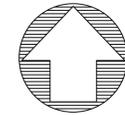
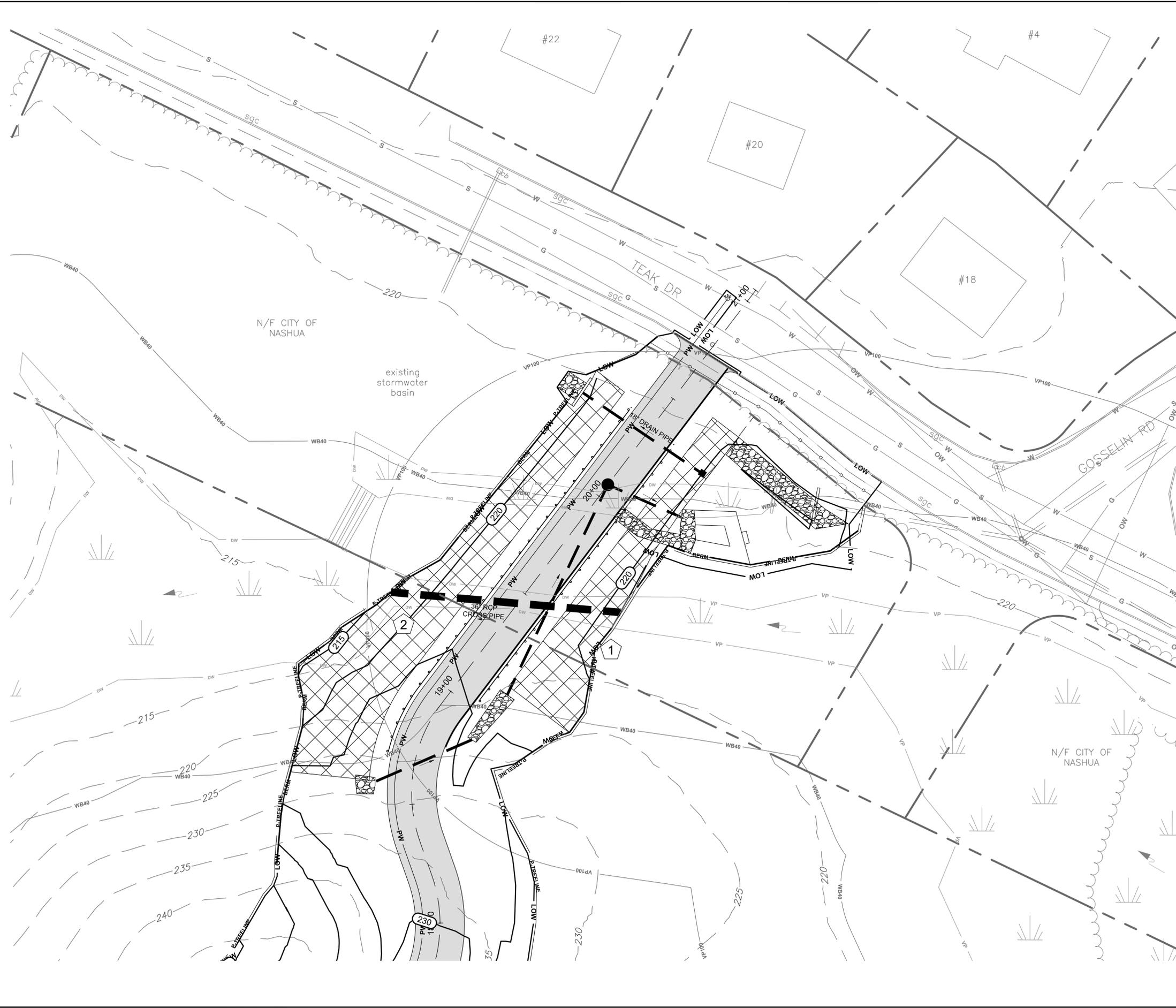


PROJECT
FIRE TRAINING FACILITY

SHEET TITLE
WETLAND IMPACT PLAN

DRAWING NO.
W1.1
SHEET 1 OF 3

S:\DPWEngineering\Projects\2024_042_Four Hills Rear Water Main\Plans\CAD\Plot\Fire Training_Wetland.dwg Jun 17, 2025 - 2:55pm quinteron



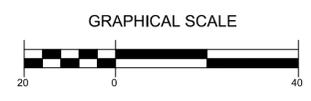
NORTH

KEYNOTES

- 1 EROSION CONTROL BERM
- 2 EROSION CONTROL MATTING

LEGEND

- | EXISTING | PROPOSED | |
|----------|----------|-----------------------------------|
| --- | --- | PROPERTY LINE |
| --- | --- | CONTOUR MAJOR |
| --- | --- | CONTOUR MINOR |
| S | --- | SEWER |
| G | --- | GAS |
| W | --- | WATER |
| --- | --- | 12" HP STORM DRAIN PIPE |
| --- | --- | CURB |
| DW | --- | DELINEATED WETLAND |
| WB40 | --- | 40 FT WETLAND BUFFER |
| VP | --- | DELINEATED VERNAL POOL |
| VP100 | --- | 100 FT VERNAL POOL BUFFER |
| --- | --- | LIMIT OF WORK |
| --- | --- | FENCE AND 20 FT SLIDE GATE |
| --- | --- | TREE LINE |
| --- | --- | FLOW ARROW |
| --- | --- | EROSION CONTROL MIX BERM |
| --- | --- | RIP RAP |
| --- | --- | TEMPORARY EROSION CONTROL BLANKET |
| --- | --- | WETLAND |
| --- | ● | DRAIN MANHOLE |
| --- | ○ | CATCH BASIN |
| --- | ■ | INLET CONTROL STRUCTURE |



NO.	DESCRIPTION	DATE	BY

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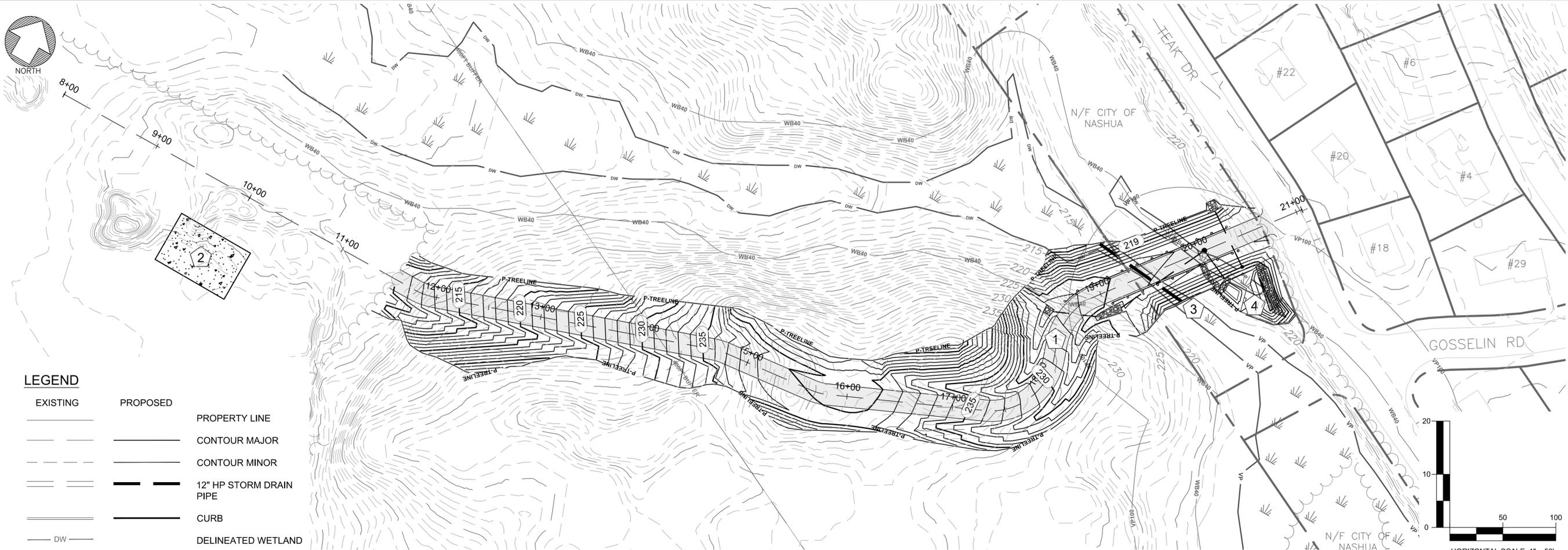


PROJECT
FIRE TRAINING FACILITY

SHEET TITLE
EROSION CONTROL PLAN

DRAWING NO.
W2.1
SHEET 2 OF 3

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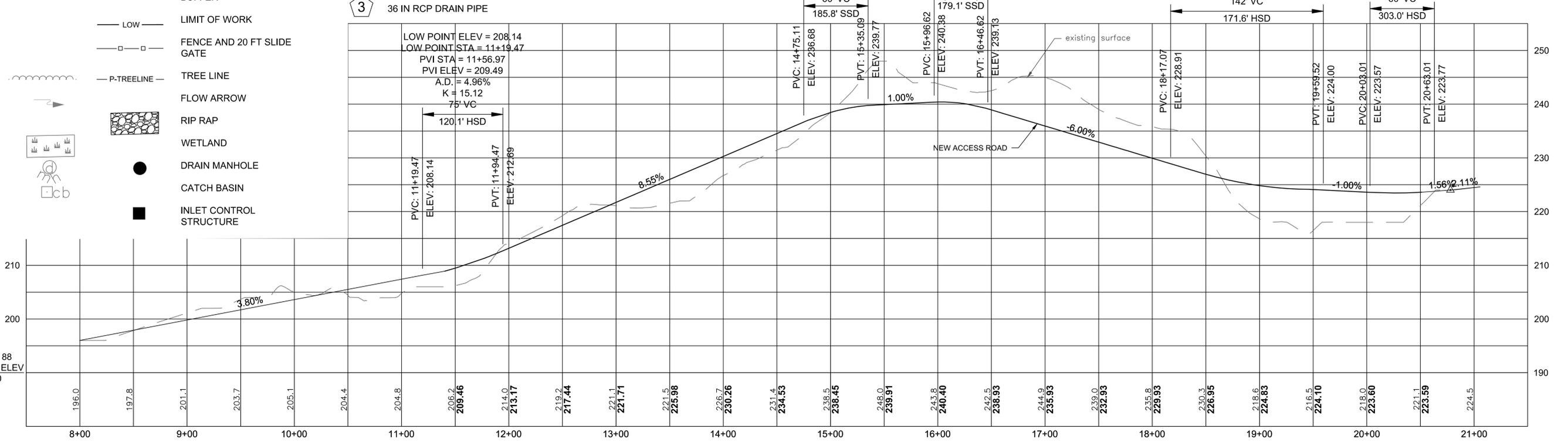
LEGEND

- | EXISTING | PROPOSED | |
|----------|----------|----------------------------|
| | | PROPERTY LINE |
| | | CONTOUR MAJOR |
| | | CONTOUR MINOR |
| | | 12" HP STORM DRAIN PIPE |
| | | CURB |
| | | DELINEATED WETLAND |
| | | 40 FT WETLAND BUFFER |
| | | DELINEATED VERNAL POOL |
| | | 100 FT VERNAL POOL BUFFER |
| | | LIMIT OF WORK |
| | | FENCE AND 20 FT SLIDE GATE |
| | | TREE LINE |
| | | FLOW ARROW |
| | | RIP RAP |
| | | WETLAND |
| | | DRAIN MANHOLE |
| | | CATCH BASIN |
| | | INLET CONTROL STRUCTURE |

KEYNOTES

- 1 20 FT WIDE ACCESS ROAD
- 2 FIRE TRAINING FACILITY
- 3 36 IN RCP DRAIN PIPE
- 4 FOREBAY STORMWATER PRE-TREATMENT

HIGH POINT ELEV = 239.77 HIGH POINT STA = 15+35.09 PVI STA = 15+05.10 PVI ELEV = 239.26 A.D. = -6.92% K = 8.66 60' VC	HIGH POINT ELEV = 240.42 HIGH POINT STA = 16+03.77 PVI STA = 16+21.62 PVI ELEV = 240.63 A.D. = -7.00% K = 7.14 50' VC	LOW POINT ELEV = 224.00 LOW POINT STA = 19+59.52 PVI STA = 18+88.30 PVI ELEV = 224.68 A.D. = 4.98% K = 28.62 142' VC	LOW POINT ELEV = 223.46 LOW POINT STA = 20+25.48 PVI STA = 20+33.01 PVI ELEV = 223.27 A.D. = 2.67% K = 22.47 60' VC
---	---	--	---



NO.	DESCRIPTION	DATE	BY

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DESIGNED BY: MEF
DRAWN BY: MEF
REVIEWED BY: DH
DATE: JUNE 2025



PROJECT
FIRE TRAINING FACILITY

SHEET TITLE
GRADING AND DRAINAGE PLAN

DRAWING NO.
W3.1
SHEET 3 OF 3