

CITY OF DOVER

DOVER CONSERVATION COMMISSION – AGENDA

Meeting Type: Regular Meeting
Meeting Location: City Council Conference Room - 288 Central Avenue Dover NH
Meeting Date: Tuesday, October 15, 2024
Meeting Time: 5:30 pm

1. CALL TO ORDER AND ROLL CALL

2. CITIZEN’S FORUM

3. APPROVAL OF THE PRIOR MEETING MINUTES – September 09, 2024

4. OLD BUSINESS

5. NEW BUSINESS

- A.** Conditional Use Permit (CUP) for 210 Tolend Road LLC, Assessor’s Map F, Lot 3, zoned R-40, and located off of Tolend Road across from Lika Drive. Proposal is for a 32-lot subdivision that includes an open space subdivision yield plan that would cause 700 s.f. of wetland impact and 6,400 s.f. of the 50-foot wetland buffer impact. In order for the yield plan to be considered realistic to calculate the density for an Open Space Subdivision plat, a CUP is required.

- B.** Conservation and Open Space Chapter Update

6. REPORT FROM THE CHAIR

- A.** Review of Correspondence Received from NH Department of Environmental Services

7. OTHER BUSINESS

- A.** Update from Forest Management Subcommittee

8. ADJOURNMENT



CITY OF DOVER

DOVER CONSERVATION COMMISSION – MINUTES

Meeting Type: Regular Meeting
Meeting Location: City Council Conference Room - 288 Central Avenue, Dover, NH
Meeting Date: Monday, September 9, 2024
Meeting Time: 5:30 pm

MEMBERS PRESENT: Steve Fellows (Vice Chair), Kristen Murphy, Brianna Group, Abigail Lyon, Russ Warnock (Alternate)

Absent (Excused):, Bill Hunt (Chair), Robert Atwood (Secretary)

Absent (Unexcused): Jake Geddes

STAFF PRESENT: Jackson Kaspari – Resilience Manager

OTHERS PRESENT: Councilor Williams, Steve Haight, Chad Kageleiry, Sam Hayden, Sarah Large

1. CALL TO ORDER AND ROLL CALL

The meeting was convened at 5:30 PM.

2. CITIZENS' FORUM

The Chair gave instructions for Citizens' forum

None

3. APPROVAL OF THE PRIOR MEETING MINUTES- August 12, 2024

K. Murphy moved to approve the minutes of August 12 as submitted. B. Group seconded. Vote: All in favor with A. Lyon abstaining

4. OLD BUSINESS:

None

5. NEW BUSINESS:

A. City of Dover Conditional Use Permit for Del Sol Dover, LLC, Assessor's Map G, Lot 2-1, zoned CM, located at the end of Crosby Road. Proposal is to create a three-lot subdivision which will be accessed from an extension of Crosby Road with associated drainage and grading creating 4,861 square feet of permanent impact to the 50-foot wetland buffer.

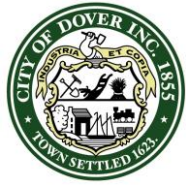
S. Haight, CivilWorks and C. Kageleiry, owner represented the item and explained the proposal including location of property, wetland buffers and impacts, road and right-of-way extensions.

They, along with staff, clarified information to the commission relating to wetlands, no vernal pools on the site, open space audit criteria, and deed- restricted area being transferred to Fish and Game.

R. Warnock moved to endorse the proposal with the condition that a note be added to the plans indicating the date of the most recent wetlands delineation. A. Lyon seconded. Vote: All in favor

B. City of Dover Conditional Use Permit for Del Sol Dover, LLC, Assessor's Map G, Lot 2-1, zoned CM, located at the end of Crosby Road. Proposal is to construct a 9,600 square foot warehouse building with associated parking and utility and drainage improvements creating 786.5 square feet of permanent impact to the 50-foot wetland buffer.

S. Haight, CivilWorks and C. Kageleiry, owner represented the item and explained the proposal including site description, plans for the site, stormwater details, and wetland buffer impacts.



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They, along with staff, clarified information to the committee relating to containment of stored materials, monitoring wells, signage for wetlands, storm water management, planned vegetation, and snow removal.

Discussion with commission member and J. Kaspari regarding progress on the Plantings list- selecting for particular areas.

K. Murphy moved to endorse the proposal as presented. B. Group seconded. Vote: All in favor

C. NHDES Standard Dredge and Fill Wetlands Permit for Jenny L. Lang, Assessor's Map L, Lot 95-1L, zoned R-20, located at 15 Landing Way. Proposal is to construct a tidal docking structure consisting of a 4' x 24' accessway, a 4' x 120' fixed wood pier, a 3' x 40' gangway and a 10' x 30' float totaling 96 square feet of permanent impact to the previously developed 100' Tidal Buffer Zone and 900 square feet of permanent impact to tidal wetlands

Sam Hayden (in place of Steve Riker) presented the project for feedback which will be sent to NHDES. No local permit is being sought. He explained the logistics of the construction process and that it's a seasonal structure that is pulled up out of season.

He clarified additional information to the committee.

A. Lyon moved to endorse the proposal as presented. R. Warnock seconded. Vote: All in favor

D. New Meadows Rapid Ecological Assessment

Sarah Large presented the assessment to the committee.

Committee members asked some clarifying questions which were discussed: community trail locations and connectivity, American beech trees/ disease.

E. Additional Volunteer Opportunities – Planning Board and Cocheco River Local Advisory Committee

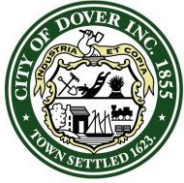
J. Kaspari noted there are vacancies on these boards and to reach out if anyone is able to join, or spread the word to others who might be interested.

Apple Harvest Day is Oct 5th and the Energy Commission is organizing a sustainability outreach event at City Hall and is looking for engagement from appropriate committees.

F. Conservation and Open Space Chapter Update

J. Kaspari noted the steering committee has reviewed the draft outline for the structure of the chapter and associated materials. Staff review is anticipated for November, then it will come before this commission and then the Planning Board hopefully by December.

Discussion continued about the Natural Resource Inventory



CITY OF DOVER

DOVER CONSERVATION COMMISSION – MINUTES

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6. REPORT FROM THE CHAIR

A. Review of Correspondence Received from NH Department of Environmental Services

None

7. OTHER BUSINESS

A. Update from Forest Management Subcommittee

Topics discussed:

- Reviewed the findings of the fellow
- Upcoming site walk for forest management and recreational use
- Pocket forest postponed until an opportunity arises
- Land acquisition research

Update on donated tree which was installed.

Discussion about what is the best avenue to continue the work the fellow was doing on urban forestry/ species list. The conversation extended to ongoing grant preparation, plans if granted, and process for how lists are implemented.

Resources from other cities and the county were suggested to review.

8. ADJOURNMENT

A. Lyon moved to adjourn. R. Warnock seconded. Vote: U/A

The meeting was adjourned at 6:52 PM.



PERMIT SNAPSHOT REPORT COND-2024-0028 FOR CITY OF DOVER, N.H.

Permit Type Conditional Use **Project:** **App Date:** 09/03/2024
Work Class: Environmental **District:** None **Exp Date:** NOT AVAILABLE
Status: In Review **Square Feet:** 0.00 **Completed:** NOT COMPLETED
Valuation: \$0.00 **Assigned To:** Blonigen, Rachel **Approval**
Expire Date:
Description: Wetlands impact of 700 square feet and wetland buffer impact of 6,400 square feet associated with an Open Space Subdivision Yield Plan.

Parcel: F0003-000000	Main	Address: 210 Tolend Rd Dover, NH	Main	Zone: IT(Non-Residential - Innovative Technology) R-40(Residential - Rural)
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Owner Scott O'Neill Home: (603) 742-8107	Plan Preparer Tritech Engineering Corp. 755 Central Avenue Dover, NH 03820 Business: (603) 742-8107	Applicant Tritech Engineering Corp. 755 Central Avenue Dover, NH 03820 Business: (603) 742-8107
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Permit Custom Fields

Select Permit Type	Wetland Protection District	General Purpose	New Construction	Project Zone	Residential
What is the parcel zoned?	R-40	Work	Wetlands impact of 700 square feet and wetland buffer impact of 6,400 square feet associated with and Open Space Submdivision Yield Plan.	permitstatedef	NHDES AoT, not yet applied for.

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Robert_Stowell_9/3/2024.jpg	09/03/2024 15:15	Stowell, Robert		Uploaded via CSS
Permit Snapshot Report.pdf	09/03/2024 15:15	Service, EnerGov		Attached by IO - ATTACH: Initial Permit Snapshot

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00009157	Planning General Application Fee	\$200.00	\$200.00
Total for Invoice INV-00009157		\$200.00	\$200.00
Grand Total for Permit		\$200.00	\$200.00

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Conditional Use Review v.1	In Review	10/01/2024	10/29/2024		No	No
Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Bassegio, Erin	In Review	10/01/2024	10/29/2024	

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		10/01/2024 10:16	
Confirm application complete v.1	Generic Action		10/01/2024 10:17
Conditional Use Review v.1	Receive Submittal	10/01/2024 0:00	

Planning Board v.1	
Planning Board Agenda v.1	Task
Invoice for Notices v.1	Task
Send Notices v.1	Task
Planner Creates Staff Recommendations v.1	Permit Activity
Distribute Planning Board Materials v.1	Task
Planning Board Hearing v.1	Hold Hearing

PERMIT SNAPSHOT REPORT (COND-2024-0028)

Planning Board Decision v.1	Permit Activity
NOD Sent to Applicant v.1	Create Report
Issue Permit v.1	
Verify Fees Prior to Permit v.1	Generic Action
Issue and Review Permit v.1	Generic Action
Print and Email Permit v.1	Generic Action
Plans uploaded to Treeno v.1	Generic Action
Internal Notification of Plan Completion v.1	Generic Action
Recording v.1	Task

TRITECH

ENGINEERING CORPORATION

755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

TELEPHONE 603.742.8107
FACSIMILE 603.742.3830

October 7, 2024

Donna Benton, AICP
Director of Planning & Community Development
City of Dover, Planning Department
288 Central Avenue
Dover, New Hampshire 03820

Subject: Conditional Use Permit Application
210 Tolend Road, LLC
Tolend Road & Emeral Lane
Dover Tax Map F Lot 3
Dover, New Hampshire
Job No. 23118

Dear Donna:

On behalf of the property owner, 210 Tolend Road LLC, we are submitting this Conditional Use Permit (CUP) application for impacts to the Wetland Protection District of an Open Space Subdivision Yield Plan. Specifically; the Open Space Subdivision Yield Plan would cause 700 square feet of wetland impact and 6,400 square feet of wetland buffer impact.

Project Background

The property owner, 210 Tolend Road LLC, wishes to subdivide their property located at 210 Tolend Road. The subject property is located the R-40 Zoning District. In accordance with City of Dover Subdivision Regulations Chapter 157 Section IV, properties in this district must be subdivided in compliance with the Open Space Subdivision Regulations. Therefore, the applicant is proposing an open space subdivision of the subject property.

The initial task in the open space subdivision process is the determination of the maximum allowable density of the property to be subdivided. In accordance with Subdivision Regulation 157-21.D(1) "The maximum number of dwelling units permitted in an open space subdivision shall be determined by a submitted yield plan. The resultant number shall not allow a higher density than that provided by a conventional subdivision on the same parcel.

The attached open space subdivision yield plan is a conventional subdivision plan of the subject property that depicts 32 subdivision lots. If this yield plan were to be constructed, it would cause the above noted impacts to the Wetland Protection District. Therefore, the planning staff has required that the applicant make this Conditional Use Permit request to ensure that the yield plan is valid.

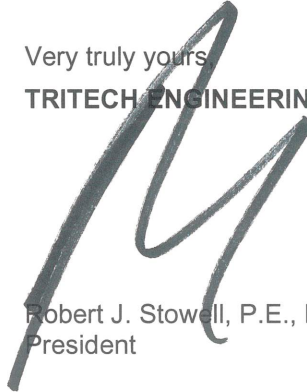
We look forward to meeting with the Conservation Commission at their October 15th meeting and discussing this Conditional Use Permit application & plan.

Attached please find the supporting documentation:

- Conditional Use Permit Application.
- Open Space Subdivision Yield Plan.
- Conditional Use Permit Plan for the OSS Yield Plan.
- NH Method Wetland Evaluation w/Photographs & USGS Map.
- Conditional Use Permit Narrative (Revised).
- Alternate Crossing Plan.

Please advise should you have any questions.

Very truly yours,
TRITECH ENGINEERING CORP.



Robert J. Stowell, P.E., L.L.S.
President

RJS / rms

Attachments

\\23118CUPsubmittaltr2.docx



City of Dover, New Hampshire CONDITIONAL USE PERMIT APPLICATION

[Revision Date: October 19, 2020]

Office Use Only	Project #:	_____	Date Received:	_____
	Amount Paid:	_____	Time Received:	_____

APPLICANT AND OWNER INFORMATION

Name of Applicant: _____ 210 Tolend Road LLC Telephone # _____ 978-375-3153

Address of Applicant: _____ 42J Dover Point Road, Dover NH

E-Mail Address: _____ johnoneill.nh@gmail.com

Name of Property Owner (if different from applicant): _____ Telephone # _____

Address of Property Owner: _____

PROPERTY INFORMATION

Assessor's Map # _____ F Lot(s) # _____ 3

Address of Property: _____ 210 Tolend Road, Dover NH

Zoning District(s) _____ R-40 Overlay District(s) _____ Wetland Protection

Existing Use of Property: _____ Single family residential

CONDITIONAL USE PERMIT INFORMATION

Type of Conditional Use Permit (Check All That Apply):

- | | | |
|---|---|--|
| ☐ Conservation District | ☐ RCM Use Overlay District | ☐ Gateway District |
| ☐ Groundwater Protection | ☐ Off-Street Parking and Loading | ☐ Alternative Treatment Center |
| ☒ Wetland Protection District | ☐ Central Business District | ☐ Heritage Residential District |

Describe Proposed Use or Activity That Requires Conditional Use Permit and Describe Any Impacts:

Wetlands impact of 700 sq. ft. & wetland buffer impacts of 6,400 sq. ft. associated with an Open Space Subdivision Yield Plan.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: NHDES AoT (not yet filed)

Name of Professional That Prepared Plans: Robert J. Stowell (Tritech Engineering Corp.)

Address 755 Central Ave, Dover NH Telephone #: 603-742-8107

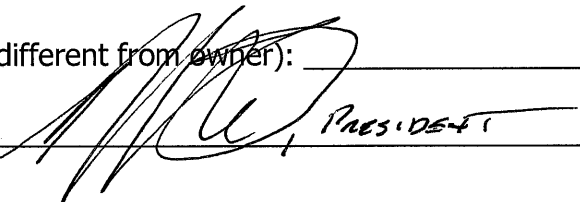
Professional License #: 9903 E-mail address: rjs@tritecheng.com

SIGNATURES

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner: _____ Date: _____

Signature of Applicant (if different from owner): _____ Date: _____

Signature of Agent:  PRESIDENT Date: 09/03/2024

AUTHORIZATION TO ENTER SUBJECT PROPERTY

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: _____

CITY OF DOVER CONDITIONAL USE LIST OF ABUTTERS

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. Staff will provide the abutter information, while the applicant must provide accurate contact information for the owner, applicant and professional agents representing the project.

Owner:

TAX MAP	LOT #	PROPERTY OWNER	<u>MAILING ADDRESS</u>
F	3	210 Tolend Road LLC	42J Dover Point Road, Dover NH

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	<u>MAILING ADDRESS</u>

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	<u>MAILING ADDRESS</u>
Robert J. Stowell	Tritech Engineering Corporation	755 Central Ave, Dover NH
Michael Mariano	Highland Soil Services	75 Prospect St, Somersworth NH

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	<u>MAILING ADDRESS</u>

CITY OF DOVER
CONDITIONAL USE PERMIT CRITERIA
Zoning Ordinance §170-27.1 (F) – Conditional Use Approval

NARRATIVE

for

Ambrose Woods

210 Tolend Road
Dover, New Hampshire
October 2024

F. Conditional Use Approval.

- (1) Conditional Use approval may be granted by the PLANNING BOARD (RSA 674:21II) after proper public notice and public hearing, for construction within the Wetland Protection District or buffer. Said construction may include, but is not limited to a road or other accessway, utility right-of-way, communication lines, power lines and pipelines, STRUCTURES, and parking LOTs provided that the proposed construction complies with the following standards:

- (a) *Practicable Alternative:* There is no practicable alternative that would have less adverse impact on the area.

The applicant owns approximately 9 acres of upland (22 percent of the total upland) which is inaccessible without a wetland crossing. Based on current City of Dover Regulations his upland area can support approximate 8 homes (25 percent of the total yield). This area is inaccessible without impact to the wetland. This impact location is the least impacting alternate to gain access to that land.

- (b) *Avoidance:* The potential impacts have been avoided to the maximum extent practicable. The APPLICANT will demonstrate by plan and example that the proposed construction represents the least impacting alternative.

We have attached an Alternate Impact Plan which show wetland impact of 3960 square feet which 3260 square feet greater than and is over 5 times the wetland impact than the location selected. The wetland buffer impact at this alternate location is 11,330 which 4930 square feet greater than and almost double the buffer impact of the location selected. Although, a NH Method analysis was not completed, it is clear that this location has greater functions and values than the proposed crossing. This alternate impact location is the only other location that could reasonably be considered. This impact location avoids larger wetlands with greater functions and values.

- (c) *Minimization:* Any unavoidable impacts have been minimized. No reasonable alternative to the proposed construction exists which does not impact a wetland or which has less detrimental impact on a wetland. Design, construction and maintenance methods will be prepared by a registered engineer to minimize detrimental impacts to the wetlands and will include restoration of the site as nearly as possible to its original grade.

This impact location is at the narrowest part of the wetlands and coincides with an existing woods road crossing with an existing culvert. The wetland impact at this location is 700 square feet or 0.10 percent of the total wetlands on the subject property. The wetland buffer impact at this location is 6400 square feet or 0.17 percent of the total wetland buffer on the subject property. The crossing at this location minimizes detrimental impacts to the wetlands. This design has been prepared by a professional engineer to meet current City of Dover, State of New Hampshire and Federal Government regulations.

CITY OF DOVER
CONDITIONAL USE PERMIT CRITERIA
Zoning Ordinance §170-27.1 (F) – Conditional Use Approval

NARRATIVE

for

Ambrose Woods

210 Tolend Road
Dover, New Hampshire
October 2024

- (d) *Mitigation*: if the APPLICANT is required by State rules to prepare a compensatory mitigation plan, the APPLICANT shall provide the Conservation Commission and PLANNING BOARD with one copy each of said plan for their review.

This impact would be classified as a Minimum Impact application with NHDES and does not meet their threshold for required mitigation.

- (e) Approval for the wetlands impact has been received from the NHDES Wetlands Bureau pursuant to Section G (3).

As this request relates to an impact associated with an OSS Yield Plan, we do not intend to seek NHDES approval.

- (f) To assess and summarize the wetlands' functions and values as denoted in the NH Method and Section 170-27.1(B)(2).

Michael Mariano of Highland Soil Services, a New Hampshire Certified Wetland Scientist has completed the attached NH Method worksheets. These results low or very low scores for the functions and values of the Wetland being impacted by the proposed roadway crossing.

As it relates specific function outlined in 170-27.1(B)(2):

- **Flood protection – NH Method score 0.036.**
- **Recharge of Ground Water – NH Method score 1.0.**
- **Augment stream flow – not scored by the NH Method.**
- **Filtration of water flow – NH Method score 2.14.**

**NH Method for the Evaluation of Freshwater Wetlands
Ambrose Woods
210 Tolend Road
Dover, New Hampshire
September 30, 2024**

This report evaluates the wetland at a proposed road crossing approximately 450 feet southwest of the existing house at 210 Tolend Road.

The narrow wetland, bisected by an existing woods road and culvert is approximately 2,000 square feet at 150 long and between 10 and 15 feet wide. It is essentially a drainageway that provides a hydrologic connection between larger wetlands to the north and south. Due to the distinct characteristics, functions and values of this narrow wetland, it has been separated from the larger wetlands for evaluation.

The evaluation provided by the NH Method for this wetland summarizes the wetland's functions and values as denoted in the City of Dover Zoning Ordinance Section 170.27.1 Wetland Protection District.

2. HOW THE NH METHOD WORKS

A. Wetland Functions

Wetland functions represent the practical, measurable values of wetlands. While many functions of wetlands are important to people, not all wetlands perform all of these functions at a high level, and not all functions are performed equally in each wetland. How a wetland functions depends on the specific biological and physical features of each wetland site. The NH Method addresses twelve wetland Functions:

FUNCTION	DESCRIPTION
Ecological Integrity	Evaluates the overall health and stability of the wetland ecosystem
Wetland-Dependent Wildlife Habitat	Evaluates the suitability of the wetland as habitat for those animals typically associated with wetlands and wetland edges. No single species is emphasized.
Fish and Aquatic Life Habitat	Evaluates the suitability of surface waters associated with the wetland as habitat for fish and other aquatic life. No single species or group of species is emphasized.
Scenic Quality	Evaluates the visual and aesthetic quality of the wetland.
Educational Potential	Evaluates the suitability of the wetland as a site for education and research.
Wetland-Based Recreation	Evaluates the suitability of the wetland and associated streams and ponds for non-powered boating, fishing, hunting and other similar recreational activities.
Flood Storage	Evaluates the effectiveness of the wetland for storing floodwaters and reducing downstream flooding.
Groundwater Recharge	Evaluates the potential of the wetland to recharge an underlying aquifer.
Sediment Trapping	Evaluates the effectiveness of the wetland for trapping sediments in runoff water from surrounding upland.
Nutrient Trapping/Retention/Transformation	Evaluates the effectiveness of the wetland for retaining and cycling nutrients, thereby reducing the impacts of excess nutrients in runoff to downstream lakes and streams.
Shoreline Anchoring	Evaluates the effectiveness of the wetland in preventing shoreline erosion.
Noteworthiness	Evaluates the wetland for one or more outstanding features such as critical wildlife habitat, rare species, high value wetlands in urban settings, etc.



NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
 NH CWS #183

1 – ECOLOGICAL INTEGRITY

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there land uses in the wetland's watershed that could degrade water quality in the wetland?		a. Less than 5% of the watershed has land uses that could degrade water quality. b. 5-10% of the watershed has land uses that could degrade water quality. c. > 10% of the watershed has land uses that could degrade water quality.	10 5 1
2. Is there evidence of fill in the wetland?	Existing woods road with culvert crosses the wetland	a. Less than 1 % b. From 1-3 % c. More than 3 %	10 5 1
3. What percentage of the wetland has been altered by agricultural activities?		a. Less than 5 % b. From 5 to 25 % c. More than 25 %	10 5 1
4. What percentage of the wetland has been adversely impacted by logging activity within the last 10 years?		a. Less than 1% b. From 1 to 10 % c. More than 10 %	10 5 1
5. How much human activity is taking place in the wetland (e.g. ATV use, trails, cars, dumping of brush and garbage, etc.)?	Minor use of existing woods road - owner only	a. Low: Few trails in use, little or no traffic, and little or no litter. b. Moderate: Some used trails, roads, litter c. High: Many trails, roads, and/or litter	10 5 1
6. What percentage of the wetland is occupied by invasive plant species?		a. None b. 1-5% of the wetland has invasive species c. > 5% of the wetland has invasive species	10 5 1
7. Are there roads, driveways and/or railroads crossing or adjacent to the wetland or come within 500 ft. of the wetland?		a. No roads, driveways or railroads. within 500 ft. of, or in the wetland b. Roads, driveways, railroads are within 500 ft of the wetland c. Roads, driveways, railroads cross, or are adjacent to, the wetland	10 5 1
8. How much human activity is taking place in the upland within 500 feet of the wetland edge?	1 existing house at 210 Tolend Road	a. Less than 5% or no activity b. Human activity evident in up to 25% of the 500 ft zone c. Human activity evident in more than 25% of the 500 ft zone	10 5 1
9. What is the percent of impervious surface within 500 feet of the wetland edge?		a. Less than 3% impervious area within 500 ft of the wetland edge b. 3-10% impervious area within 500 ft of the wetland edge c. Greater than 10% impervious area within 500 ft of the wetland edge	10 5 1
10. Is there a human-made structure that regulates the flow of water through the wetland?	Culvert at 15'-wide x 150' long wetland connecting 2 larger wetlands	a. No human made structures present upstream of, or in the wetland. b. One or more human made structures present upstream of, or in the wetland but hydrologic modification is slight c. One or more human made structures present upstream of, or in the wetland that severely block or alter surface water hydrology	10 5 1

AVERAGE SCORE FOR ECOLOGICAL INTEGRITY

(Add scores for each question and divide by 10)

7.6

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS (revised December, 2015)

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

2 – WETLAND-DEPENDENT WILDLIFE HABITAT

Evaluation Questions	Observations & Notes	Answers	Score
1. What is the wetland acreage (including upland islands)?		a. More than 100 acres b. From 20 - 100 acres c. Less than 20 acres	10 5 1
2. What is the score for Ecological Integrity?		Average score for Ecological Integrity	7.6
3. Has water quality in the wetland been degraded by land use in the watershed?		Record Answer from Ecological Integrity , Question 1	10
4. What is the area of shallow permanent open water less than 6.6 feet deep, including streams and shallow ponds that are part of the wetland complex?	None	a. More than 3 acres b. From 0.5 to 3 acres c. Less than 0.5 acre	10 5 1
5. Is there deepwater habitat (lakes or ponds > 6.6ft deep) and/or 4 th order or higher rivers associated with the wetland?		a. Deepwater stream ≥1 mile long and/or lake or pond ≥10 acres present b. Deepwater stream < 1 mile long and/or lake or pond < 10 acres present c. No deepwater stream, lake or pond present	10 5 1
6. What is the diversity of vegetation classes in the wetland? <i>Refer to Appendix F for more information about wetland vegetation classes.</i>	PFO1	a. Three or more wetland classes (including upland islands) present b. Two wetland classes (including upland islands) present c. One wetland class present	10 5 1
7. Are other wetlands in close proximity to the study wetland?	Study wetland is a narrow drainageway connecting a palustrine forested wetland above the woods road and a palustrine forested wetland and palustrine emergent persistent wetland below the woods road.	a. Other connected or unconnected wetlands within a 0.25 mile distance b. Wetland connected to other wetlands within a 0.5 to 1 mile distance by perennial stream or lake, OR other unconnected wetlands are present within a 0.25 to 0.5 mile distance c. Wetland not hydrologically connected to other wetlands within 1 mile and more than 0.5 miles from other unconnected wetlands.	10 5 1

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

2 – WETLAND-DEPENDENT WILDLIFE HABITAT *(continued)*

Evaluation Questions	Observations & Notes	Answers	Score
8. Are there wildlife travel corridors allowing access to other wetlands?	Tolend Road to the north Emerald Lane to the south	a. Free access along well vegetated stream corridor, woodland, or lakeshore b. Access partially blocked by roads, urban areas, or other obstructions c. Access blocked by roads, urban areas, or other obstructions	10 5 1
9. What percentage of the wetland edge is bordered by undisturbed woodland or idle land (e.g. shrub land or abandoned fields) at least 500 feet in width?		a. More than 95% of the wetland b. More than 75-95% of the wetland c. Less than 75% of the wetland	10 5 1
10. What percentage of the wetland is occupied by invasive plant species?		Record Answer from Ecological Integrity , Question 6	5

AVERAGE SCORE FOR WILDLIFE HABITAT

(Add scores for each question and divide by 10)

5.16

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

3 – FISH AND AQUATIC LIFE HABITAT

Evaluation Questions	Observations & Notes	Answers	Score
1. What is the dominant land use in the watershed above wetland?		a. Woodland, wetland, or abandoned farmland b. Active farmland or rural residential c. Urban and heavily developed suburban areas, commercial and industrial areas.	10 5 1
2. Has water quality in the wetland been degraded by land use in the watershed?		Record Answer from Ecological Integrity , Question 1	10
3. What is the area of <u>shallow</u> permanent open water less than 6.6 ft deep, including streams and ponds within the wetland?		Record Answer from Wetland-Dependent Wildlife Habitat , Question 4	1
4. What is the acreage of <u>deepwater</u> habitats deeper than 6.6 feet (pond or lake) associated with the wetland?		a. More than 100 acres b. From 10 to 100 acres c. Less than 10 acres d. deepwater pond or lake not present	10 5 1 0
5. What is the width (bank to bank) of the stream within the wetland?		a. More than 50 feet b. From 25 to 50 feet c. Less than 25 feet d. No stream present	10 5 1 0
6. Does the stream channel appear to have been recently altered?		a. Stream is in a natural channel, either a meandering low gradient stream, OR a steeper gradient stream with pools and riffles b. Portions of stream appear recently modified, OR stream formerly channelized but has regained some natural channel features c. Stream appears to have been recently been channelized, OR stream is confined in a non-vegetated chute or pipe d. No stream present	10 5 1 0
7. Within the wetland, what is the diversity of substrate types in the area(s) <u>occupied by open water</u> (flowing or standing) for the non-growing season?	No open water Score of 0 chosen	a. 4 or more substrate types b. 2 or 3 substrate types c. 1 substrate type	10 5 1 0
8. How abundant are coarse woody material and large rocks associated with the open water portion of the wetland?	No open water Score of 0 chosen	a. Moderately Abundant to Abundant: More than 10% of the open water portion of the wetland area contains cover objects such as logs, stumps, branches and rocks b. Scarce: Less than 10% of the water open water portion of the wetland wetland area contains cover objects c. No visible woody materials or rocks	10 5 1 0

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
CWS #183

Evaluation Questions	Observations & Notes	Answers	Score
9. What is the abundance of floating & submerged vegetation?	Date of Observation:	a. Abundant: More than 70% of water area contains cover objects such as pond lilies, pondweed, and bladderwort b. Moderately abundant: From 30 to 70% of water area contains floating and submerged vegetation c. Scarce: Less than 30% of the water area contains floating and submerged vegetation	10 5 1 0
10. Are there artificial barriers to the passage of aquatic life? (e.g. dams, elevated culverts, bridge with a width less than the natural stream channel, road crossings, etc. along the stream reach associated with the wetland).		a. No artificial barrier(s) present. b. An artificial barrier is present and equipped with a fish ladder or other provisions for fish passage, <u>or</u> artificial barrier is only present during extreme low water c. Dam, elevated culverts or other artificial barrier(s) is present without provisions for fish passage d. Stream not present	10 5 1 0
11. Are fish or aquatic species present that are rare, threatened, endangered or "Species of Greatest Conservation Need"?		a. Documented occurrence of a rare or endangered fish or aquatic life species within or immediately adjacent to the subject wetland b. Documented occurrence of a rare or endangered fish or aquatic life species within .5 miles of wetland <u>and</u> suitable habitat exists for this species within the wetland c. No documented occurrence of a rare or endangered fish or aquatic life species within .5 miles of wetland, but suitable habitat exists and wetland is within range of one or more rare species d. No documented occurrence of a rare or endangered fish or aquatic life species within .5 miles of wetland, and suitable habitat is not known to exist	10 5 1 0

AVERAGE SCORE FOR FISH & AQUATIC LIFE HABITAT

(Add scores for each question and divide by 11)

2.1

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS (revised December, 2015)

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
CWS #183

4 – SCENIC QUALITY

Primary viewing Site: There are no viewing sites for this wetland

Evaluation Questions	Observations & Notes	Answers	Score
1. How many wetland vegetation classes are visible from the primary viewing location(s)? <i>Refer to Appendix F for more information about wetland vegetation classes.</i>	There are no viewing locations	a. Three or more classes b. Two classes c. One class	10 5 1 0
2. Is there public access at the viewing site?		a. Viewing site is on a property with public access, and trails to the site, or site is along a road. b. Wetland is on property with public access but <u>no</u> trails to the site. c. Wetland is on a property that does not have public access.	10 5 1
3. What is the visible extent across the wetland?		a. Large expanse visible and low growing plants, or mixed vegetation classes you can see through b. View is somewhat restricted by trees and shrubs c. Forested or scrub-shrub wetland with little or no expanse visible.	10 5 1
4. What is the approximate extent of open water (including streams) visible from the primary viewing location/s?	No open water	a. More than 3 acres b. From 1 to 3 acres c. Less than 1 acre	10 5 1
5. Does the wetland provide visual contrast with the surrounding landscape?		a. High level of visual contrast with surrounding natural landscape. b. Some visual contrast with surrounding natural landscape c. Little visual contrast with surrounding landscape, or surrounding landscape is developed	10 5 1
6. What is the general appearance of the wetland and surrounding land use(s) visible from primary viewing location(s)?	There are no viewing locations	a. Wetland is undisturbed and natural. No visual detractors, such as buildings, litter, abandoned cars, or powerlines b. Limited disturbance in and/or around wetland. Minor visual detractors c. Severe visual detractors present	10 5 1

AVERAGE SCORE FOR SCENIC QUALITY

(Add scores for each question and divide by 6)

3.7

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS (revised December, 2015)

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

5 – EDUCATIONAL POTENTIAL

Primary Educational Site(s): There is no educational site so the Educational Potential is not a wetland value

Evaluation Questions	Observations & Notes	Answers	Score
1. What is the Ecological Integrity of the wetland?		Average Score from 1- Ecological Integrity	<u>.6</u>
2. Does the wetland have high value wildlife habitat?		Average Score from 2 – Wetland-Dependent Wildlife Habitat	<u>5.16</u>
3. Does the wetland have high value fish and aquatic life habitat?		Average Score from 3 – Fish & Aquatic Life Habitat	<u>2.1</u>
4. Is all or part of the wetland on public or private property that has public or private access (i.e. with written permission)?		a. Wetland is on a property with public or private access and trails to the site. b. Wetland is on a property with public or private access but <u>no</u> trails to the site. c. Wetland is on a property that does not currently have public or private access.	10 <u>5</u> 1
5. How close is the educational site to off-road parking suitable for 5-10 vehicles or large enough for a school bus?		a. Adequate parking is available less than a 5 minute walk from the educational site. b. Adequate parking is a 5-15 minute walk from educational site, or parking is limited to less than 5 cars. c. Adequate parking is more than 15 mins walk from the educational site, or no adequate parking is available.	10 5 <u>1</u>
6. How many wetland vegetation classes are accessible or potentially accessible for study at the educational site? <i>Refer to Appendix F for more information about wetland vegetation classes.</i>		a. Three or more wetland vegetation classes b. Two wetland vegetation classes c. One wetland vegetation class	10 <u>5</u> 1
7. Is there access to open water (include streams) associated with the wetland at educational site?		a. Direct access to water available b. Water access is a short distance (5 mins or less) from the educational site c. No access or access not feasible d. No open water	10 5 1 <u>0</u>
8. What is the aesthetic and visual quality of the educational site?		Average Score from 4 – Scenic Quality	<u>3.7</u>
9. Is the educational site accessible to the disabled?		a. Yes b. No	10 <u>0</u>

AVERAGE SCORE FOR EDUCATIONAL POTENTIAL

(Add scores for each question and divide by 9)

3.4

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

6 – WETLAND-BASED RECREATION (CANOEING, KAYAKING, AND WILDLIFE OBSERVATION)

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there opportunities for wildlife observation?		Average score for 2 – Wetland-Dependent Wildlife Habitat	<u>5.16</u>
2. Is there access to suitable open water for canoes and kayaks?		a. Open water is present, with easy access b. Open water is present, but site is not easily accessed for canoes/kayaks. c. Open water is present but no access is allowed or possible d. No open water suitable for canoe/kayak	10 5 1 <u>0</u>
3. Are there trail-based recreation opportunities?		a. Maintained trails are present in and immediately adjacent to the wetland b. Trails are present but not maintained c. No trails are present	10 5 <u>1</u>
4. Are there off-trail recreation opportunities?		a. Wetland has open water greater than 0.5 acres in size AND an undisturbed 500 ft buffer for greater than 75% of the wetland edge. b. Wetland has open water greater than 0.5 acres in size OR an undisturbed 500 ft buffer for greater than 75% of the wetland edge. c. Wetland has neither open water nor an undisturbed buffer greater than 75% d. No access to potential recreation site or access not feasible	10 5 1 <u>0</u>
5. Is there off-road public parking at the potential recreation site for at least two cars?		a. Adequate parking is available less than 5 minutes from the recreation site. b. Adequate parking is a 5-10 minute walk from the recreation site, or parking is limited. c. Adequate parking is more than 10 minutes walk from the recreation site, or no adequate parking is available. d. No access to potential recreational site or access is not feasible	10 5 1 <u>0</u>
6. What is the scenic quality of the potential recreational site?		Average score from 4 – Scenic Quality	<u>3.7</u>

AVERAGE SCORE FOR WATER-BASED RECREATION
(Add scores for each question and divide by 6)

1.6 score derived from table values. But with no open water there are no opportunities for water-based recreation

1.6

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS (revised December, 2015)

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

7 – FLOOD STORAGE

Instead of manually calculating the Wetland Flood Index on this data sheet, you can use the Flood Index Worksheet, an Excel spreadsheet provided on the [NH Method website](#) which is set up to do all the calculations for you. An example of the spreadsheet is provided in Table 3.

Note that this function is scored somewhat differently from the other NH Method function. A series of factors are developed that are then use to derive the Flood Storage Index. The numerical scores for the factors do not correspond to the 10, 5, 1, 0 scoring scale used in the other functions.

In the following situations, the Flood Value Index does not need to be calculated for the wetland being studied. Instead a certain flood index range can be assumed:

1. Wetlands with slopes greater than 10% (10' vertical :100' horizontal) as measured along the flow path, where it is obvious that little flood attenuation could occur, **should be assigned a Low Flood Index Value range (0.0 to 0.9).**
2. For large ponds or lakes or wetlands with ponded water surface area greater than 200 acres and streams that are Fourth Order or higher (i.e. 4th, 5th, 6th etc.) **assign a High Flood Index Value range (7.6 to 10.0)**

Evaluation Questions	Observations and Notes	Answers	Factor
1. What is the Wetland Acreage (W)? <i>Be sure to EXCLUDE the acreage of any upland islands from the total wetland acreage</i>		<u>0.05</u> acres	
2. What is the Watershed Acreage (S)?		<u>7.5</u> acres	
3. What is the Water Storage Depth in the wetland (D)?		a. Use the actual water storage depth if known b. Assign a default value of 1.0 if the wetland is located in a 100 year floodplain c. Assign a default value of 1.0 ft if the actual water storage depth is not known	D= ___ ft D=1.0 ft D=1.0 ft
4. What is the Wetland Storage Volume (V)?		Multiply Water Storage Depth by Wetland acreage: D x W = V	V= <u>0.05</u> acre feet
5. Wetland Storage Volume Factor (F)		Insert value from Table 1	F= <u>0.012</u>
6. Watershed Area Factor (A)		Insert value from Table 2	A= <u>0.50</u>
7. Location of wetland within the watershed (L) <i>(Choose the highest factor that applies)</i>		a. Wetland located within 1,000 ft of a 4 th order or higher stream OR within 1000 ft of a pond/lake that outlets to a 4 th order or higher stream b. Wetland located within 500 ft of a perennial stream (less than 4 th order) c. Neither of the above situations apply to the study wetland	1.0 0.8 0.6

SCORE FOR WETLAND FLOOD INDEX = F x A x L x 10

0.036

Use the score to locate the Value Range below and assign Flood Index Value

Wetland Flood Index Values	Flood Value Type
0.0 – 0.9	Low Flood Value
1.0 – 2.5	Low to Moderate Flood Value
2.6 – 5.0	Moderate Flood Value
5.1 – 7.5	Moderate to High Flood Value
7.6 – 10.0	High Flood Value

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS (revised December, 2015)

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

8 – GROUNDWATER

Note that this function does not require any field work

Evaluation Questions	Observations & Notes	Answers	Score
1. Does the wetland overlie a stratified drift aquifer?		a. Wetland overlies a stratified drift aquifer b. Wetland is within ¼ mile of a stratified drift aquifer c. Wetland is more than ¼ mile from a stratified drift aquifer	10 5 ☐ 1
2. Is the wetland in a potential public water supply area?		a. Wetland is in an area identified by Favorable Gravel Well Analysis b. Wetland is within ¼ mile of an area identified by Favorable Gravel Well Analysis c. Wetland is more than ¼ mile from an area identified by Favorable Gravel Well Analysis	10 5 ☐ 1
3. Is the wetland within a public wellhead protection area?		a. More than 75% of the wellhead protection area includes the wetland b. 25%-75% of the wellhead protection area includes the wetland c. Less than 25% of the wellhead protection area includes the wetland	10 5 ☐ 1
4. What is the percent coverage of highly permeable soils within 100 ft of the wetland? <i>Refer to Table 3 to answer this question</i>		a. More than 50% of the soil types within 100 ft of the wetland are on the list in Table 3. b. 25-50% of the soil types within 100 ft of the wetland listed in Table 3 c. Less than 25% of soil types within 100 ft of the wetland are listed in Table 3	10 5 ☐ 1
5. What is the percent coverage of the highly permeable soil types listed in Table 4 within the wetland? <i>Refer to Table 4 to answer this question</i>		a. More than 50% of the soil types within the wetland are on the list in Table 4 b. 25-50% of the soil types within the wetland listed in Table 4 c. Less than 25% of the soil types within the wetland are listed in Table 4	10 5 ☐ 1

AVERAGE SCORE FOR GROUND WATER

(Add scores for each question and divide by 5)

1

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

9 – SEDIMENT TRAPPING

Evaluation Questions	Observations &Notes	Answers	Score
1. What is the wetland's Flood Storage value?		Average score from 7 – Flood Water Storage.	<u>0.036</u>
2. Does the wetland lack outlet or have a constricted outlet?		a. Wetland has no outlet or has a constricted outlet or is ponded above the outlet b. Wetland has an outlet but flow path through wetland is primarily sheet flow c. Wetland outlet not constricted or flow primarily within stream channel.	10 5 1
3. What is the character of water flow through the wetland? $\frac{\text{Channel Length}}{\text{Straight line distance of stream}} = \text{Sinuosity Ratio}$		a. At least one of the following situations apply: - No stream channel OR - Inlet present but no outlet OR - Outlet is im ponded and standing water present in downstream end of wetland OR - Inlet and outlet present and channel sinuosity is ≥ 1.5 b. Inlet and outlet present, and sinuosity of channel is >1.0 and <1.5 c. Channel is straight (sinuosity=1.0) and no impoundments within wetland or at wetland outlet	10 5 1
4. What is the ratio of the wetland's size to the size of its watershed? $\frac{\text{Acres of Wetland}}{\text{Area of watershed above wetland outlet}} \times 100$		a. Wetland is more than 10% of its watershed b. Wetland is between 1-10% of its watershed. c. Wetland is less than 1% of its watershed.	10 5 1
5. What is the gradient within the wetland?		a. Wetland has gradient $< 0.5\%$ or no outlet b. Wetland gradient is 0.5% to 3% c. Wetland has gradient greater than 3% .	10 5 1
6. What is the areal extent (% coverage) all vegetation types that will most likely trap sediments? (e.g. forested swamps, scrub shrub swamps, and persistent emergent marshes) <i>Refer to Appendix F for more information about wetland vegetation classes.</i>		a. Persistent emergent plants (stems above surface of water /wetland throughout the year), trees and/or shrubs cover at least 90% of the surface area of the wetland. b. Persistent emergent, trees and/or shrubs, and/or non-persistent emergents (stems fall below the surface of water/wetland during fall and winter) cover 50-90% of the wetland's surface area. c. Persistent emergent, trees and/or shrubs, and/or non-persistent emergents (stems fall below the surface of water/wetland during fall and winter) cover $<50\%$ of the wetland's surface area.	10 5 1
7. What is the average water depth in the wetland during growing season?		a. Average water depth is < 1 ft or there is no open water b. Average water depth > 1 ft and < 6.6 ft. c. Average water depth is greater than 6.6 ft	10 5 1

AVERAGE SCORE FOR SEDIMENT TRAPPING:
(Add scores for each question and divide by 7)

2.14

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

10 – NUTRIENT REMOVAL/RETENTION/TRANSFORMATION

Evaluation Questions	Observations & Notes	Answers	Score
1. What is the wetland's Flood Storage value?		Average score from 7 – Flood Storage.	<u>0.036</u>
2. What is the wetland's ability to trap sediments?		Average score from 9 – Sediment Trapping.	<u>2.14</u>
3. What is the extent (percent cover) of persistent emergent vegetation, trees and/or shrubs within the wetland?		Record answer from 9 – Sediment Trapping, Question 6	<u>1</u>
4. What hydroperiod occurs over more than 50% of the wetland?		a. Semi-permanently flooded, seasonally flooded/saturated, or saturated b. Seasonally flooded, seasonally flooded/well-drained or temporarily flooded c. Permanently flooded or intermittently exposed	10 5 1
5. What hydric soils cover the greatest percentage of the wetland?		a. Wetland is dominated by fine textured soils (refer to Table A, Appendix D) b. Wetland is dominated by organic and/or peat soils (refer to Table B, Appendix 3) c. Wetland is dominated by sands and gravels (refer to Table C, Appendix D)	10 5 1

AVERAGE SCORE FOR NUTRIENT TRANSFORMATION

(Add scores for each question and divide by 5)

4.6

Wetland Name/Code: _____ Evaluation Date: _____ Evaluator: _____

11 – SHORELINE ANCHORING

If there is no stream, river, lake or pond within or adjacent to the wetland,
leave this Function out of the evaluation.

Evaluation Questions	Observations & Notes	Answers	Score
1. What is the gradation of wetland vegetation types along the shoreline?		a. Three or more wetland vegetation types present (PAB, PEM, PSS or PFO) b. Two wetland vegetation types present c. One wetland vegetation type present	10 5 1
2. What is the vegetation density in the wetland bordering watercourse, lake or pond?		a. High: More than 90% woody or persistent vegetation cover b. Moderate: From 70-90% woody or persistent vegetation cover c. Low: Less than 70% woody or persistent vegetation cover	10 5 1
3. How wide is the wetland bordering the watercourse, lake or pond?		a. More than 20 feet b. From 10-20 feet c. Less than 10 feet	10 5 1
4. How "rough" is the substrate of the wetland at the shoreline of the waterbody?		a. Wetland substrate characterized by many boulders, stones or cobbles and woody material b. Wetland substrate has few boulders, stones or cobbles, or substrate is mostly gravel or coarse sands and little woody material c. Wetland substrate is uniformly smooth and is comprised of clays, silts or very fine sands or organic materials and no woody material	10 5 1

AVERAGE SCORE FOR SHORELINE ANCHORING

(Add scores for each question and divide by 4)

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS (revised December, 2015)

Wetland Name/Code: Ambrose Evaluation Date: 09-30-24 Evaluator: Michael Mariano
NH CWS #183

12 – NOTEWORTHINESS

Describe noteworthy features in the wetland narrative

Note that the scores for this function are totaled and NOT averaged

Evaluation Questions	Observations & Notes	Answers	Score
1. Is the wetland located in or within 500 ft of an area of Highest Ranked Habitat (state or regional level), as identified on the NH Wildlife Action Plan Highest Ranked Habitat Condition map?		☐ a. Yes	10
2. Does the wetland have local significance because has consistently high scores for all functions and/or is among the top ten largest wetlands in town?	No	a. Yes	10
3. Does the wetland have local, regional or statewide significance because it is located in a priority area, is documented in a local or regional conservation plan, or it has been recognized as having regional importance in the state?	No	a. Yes	10
4. Does the wetland have known biological, geological, or other elements that are rare or unique as documented by the NH Natural Heritage Bureau or as determined by a professional?		☐ a. Yes	10
5. Is the wetland known to contain a documented historical or archaeological site?	Reference the documentation here: No	a. Yes	10
6. Is the wetland hydrologically connected to a state or federally designated river within ¼ mile of the wetland's outlet?	No	a. Yes	10
7. Is the wetland one of just a few left in an urban setting?	No	a. Yes	10

TOTAL SCORE FOR NOTEWORTHINESS

20

Add up the scores for all questions which received a YES answer.

The total score is the score for this function (note that this score is not averaged).

For example, if you answered YES to four questions, the score would be 40.

If you answered YES to only one question, the score is 10

Summary of Scores

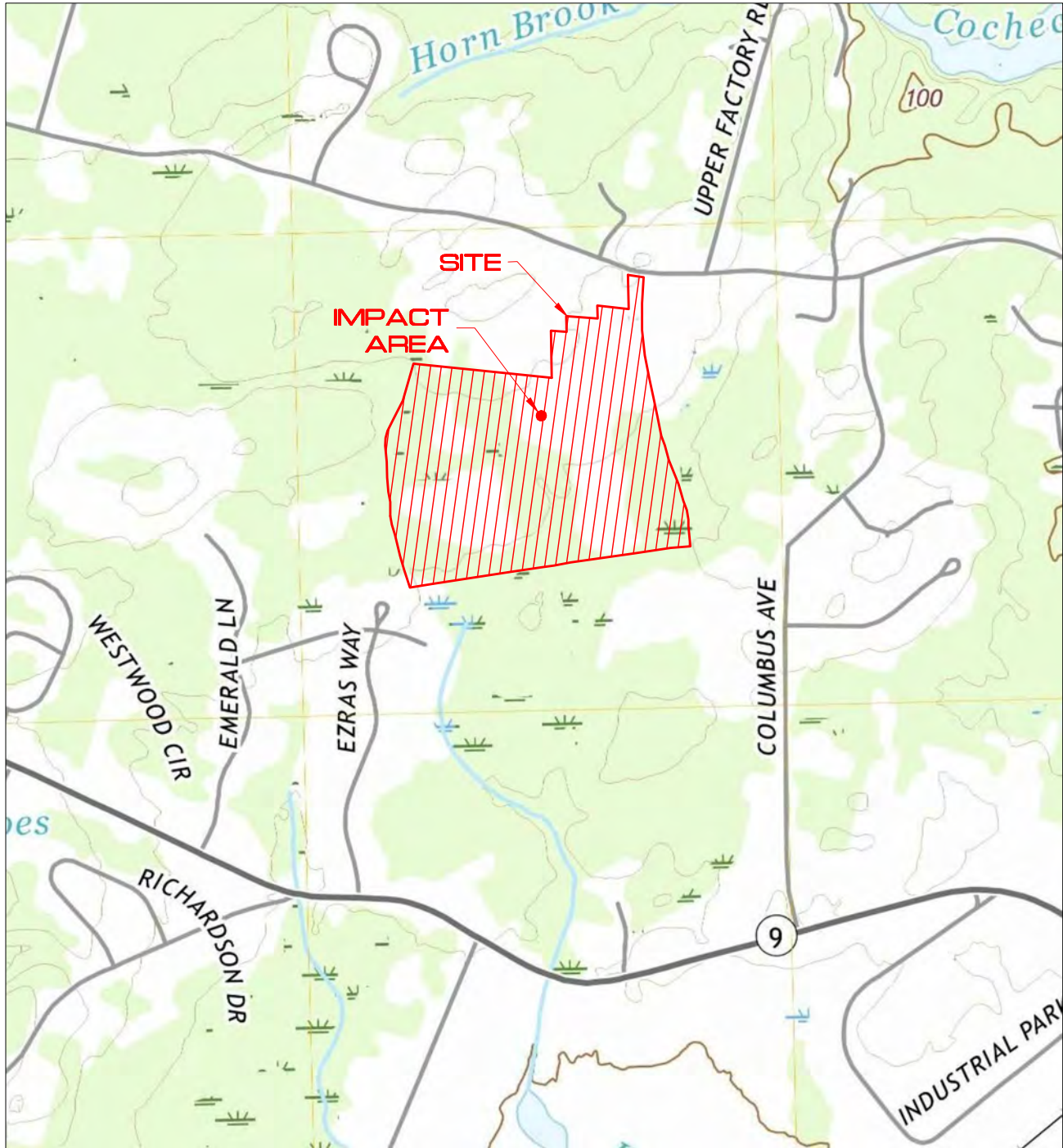
1. Ecological Integrity	7.6
2. Wetland Dependent Wildlife Habitat	5.16
3. Fish & Aquatic Habitat	2.1
4. Scenic Quality	3.7
5. Educational Potential	3.4
6. Wetland-based Recreation	1.6
7. Floodwater Storage	0.036
8. Groundwater	1.0
9. Sediment Trapping	2.14
10. Nutrient Transformation	4.6
11. Shoreline Anchoring	N/A
12. Noteworthiness	20

N

TRITECH
ENGINEERING CORPORATION

NOTE:

THIS PLAN SHOWS PORTIONS OF THE U.S.G.S.: DOVER QUADRANGLE, NEW HAMPSHIRE 7.5 MINUTE SERIES 2015 MAP. SITE LOCATION IS APPROXIMATE.



SHEET NO.

LOCUS-1

USGS PLAN
AMBROSE PROPERTY

TOLEND ROAD

TAX MAP F3, LOT 0

DOVER, NEW HAMPSHIRE

SEPTEMBER 30, 2024

JOB No. 23118

SCALE: 1" = 1,000'

TRITECH

ENGINEERING CORPORATION

765 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03860

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AMBROSE WOODS

210 Tolend Road
Dover, New Hampshire



Photo 1 – STA 11+00 Looking East Toward Existing House and Existing Culvert



Photo 2 – Inlet Side of Existing Culvert Looking South Toward Woods Road

AMBROSE WOODS

210 Tolend Road
Dover, New Hampshire



Photo 3 – Outlet Side of Existing Culvert Looking North Toward Woods Road

YIELD CHART				USEABLE				NET		LOT
LOT	TOTAL AREA	WETLAND	UPLAND	FRONTAGE	BUFFER	BUFFER	NON-BUFFER	AREA		
1	40,000 SQ.FT.	0	40,000 SQ.FT.	249 FT	0	0	40,000 SQ.FT.	40,000 SQ.FT.	1	
2	40,000 SQ.FT.	0	40,000 SQ.FT.	150 FT	0	0	40,000 SQ.FT.	40,000 SQ.FT.	2	
3	40,000 SQ.FT.	0	40,000 SQ.FT.	150 FT	132 SQ.FT.	132 SQ.FT.	39,668 SQ.FT.	40,000 SQ.FT.	3	
4	50,630 SQ.FT.	3,790 SQ.FT.	46,840 SQ.FT.	270 FT	18,400 SQ.FT.	16,000 SQ.FT.	28,444 SQ.FT.	44,444 SQ.FT.	4	
5	45,440 SQ.FT.	5,416 SQ.FT.	40,024 SQ.FT.	350 FT	10,206 SQ.FT.	10,206 SQ.FT.	29,818 SQ.FT.	40,024 SQ.FT.	5	
6	40,000 SQ.FT.	0	40,000 SQ.FT.	235 FT	0	0	40,000 SQ.FT.	40,000 SQ.FT.	6	
7	46,530 SQ.FT.	0	46,530 SQ.FT.	179 FT	0	0	46,530 SQ.FT.	46,530 SQ.FT.	7	
8	42,650 SQ.FT.	0	42,650 SQ.FT.	150 FT	775	775	41,875 SQ.FT.	42,650 SQ.FT.	8	
9	52,150 SQ.FT.	7,815 SQ.FT.	44,300 SQ.FT.	150 FT	14,400 SQ.FT.	14,400 SQ.FT.	29,900 SQ.FT.	44,300 SQ.FT.	9	
10	64,285 SQ.FT.	22,250 SQ.FT.	41,750 SQ.FT.	215 FT	16,000 SQ.FT.	16,000 SQ.FT.	25,750 SQ.FT.	41,750 SQ.FT.	10	
11	66,400 SQ.FT.	26,135 SQ.FT.	40,315 SQ.FT.	227 FT	15,715 SQ.FT.	15,715 SQ.FT.	24,600 SQ.FT.	40,315 SQ.FT.	11	
12	80,620 SQ.FT.	36,700 SQ.FT.	43,920 SQ.FT.	300 FT	19,800 SQ.FT.	16,000 SQ.FT.	24,060 SQ.FT.	40,060 SQ.FT.	12	
13	116,000 SQ.FT.	49,685 SQ.FT.	66,315 SQ.FT.	555 FT	36,525 SQ.FT.	16,000 SQ.FT.	29,760 SQ.FT.	45,760 SQ.FT.	13	
14	135,440 SQ.FT.	74,125 SQ.FT.	61,315 SQ.FT.	250 FT	24,675 SQ.FT.	16,000 SQ.FT.	36,420 SQ.FT.	52,420 SQ.FT.	14	
15	71,192 SQ.FT.	17,540 SQ.FT.	53,646 SQ.FT.	190 FT	29,540 SQ.FT.	16,000 SQ.FT.	24,105 SQ.FT.	40,105 SQ.FT.	15	
16	40,600 SQ.FT.	0	40,600 SQ.FT.	150 FT	0	0	40,600 SQ.FT.	40,600 SQ.FT.	16	
17	40,300 SQ.FT.	0	40,300 SQ.FT.	150 FT	0	0	40,300 SQ.FT.	40,300 SQ.FT.	17	
18	41,017 SQ.FT.	0	41,017 SQ.FT.	380 FT	315 SQ.FT.	315 SQ.FT.	40,700 SQ.FT.	41,015 SQ.FT.	18	
19	40,000 SQ.FT.	0	40,000 SQ.FT.	150 FT	0	0	40,000 SQ.FT.	40,000 SQ.FT.	19	
20	40,165 SQ.FT.	0	40,165 SQ.FT.	575 FT	0	0	40,165 SQ.FT.	40,165 SQ.FT.	20	
21	51,500 SQ.FT.	6,450 SQ.FT.	45,050 SQ.FT.	150 FT	8,450 SQ.FT.	8,450 SQ.FT.	36,000 SQ.FT.	44,450 SQ.FT.	21	
22	58,850 SQ.FT.	8,400 SQ.FT.	50,450 SQ.FT.	150 FT	11,600 SQ.FT.	11,600 SQ.FT.	38,850 SQ.FT.	50,450 SQ.FT.	22	
23	58,600 SQ.FT.	11,400 SQ.FT.	48,684 SQ.FT.	150 FT	9,916 SQ.FT.	9,916 SQ.FT.	37,265 SQ.FT.	47,181 SQ.FT.	23	
24	58,400 SQ.FT.	12,740 SQ.FT.	45,660 SQ.FT.	150 FT	9,730 SQ.FT.	9,730 SQ.FT.	35,925 SQ.FT.	45,655 SQ.FT.	24	
25	163,000 SQ.FT.	81,350 SQ.FT.	81,650 SQ.FT.	240 FT	44,265 SQ.FT.	16,000 SQ.FT.	37,385 SQ.FT.	53,385 SQ.FT.	25	
26	131,085 SQ.FT.	79,418 SQ.FT.	51,667 SQ.FT.	175 FT	26,884 SQ.FT.	16,000 SQ.FT.	24,780 SQ.FT.	40,780 SQ.FT.	26	
27	84,475 SQ.FT.	28,541 SQ.FT.	55,934 SQ.FT.	170 FT	30,510 SQ.FT.	16,000 SQ.FT.	25,415 SQ.FT.	41,415 SQ.FT.	27	
28	254,325 SQ.FT.	182,541 SQ.FT.	71,784 SQ.FT.	150 FT	44,254 SQ.FT.	16,000 SQ.FT.	27,530 SQ.FT.	43,530 SQ.FT.	28	
29	41,590 SQ.FT.	1,165 SQ.FT.	40,425 SQ.FT.	350 FT	2,800 SQ.FT.	2,800 SQ.FT.	37,625 SQ.FT.	40,425 SQ.FT.	29	
30	40,100 SQ.FT.	0	40,100 SQ.FT.	180 FT	0	0	40,100 SQ.FT.	40,100 SQ.FT.	30	
31	40,450 SQ.FT.	0	40,450 SQ.FT.	400 FT	0	0	40,450 SQ.FT.	40,450 SQ.FT.	31	
32	40,000 SQ.FT.	0	40,000 SQ.FT.	500 FT	0	0	40,000 SQ.FT.	40,000 SQ.FT.	32	

NOTES

1.) INTENT: THIS OPEN SPACE SUBDIVISION YIELD PLAN IS INTENDED TO "THE MAXIMUM NUMBER OF DWELLING UNITS PERMITTED IN AN OPEN SPACE SUBDIVISION SHALL BE DETERMINED BY A SUBMITTED YIELD PLAN PER SUBDIVISION REGULATIONS 157:21 (D)(1).

2.) CURRENT OWNER OF RECORD: 210 TOLEND ROAD LLC,
42 J DOVER POINT ROAD
DOVER, NEW HAMPSHIRE

SIGNATURE _____

APPLICANT: 210 TOLEND ROAD, LLC,
42 J DOVER POINT ROAD
DOVER, NEW HAMPSHIRE

3.) TAX MAP F LOT 3.

4.) TOTAL LOT AREA: 2,426,198 SQ.FT. - 55,698 ACRES

5.) PROJECT DEED REFERENCE: BOOK 1496 PAGE 173

6.) PROJECT PLAN REFERENCE: SUBDIVISION PLAN
INDIAN RIDGE
EMERALD LANE
DOVER, NEW HAMPSHIRE
TRITECH ENGINEERING INC.
AUG. 28, 2014 SCRD #110-70

BOUNDARY PLAN
LAND OF
LIONEL & KRISTINA PARADIS
TOLEND ROAD
DOVER, N.H.
TAX MAP F LOT 2
BERRY SURVEYING
JULY 23, 2012 SCRD #104-61

PLAN OF
ALTERNATIVE DESIGN SUBDIVISION
LITTLEWORTH RD.
DOVER, N.H.
FOR EZRA GREEN'S FARM LLC,
NORWAY PLAINS ASSOCIATES, INC.
MARCH 2000 SCRD 59-49

PLAN OF LAND
CARLTON W. HAM
DOVER, N.H.
FREDERICK E. DREW
SEPT. 1991 SCRD 40-47
BERRY SURVEYING

PLAN OF SUBDIVISION
FOR ELLIOTT BERKOWITZ
TOLEND ROAD
DOVER, NEW HAMPSHIRE
K.E. MOORE & B.G. STAPLES
OCT. 1986 SCRD 30-62

7.) PROPERTY IS SUBJECT TO NET&T EASEMENT DESCRIBED IN BOOK 506 PAGE 14.

8.) ZONING: R-40 MIN. LOT SIZE: 40,000 SQ.FT. MIN. FRONTAGE: 150 FT MIN. SETBACKS: FRONT: 40 FT SIDE: 25 FT REAR: 15 FT	OPEN SPACE SUBDIVISION R-40 MIN. LOT SIZE: 20,000 SQ.FT. MIN. FRONTAGE: 40 FT MIN. SETBACKS: FRONT: 20 FT SIDE: 20 FT REAR: 20 FT EXTERNAL BOUNDARIES: 50 FT EXISTING BUILDINGS: 100 FT
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IN ADDITION TO R-40, THIS PROPERTY FALLS WITHIN SEVERAL ZONING
OVERLAY DISTRICTS:
- WETLANDS PROTECTION DISTRICT

9.) VARIANCES, SPECIAL EXCEPTIONS OR CONDITIONAL USE PERMITS GRANTED: NONE

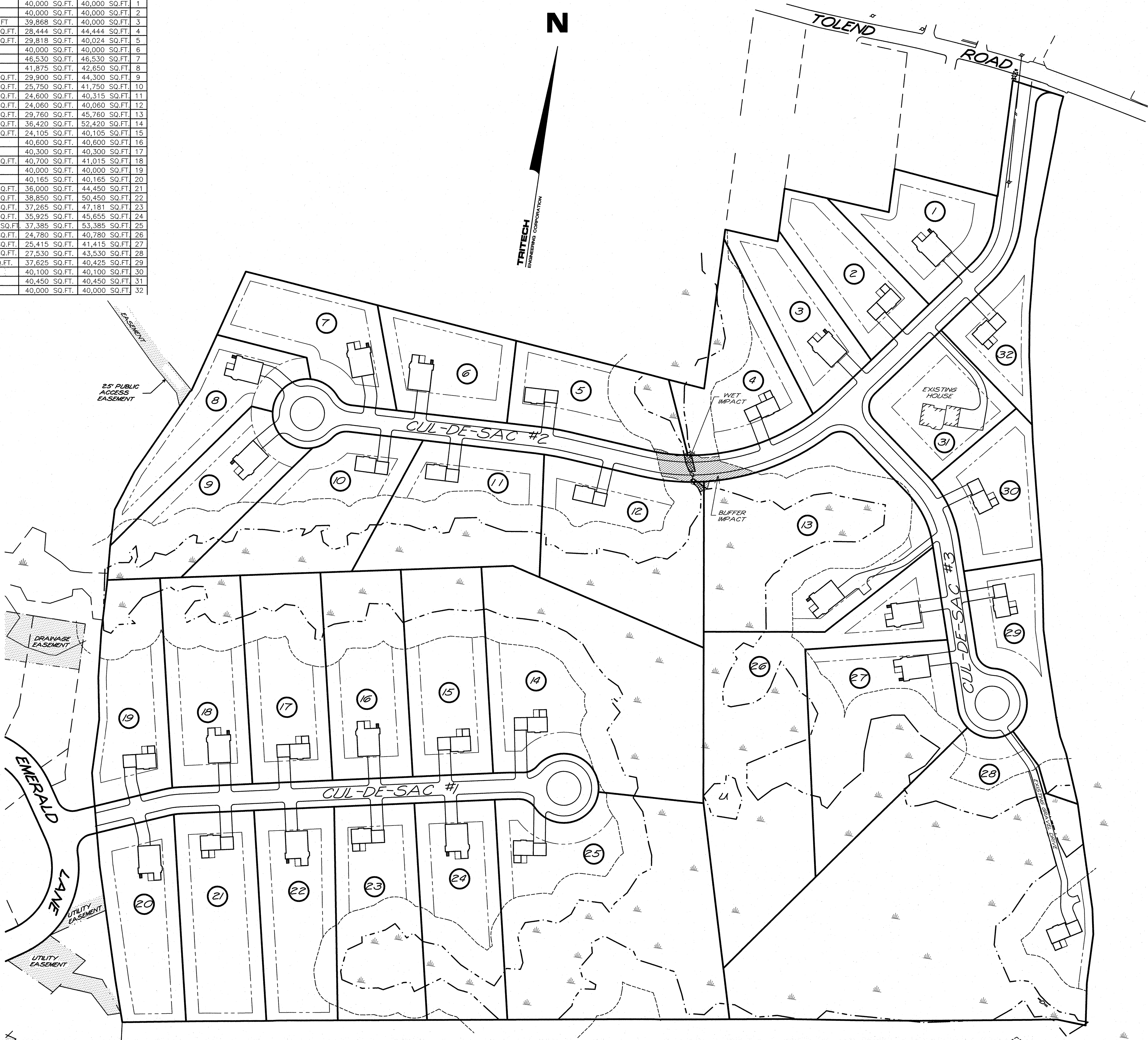
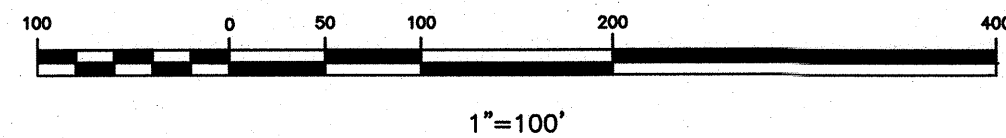
10.) THE RAW UNADJUSTED CLOSURE OF OUR RANDOM POINT TRAVERSE WAS 1 PART
IN 27,000. AND WAS ACCOMPLISHED USING A TOPCON GT 503 TOTAL STATION,
DURING THE MONTH OF JANUARY, 2000.

11.) SUBJECT PARCEL IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD.
FIRM PANEL NO. 33017C 03100, MAY 17, 2005.

12.) DURING THE MONTH OF AUGUST 2023, MICHAEL MARIANO, STATE OF NEW HAMPSHIRE
CERTIFIED SOIL SCIENTIST #76, NH CERTIFIED WETLAND SCIENTIST #183, CONDUCTED
AN ON-SITE WETLANDS DELINEATION OF THE SUBJECT PARCEL. WETLANDS WERE
IDENTIFIED BASED ON THE CITY OF DOVER ZONING ORDINANCE (170-27.1) AND ON
STATE & FEDERAL CRITERIA OUTLINED IN THE "CORPS OF ENGINEERS WETLANDS
DELINEATION MANUAL" (DEPT. OF THE ARMY, 1987). ON THIS SITE, WETLANDS
BASED ON LOCAL CRITERIA SHARE THE SAME BOUNDARIES WITH THOSE BASED
ON STATE AND FEDERAL CRITERIA.

13.) BASIS OF BEARING: BEARING SYSTEM BASED ON GPS FIELD OBSERVATIONS ON AUGUST 29,
2023 USING TOPCON HIPER SR RECEIVERS AND OPUS CORRECTED ON AUGUST 31, 2023.
DATUM BASED ON NEW HAMPSHIRE STATE PLANE COORDINATES: SRG (2800 NH), (NAD83)

14.) WETLAND IMPACT: TOTAL WETLAND: 674,247 SQ.FT. WETLAND IMPACT: 700 SQ.FT. % IMPACT: 0.10 %	BUFFER IMPACT: TOTAL BUFFER: 381,392 SQ.FT. BUFFER IMPACT: 6,400 SQ.FT. % IMPACT: 1.68 %
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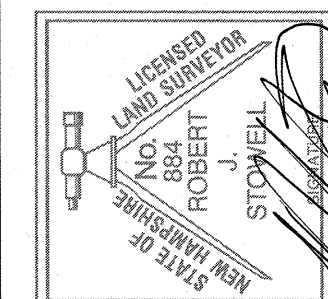
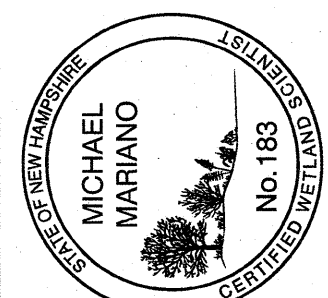


TRITECH

ENGINEERING CORPORATION

785 CENTRAL AVENUE
DOVER NEW HAMPSHIRE 03800
TEL: 603 605 7445 FAX: 603 605 7442

REVISIONS
DATE: DESCRIPTION:



YIELD PLAN
AMBROSE WOODS

TAX MAP F LOT 3

210 TOLEND ROAD

DOVER, NEW HAMPSHIRE

SEPTEMBER 3, 2024 JOB No. 23118

SCALE: 1" = 100'

SHEET No.

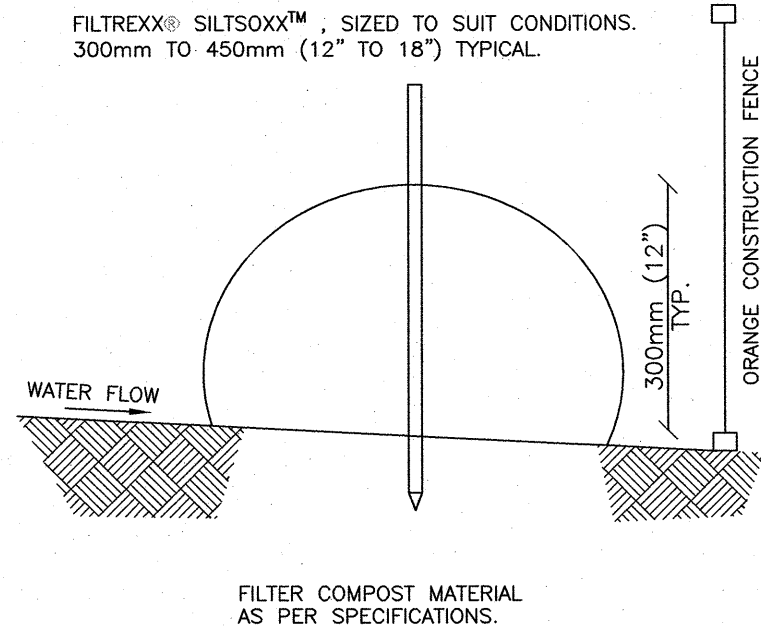
Y-1



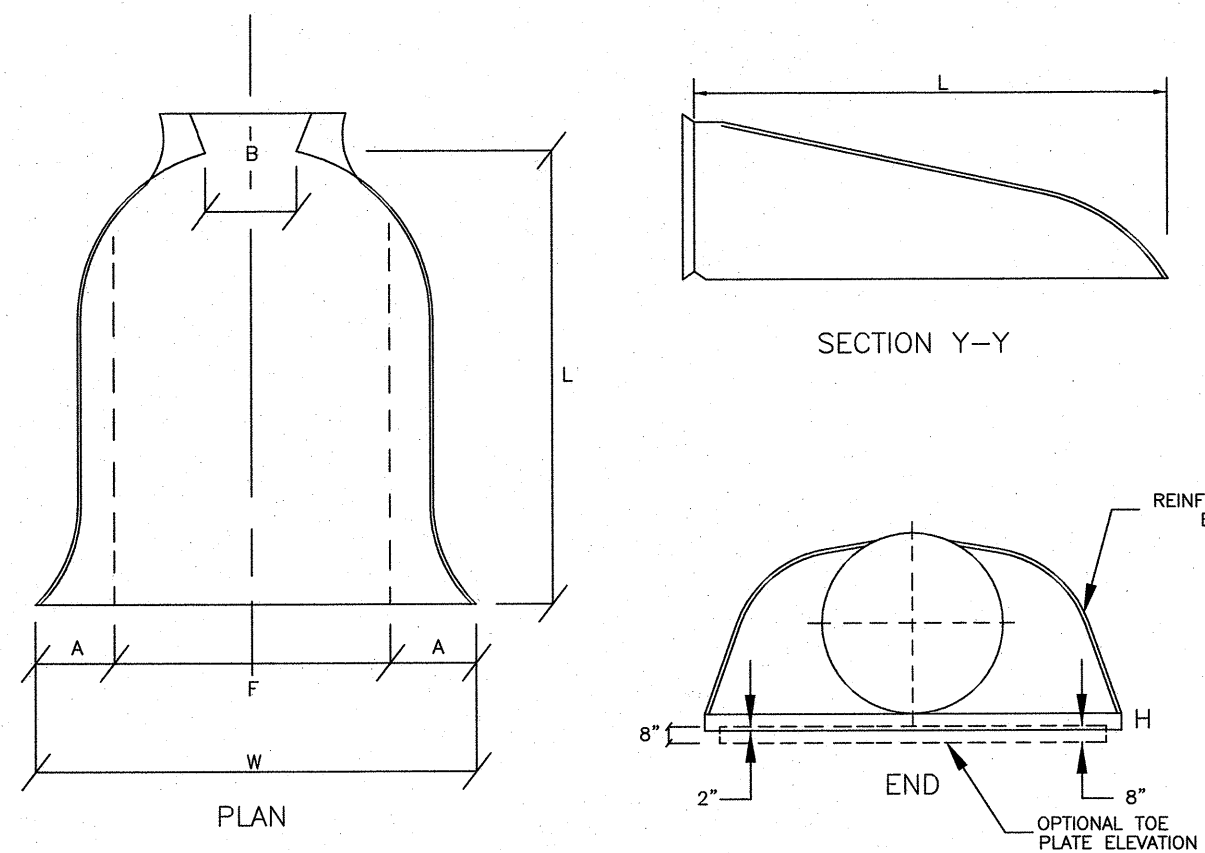
NOTES

1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
3. WHERE IT REQUIRES REPAIR, IT WILL BE ROUTINELY REPAIRED.
4. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE BERM WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE ENGINEER.
5. THE COMPOST FILTER BERM WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

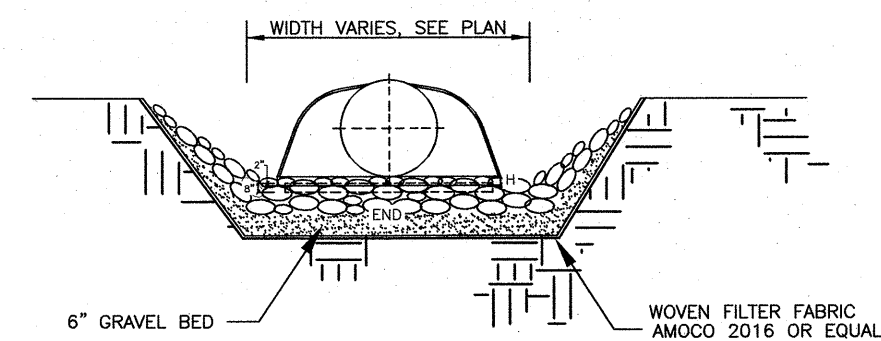
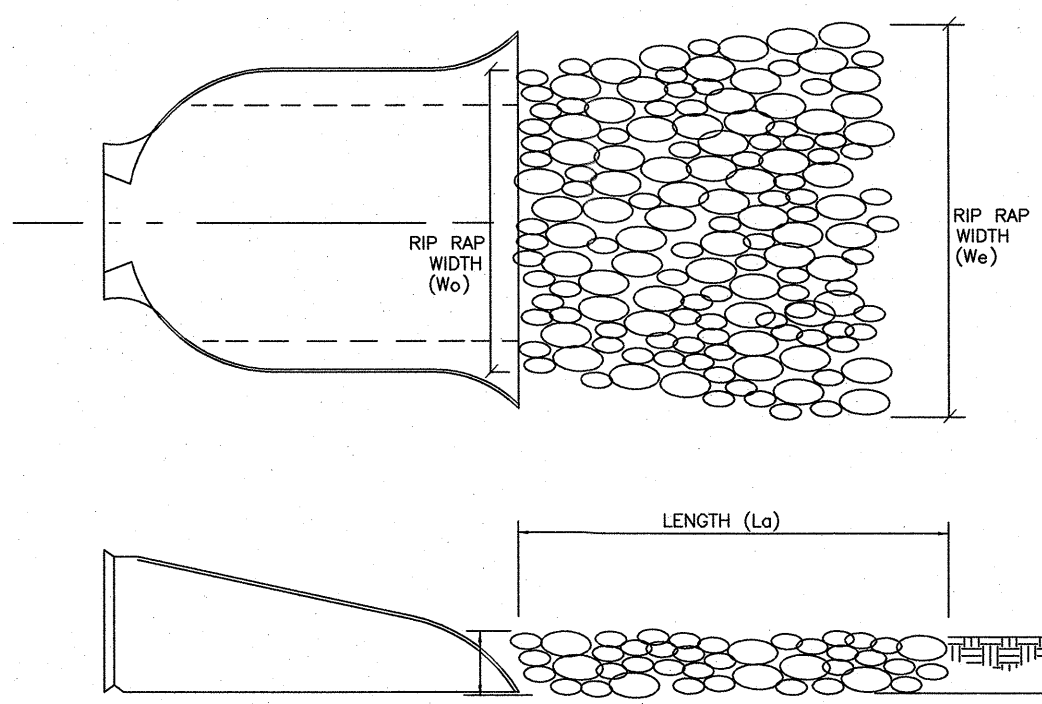
1 FILTREXX® SILTSOXX™
NOT TO SCALE



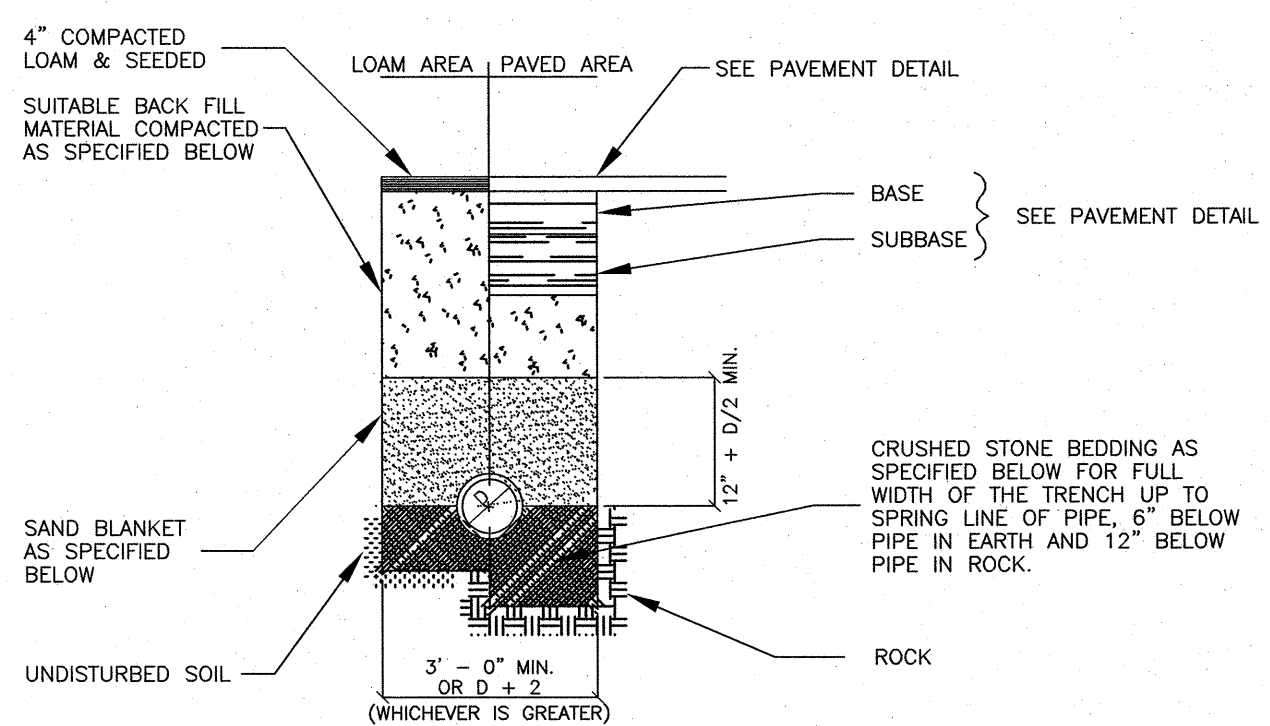
DIA	A	B	H	F	L	W
12"	5"	7"	6"	22"	21"	44"
15"	6"	8"	6"	28"	26"	52"
18"	7"	10"	6"	34"	31"	58"
24"	9"	13"	6"	46"	41"	72"



3 CMP FLARED END SECTION
NOT TO SCALE



2 RIPRAP DETAIL
NOT TO SCALE



* EQUIVALENT TO STANDARD STONE SIZE #67 - SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

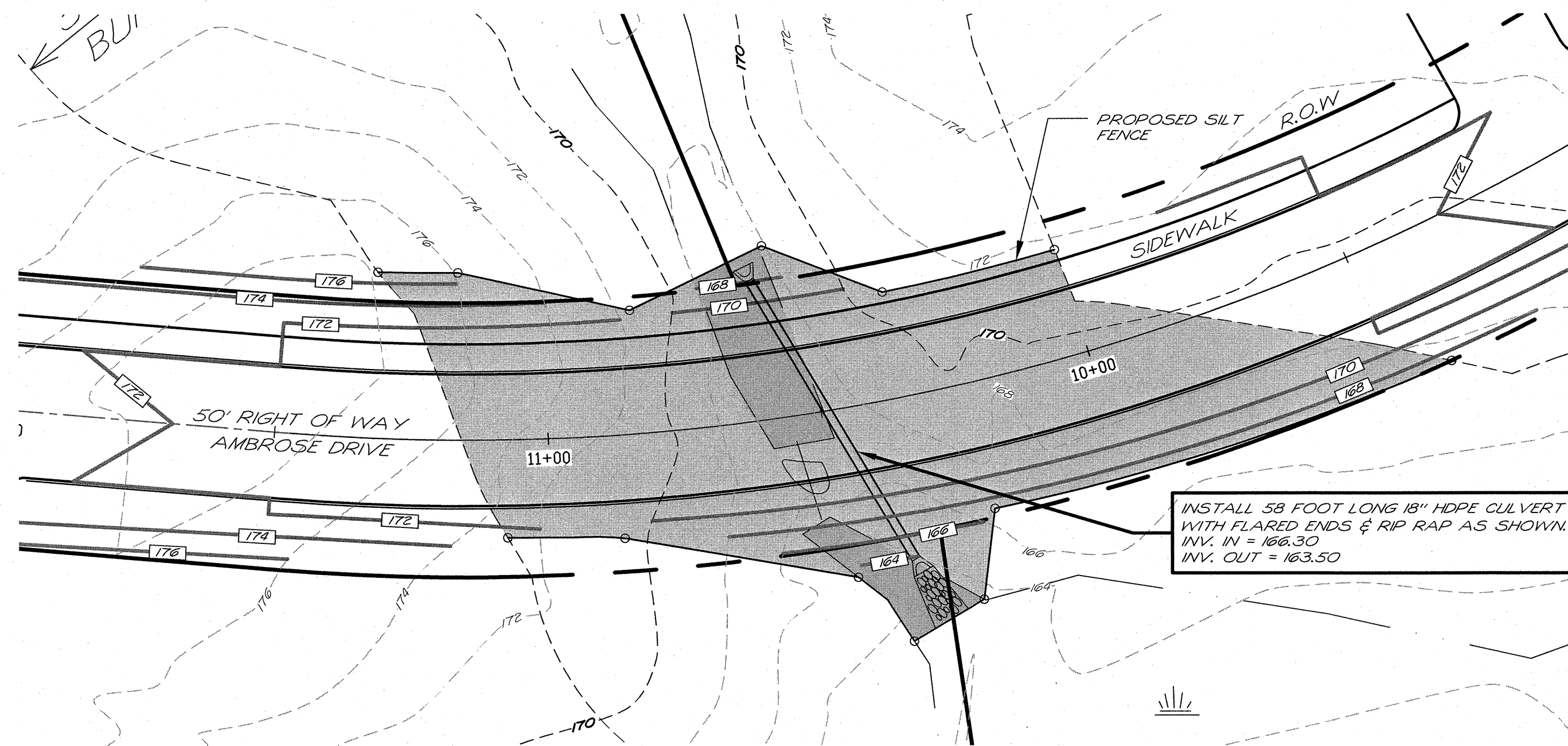
BACK FILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACK FILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

SAND BLANKET		CRUSHED STONE BEDDING	
SIEVE SIZE	% FINER BY WEIGHT	SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 - 100	1"	90 - 100
3/4"	0 - 15	3/4"	20 - 55
		3/8"	0 - 10
		#4	0 - 5

4 STORM DRAINAGE & SEWER PIPE TRENCH
NOT TO SCALE

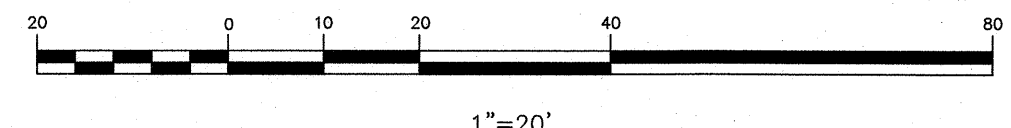
WETLANDS IMPACT
700 SQ.FT.

WETLANDS BUFFER IMPACT
6,400 SQ.FT.



LEGEND

- PROPERTY LINE
- WETLAND BOUNDARY
- WETLAND BUFFER
- PROPOSED SILT FENCE
- FINISH GRADE CONTOUR
- EXISTING GRADE CONTOUR
- PROPOSED RIP RAP



CONDITIONAL USE PERMIT PLAN

AMBROSE WOODS

210 TOLEND ROAD
DOVER, NEW HAMPSHIRE

SEPTEMBER 3, 2024 JOB No. 23118

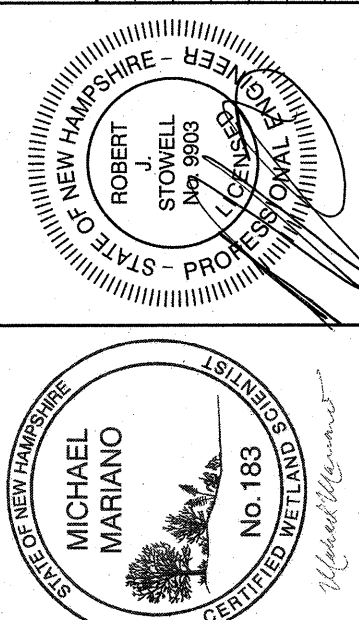
SCALE: 1" = 20'

SHEET No.

CUP-1

TRITECH
ENGINEERING CORPORATION

REVISIONS
DATE: DESCRIPTION:



755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 9890