Preliminary Subdivision Application Materials

Meredith Woods Subdivision
Meredith Drive
Windham, Maine

Prepared by:
Steve Roberge
SJR Engineering Inc.
16 Thurston Drive
Monmouth, Maine 04259
Tel/Fax: 1-207-242-6248

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Section 01
Windham Subdivision Application Form

Town of Windham
Planning Department:
8 School Road
Windham, Maine 04062
Tel: (207) 894-5960 ext. 2
Fax: (207) 892-1916 -
www.windhammaine.us

MAJOR SUBDIVISION - PRELIMINARY PLAN - REVIEW APPLICATION

FEES FOR MAJOR SUBDIVISION PRELIMINARY PLAN REVIEW	**APPLICATION FEE:** + EACH LOT > 10 = $300/LOT	☑ $1,300.00 ☐ $_____	**AMOUNT PAID:** $_____ DATE: _____ *Office Use:*	*Office Stamp:*	
	REVIEW ESCROW: Up to 10 Lots = $2,500 11 – 15 Lots = $3,000 16 – 30 Lots = $4,000 30 + Lots = $5,000	☐ $_____			

PROPERTY DESCRIPTION	Parcel ID	Map(s) # 6	Lot(s) # 38-E02	**Zoning District(s)**	Farm	**Total Land Area SF:**	1,029,952 sf
	# Lots/dwelling units: 5	Total Distr. >1Ac. ☑ Y ☐ N				**Est. Road Length(ft):**	750'
	Physical Address	Meredith Drive, Windham		**Watershed:**	Black Brook		
PROPERTY OWNER'S INFORMATION	Name	Meredith Way LLC		Name of Business			
	Phone			Mailing Address:	190 US Route 1, Box 11		
	Fax or Cell	207-415-8723			Falmouth,Maine 04105		
	Email	laurie@mainedevelopmentgroup.com					
APPLICANT'S INFORMATION (*IF DIFFERENT FROM OWNER*)	Name			Name of Business:			
	Phone			Mailing Address			
	Fax or Cell						
	Email						
APPLICANT'S AGENT INFORMATION	Name	Steve Roberge		Name of Business	SJR Engineering Inc		
	Phone			Mailing Address	16 Thurston Drive		
	Fax or Cell	207-242-6248					
	Email	steve@sjreng.com					

PROJECT INFORMATION

Existing Land Use *(Use extra paper, if necessary)*:

Raw undeveloped foreted land except for the roughed in ROW driveway to the parcel.

Provide a narrative description of the Proposed Project *(Use extra paper, if necessary)*:

The project is to develop a subdivision with 5 new residential lots. The roughly 750' access to the site will be created into a new private road that will end in a cul-de-sac.
The subdivision has been created using the conservation subdivision criteria. A net residential density calculation shows that 12 lots could be allowed. Due to the LUO restriction of 30 lots on a dead end without a second access point, the project is limited to 5 lots. The five lots will be roughly 30,000 sf in size, and have public water, private septic systems, and underground power. Stormwater management will capture road runoff in Catches Basins and ditches. It will then be diverted to the proposed soil filter pond behind lot 5.

Provide a narrative description of construction constraints (wetlands, shoreland zone, flood plain, non-conformance, etc.):

Access to the project is limited to a 50' wide strip of land off Meredith Road tht will be turned into a private road for access to the 5 lots. Significant wetlands are located (and protected) within the immediate area. A significant stream (Black Brook) crosses the parcel creating no viable access to the remaining land (Open Space). A net residential density plan has been created tht depicts constraints identified on the site. These consist of wetlands, stream, flood plain, and sttep slopes.

Mandatory Written Information submitted in a bound format (continued):	Applicant	Staff
ii. If using subsurface wastewater disposal systems (septic), submit test pit analyses prepared by a Maine Licensed Site Evaluator or Certified Soil Scientist. Test pit locations must be shown on a map.	☑	☐
11. Indicate the type of water supply system(s) to be used in the subdivision.	☑	☐
12. If connecting to public water, submit a written statement from the Portland Water District indicating there is adequate supply and pressure for the subdivision.	☐	☐
13. Names and addresses of the record owner, applicant, and adjoining property owners.	☑	☐
14. An acceptable title opinion proving the right of access to the proposed subdivision or site for any property proposed for development on or off a private way or private road.	☐	☐
15. The name and contact information for the road association whose private way or road is used to access the subdivision.	☐	☐
16. Financial Capacity. Estimated costs of development, and an itemization of major costs.		
i. Estimated costs of development, and an itemization of major costs.	☑	☐
ii. Financing - provide one of the following:	☑	☐
a. Letter of commitment to funding from a financial institution, governmental agency, or other funding agency.	☐	☐
b. Annual corporate report with explanatory material showing the availability of liquid assets to finance development	☐	☐
c. Bank statement showing the availability of funds if personally financing development	☐	☐
d. Cash equity commitment.	☐	☐
e. Financial plan for remaining financing.	☐	☐
f. Letter from financial institution indicating an intention to finance.	☑	☐
iii. If a corporation, Certificate of Good Standing from the Secretary of State	☑	☐
2. Technical Capacity:		

13. Rivers, streams, and brooks within or adjacent to the proposed subdivision. If any portion of the proposed subdivision is in the direct watershed of a great pond, note which great pond.	☐	☐
14. Rivers, streams, and brooks within or adjacent to the proposed subdivision. If any portion of the proposed subdivision is in the direct watershed of a great pond, note which great pond.	☐	☐
15. Location & size of existing and proposed sewers, water mains, culverts, bridges, and drainage ways on or adjacent to the property to be subdivided. The Board may require this information to be depicted via cross-section, plan, or profile views.	☑	☐
16. Location, names, and present width of existing streets, highways, easements, building lines, parks, and other open spaces on or adjacent to the subdivision.	☑	☐
17. Location and widths of any streets, public improvements, or open space within the subdivision (if any) are shown on the official map and the comprehensive plan.	☑	☐
18. All parcels of land proposed to be dedicated to public use and the conditions of such dedication.	☐	☐
19. Location of any open space to be preserved or common areas to be created, and general description of proposed ownership, improvement, and management	☑	☐
20. Approximate location of treeline after development.	☑	☐
21. Delineate boundaries of any flood hazard areas and the 100-year flood elevation as depicted on the Town's Flood Insurance Rate Map.	☑	☐
22. Show any areas within or adjacent to the proposed subdivision which has been identified by the Maine Department of Inland Fisheries and Wildlife "Beginning with Habitat project maps or within the Comprehensive Plan.		
23. Show areas within or adjacent to the proposed subdivision which is either listed on or eligible for the National Register of Historic Places, or have been identified in the comprehensive plan or by the Maine Historic Preservation Commission as sensitive or likely to contain such sites.	☐	☐
24. Erosion & Sedimentation control plan, prepared by MDEP Stormwater Law Chapter 500 Basic Standards, and the MDEP Maine Erosion and Sediment Control Best Management Practices, published March 2003.	☑	☐
25. A stormwater management plan, prepared by a Maine licensed Professional Engineer by the most recent edition of Stormwater Management For Maine: BMPS Technical Design Manual, published by the MDEP 2006.	☑	☐
26. For Cluster Subdivisions that do not maximize the development potential of the property being subdivided, a conceptual master plan for the remaining land showing future roads, Open Space, and lot layout, consistent with the requirements of 911.K., Custer Developments will be submitted.	☐	☐
C. Submission information for which a waiver may be granted.	**Applicant**	**Staff**
1. High-Intensity soil survey by a Certified Soil Scientist	☐	☐
2. Landscape Plan	☑	☐
3. Hydrogeologic assessment - required if i) subdivision is not served by public sewer and either any part of the subdivision is over a sand and gravel aquifer or has an average density of more than one dwelling unit per 100,000 square feet, or ii) where site considerations or development design indicate the greater potential of adverse impacts on groundwater quality.	☐	☐

i. A statement of the applicant's experience and training related to the nature of the development, including developments receiving permits from the Town.	☑	☐	a) Map showing basic soil types.	☑	☐
			b) Depth to the water table at representative points	☑	☐
ii. Resumes or similar documents showing experience and qualifications of full-time, permanent, or temporary staff contracted with or employed by the applicant who will design the development.	☑	☐	c) Drainage conditions throughout the subdivision.	☑	☐
			d) Data on existing groundwater quality.	☐	☐
			e) Analysis and evaluation of the effect of the subdivision on groundwater.	☐	☐
2. Name and contact information for the road association whose private way or road is used to access the subdivision (if applicable).	☐	☐	f) map showing the location of any subsurface wastewater disposal systems and drinking water wells within the subdivision & within 200 feet of the subdivision boundaries.	☐	☐
			4. Estimate the amount and type of vehicular traffic to be generated on a daily basis and at peak hours.	☑	☐
B. Mandatory Preliminary Plan Information	**Applicant**	**Staff**	5. Traffic Impact Analysis for subdivisions involving 28 or more parking spaces or projected to generate more than 140 vehicle trips per day.	☐	☐
1. Name of subdivision, date, and scale.	☑	☐			
2. Stamp of the Maine License Professional Land Surveyor that conducted the survey, including at least one copy of the original stamped seal that is embossed and signed.	☑	☐	6. If any portion of the subdivision is in the direct watershed of a great pond.	☐	☐
			i. phosphorous impact analysis and control plan.	☐	☐
3. Stamp with the date and signature of the Maine Licensed Professional Engineer that prepared the plans.	☑	☐	ii. long term maintenance plan for all phosphorous control measures.	☐	☐
4. North arrow identifying all of the following: Grid North, Magnetic North, declination between Grid and Magnetic, and whether Magnetic or Grid bearings were used in the plan design.	☐	☐	iii. contour lines at an interval of 2 feet.	☐	☐
			iv. delineate areas with sustained slopes greater than 25% covering more than one acre.	☐	☐
5. Location map showing the subdivision within the municipality.	☑	☐	**Electronic Submission**	☑	☐

The undersigned *hereby makes an application to the Town of Windham for approval of the proposed project and declares the foregoing to be true and accurate to the best of his/her knowledge.*

Stephen Roberge Digitally signed by Stephen Roberge Date: 2025.08.12 08:49:21 -04'00' 8/12/2025 Steve Roberge

APPLICANT OR AGENT'S SIGNATURE DATE PLEASE TYPE OR PRINT THE NAME

Section 02
Agent Letter

Section 03
Project Introduction

SJR ENGINEERING, INC.
STEVE@SJRENG.COM. 16 THURSTON DRIVE, MONMOUTH, ME. TEL: (207) 242-6248

August 11, 2025

Marge Govoni, Chair
Windham Planning Board
8 School Road
Windham, Maine 04062

Re: Proposed Meredith Woods Subdivision in Windham

Dear Board Members,

On behalf of Meredith Way LLC (Laurie Bachelder), we are pleased to submit this subdivision plan application to you for Planning Board preliminary plan review. We have prepared plans and narratives for the proposed Meredith Woods Subdivision which includes 5 proposed lots and a new proposed access road. The parcel is identified as Tax Map 6 Lot 38-E02 and has 23.64 acres of land. Access is from Meredith Drive and has a 50' wide Right of Way to the parcel. The parcel lies within the Farm Zoning District.

Boundary parcel information was taken from the "Minor Subdivision Plan - Lampron Subdivision" dated August 14, 2024. We have added these property line bearings/distances to our plan for the creation of a 5-lot amended final subdivision plat for recording at the registry.

LIDAR contour lines were downloaded from the NOAA website dated 2022 at a 2' contour interval and included with our plan materials.

A wetland delineation was taken from the "Minor Subdivision Plan - Lampron Subdivision" dated August 14, 2024 We have noted the location of the wetland boundary on our plans. A site review by Mark Cenci Associates in 2025 confirmed the location of these wetlands. His report is included in the application materials.

All subdivisions within the Farm Zoning district must be designed as either a conservation or a country subdivision. This proposal is designed according to the Conservation Subdivision criteria. The first item of design includes determining the primary and secondary conservation areas.

Identification of primary conservation areas reveals the large wetland area along the western sideline meets the primary conservation goal. There is also another significant wetland that splits the parcel and includes "Black Brook" watershed with associated flood plains and stream setbacks. Portions of the parcel along the stream have steep slopes (greater than 25%). No

other items have been identified for primary conservation area designation.

Identification of secondary conservation areas reveals no other area meets the secondary conservation goals. However, we have designed two large blocks of existing forested land area along the eastern and western sides of the site to remain as natural area (Open Space). This area would certainly be desirable to any future homeowner within the subdivision.

The next step of the design process was to determine the Net Residential Density (NRD), and required Open Space components of a conservation subdivision. We have provided a tabulation showing the net residential density calculations on the plan. In summary, the total parcel area has deductions for proposed road ROW (51,046 sf), slope greater than 25% (67,649 sf), 100 year flood plain (40,156 sf), and wetlands (131,120 sf). These deductions (289,971 sf) from the 1,061,386 sf total parcel leave 771,415 sf of remaining area. This remaining area (771,415 sf) divided by the allowed 60,000 sf lot size requirement for Conservation Subdivisions is 12.9 lots. We have designed for 5 additional lots.

In determining the required open space for conservation subdivisions, the LUO requires one half of the remaining land (771,415/2=385,708) plus all of the deductions as noted in net residential density (289,971) calculations. The total required open space is calculated to be 289,971+385,708=675,679 sf. We have provided 854,998 sf of open space.

One of the limiting factors to this subdivision is created by the number of lots to be served from a dead-end street. We have discussed this with the Planning Department and have settled with the 5 new lots as proposed, which meets the capacity of this street without a second connector road.

Since the subdivision has only 5 proposed lots, the street design ordinance requires it be designed to no less than the minor private street standard. The proposed plan is to construct 810' (to center of cul-de-sac) of proposed minor private road with a cul-de-sac located at the end of road. The LUO allows gravel travel lanes to be 9' wide with 2' wide graveled shoulders on each side of the road. A cul-de-sac is proposed at the end of Meredith Way with an offset circular travel path. The Developer is proposing to pave the road with 9' travel lanes and 22' of pavement around the cul-de-sac. The road is to be owned and maintained by the Homeowners Association.

We have proposed 5 lots be created with access off proposed Meredith Way. Each 30,000+ sf lot is designed to have at least 100' of road frontage except along the cul-de-sac where 50' is the required minimum frontage. Building setbacks have been shown on the plans (front 25', side/rear 10', and more 100' from Meredith Drive). All building setbacks have been increased to 50' along the total parcel perimeter property line, and 100' from the primary wetland conservation area (Lot 1).

Each of the lots will utilize underground electricity, cable communications, and have public water and septic systems. Test pits for septic disposal areas have been performed by Mark Cenci (Cenci Associates) on each of the lots.

Stormwater flows from this parcel flow into two onsite watershed areas. We are capturing stormwater flows from the cul-de-sac area using curbs and catch basins, and diverting these flows to a soil filter pond behind Lot 5. The soil filter pond will control stormwater flows to pre-existing conditions as well as provide for stormwater quality filtration. The pond will be operated and maintained by the homeowner's association on land of Lot 5 (stormwater easement).

Erosion control is necessary during the earthwork excavation and filling at the site for construction of the proposed roads, buildings, driveways, and stormwater pond area. A stabilized construction entrance is designed to help minimize potential soil material from tracking onto Meredith Drive. Silt fences, erosion control berms, hay mulch, and riprap on fabric ditches are shown on the plan and depicted in the construction details. All disturbed areas not covered with pavement, gravel, or building are to be loamed and seeded with a vegetative grass, and mulched. As construction progresses, different forms of erosion control will be necessary, and should be employed by the Contractor according to DEP's latest edition of "Best Management Practices".

A Homeowners Association has been drafted and is part of a final submission to the Planning Board that covers ownership, maintenance and operations for the road, stormwater management, and open space responsibilities.

A Fall 2025 construction startup date is planned once approvals for the project have been obtained. It is anticipated the developer will sell each of the lots to others for building construction.

This proposal will require Town of Windham Subdivision approvals. We have calculated less than 1 acre of impervious surface would be created for the

subdivision. We have also calculated more than 1 acre of disturbance would occur with this proposal. Therefore, a MDEP Stormwater PBR permit is also required.

The developer (Meredith Way, LLC (Laurie Bachelder) has extensive development experience with an approved 14 lot subdivision in Sidney, a 12-unit affordable housing development in North Yarmouth, and a recent 6 lot subdivision on Betty Lane in Windham. Numerous individual residential structures have also been constructed through her development company. This development will be constructed by one entity using "Maine Development and Excavation Group" resources (earthwork and building construction).

Meredith Way, LLC has retained the services of SJR Engineering for subdivision design/project management through the permitting process. Other consultants that will be utilized in the development of the project include Mark Cenci Associates (septic, groundwater), Dirigo Land Surveying for surveying needs, and Kristen Collins of Preti/Flaherty for legal documents.

We look forward to presenting this project to the Planning Board and answering any questions you may have concerning the design of the project.

Please call me if you have any questions.

Sincerely yours,

Stephen Roberge, PE
for SJR Engineering Inc.

Section 04
Deed

MAINE REAL ESTATE TAX-Paid

WARRANTY DEED
Statutory Short Form

2437137
DLN:

KNOW ALL BY THESE PRESENTS, That **I, Darryl Jon Hawkes**, whose mailing address is **72 Brook Street, Westbrook, ME 04092**, for consideration paid, grants to **Meredith Way LLC, a Maine Limited Liability Company,** whose mailing address is **190 US Route One, Falmouth, ME 04105,** with Warranty Covenants, the real property in the Town of **Windham**, County of **Cumberland** and State of **Maine**, more particularly described as follows:

A certain lot or parcel of land located southeasterly side of but not adjacent to the Barnes Road, so-called in the Town of Windham, County of Cumberland and State of Maine more particularly described as follows:

Beginning at a point marking the most northeasterly corner of Lot #8 as shown on a plan entitled "Mystic Woods Subdivision Barnes Road, Windham, Maine" by Pinkham & Greer recorded in the Cumberland County Registry of Deeds in Plan Book 216, Page 91.

Thence N 53° 18' 14" E 541.59 feet to a point;

Thence N 06° 27' 08" E 356.61 feet to a point;

Thence N 24° 02' 18" W 505.88 feet to a point;

Thence N 66° 55' 55" W 309.92 feet to a point;

Thence S 11° 13' 21" E 301.40 feet to a point;

Thence S 46° 30' 47" W 337.85 feet to a point;

Thence N 40° 59' 25" W 260.25 feet to a point and land now or formerly of Bradley and Suzanne Marston;

Thence N 32° 06' 22" E 868.01 feet to a point and land now or formerly of Fred and Doris Staples;

Thence S 35° 50' 39" E along the land of said Staples a distance of 1625.41 feet to a point;

Thence 32° 00' 43" W along other lands of Fred Staples a distance of 1089.01 feet to a point and land nor or formerly of Matt Hancock International LLC;

Thence N 35° 43' 29" W along the land of Matt Hancock International LLC a distance of 471.00 feet to a point;

Thence S 45° 37' 42" W along lands of said Hancock a distance of 56.25 feet to a point;

Thence N 32° 10' 55" W a distance of 275.25 feet and the point of beginning.

Also including a certain easement as depicted on said plan more particularly described as follows:

Beginning on the northwesterly side of the cul-de-sac at the terminus of Meredith Drive as shown on said plan, with a curve radius of 60', an arc length of 50.01 feet, a chord length of 48.57 feet and a chord bearing of N 47° 52' 15" E.

Thence N 03° 11' 42" E a distance of 484.08 feet to a point;

Thence S 66° 55' 55" E a distance of 50.01 feet to a point;

Thence S 03° 11' 42" W a distance of 365.31 feet to the referenced arc in the cul-de-sac.

Also another certain lot or parcel of land, situated in the Town of Windham, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at a capped iron rod set (PLS #2190) on the southerly sideline of the cul-de-sac of Meredith Drive at the southwesterly corner of Lot 20 as shown on aforesaid plan;

thence in a general westerly direction along the southerly sideline of said Meredith Drive and along a circular curve to the left, circumscribed by a radius of 60.00 feet, an arc length of 50.01 feet to a granite monument to be set and the southeasterly corner of Lot 21; said granite monument to be set being S 74°-52'-15" W a tie distance of 48.57 feet from said previous capped iron rod set;

thence N 37°-14'-02" W along said Lot 21 a distance of 6.00 feet to a capped iron rod set (PLS #2190);

thence N 03°-11'-42" E along said Lot 21 and along Open Space a distance of 643.68 feet to a point and land now or formerly of Anita Lampron;

thence S 66°-55'-55" E along the land of said Lampron a distance of 53.17 feet to a point and said Open Space;

thence S 03°-11'-42" W along said Open Space and along Lot 20 a distance of 614.90 feet to the point of beginning.

The above-described easement encompasses 31,432 s.f.. All bearings refer to grid north.

All as identified as "Possible future road extension" as shown on a certain plan entitled "Mystic Woods Subdivision, Barnes Road, Windham, Maine" dated May 5, 2015 by Pinkham & Greer Civil Engineers recorded in the Cumberland County Registry of Deeds in Plan Book 216 Page 91.

Subject to certain easements granted to the Town of Windham, Maine and to the Mystic Woods Homeowners Association.

Meaning and intending to convey and conveying the real property described in a deed to **Darryl Jon Hawkes**, by virtue of deed dated April 6, 2022 and recorded in the Cumberland County Registry of Deeds at Book 39327, Page 140 and by virtue of deed dated March 21, 2023 and recorded in the Cumberland County Registry of Deeds at Book 40036, Page 238.

DOC :7322 BK:41309 PG:344
RECEIVED - RECORDED, CUMBERLAND COUNTY REGISTER OF DEEDS
03/03/2025, 02:12:25P
Register of Deeds Jessica M. Spaulding E-RECORDED

Witness my hand and seal this 28th day of February, 2025.

Witness:

_____

_____
Darryl Jon Hawkes

STATE OF **MAINE**
COUNTY OF **CUMBERLAND**, ss. February 28, 2025

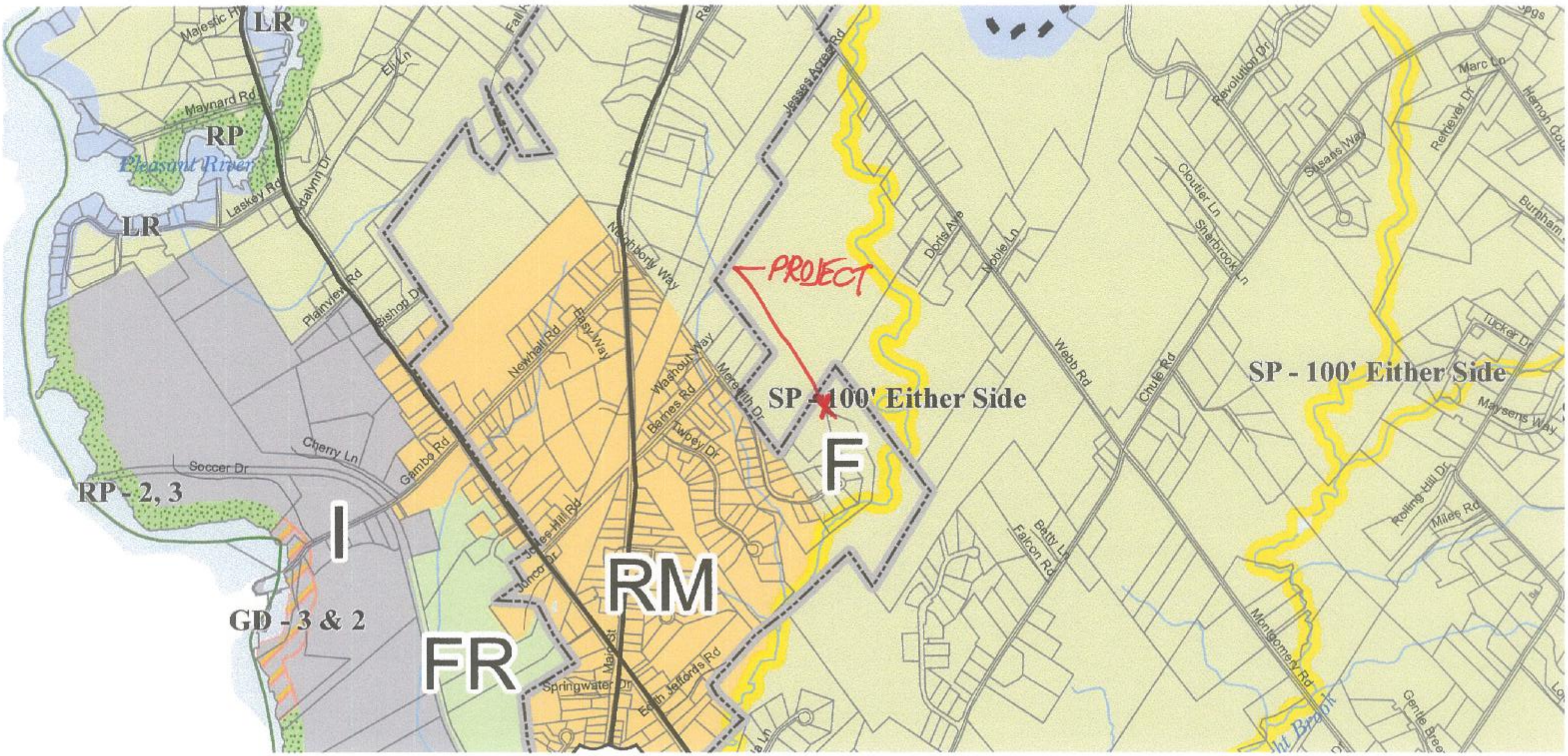
Personally appeared on the above date, the above-named **Darryl Jon Hawkes** and acknowledged the foregoing instrument to be his free act and deed.

Before me,

_____
Notary Public/Attorney at Law
Print name:
Exp: _____

Carly S. Joyce
State of Maine
Attorney at Law
Bar #9659

Section 05
Zoning


LR
RP
Pleasant River
LR
RP - 2, 3
I
GD - 3 & 2
FR
RM
F
SP - 100' Either Side
SP - 100' Either Side
PROJECT
Majestic
Maynard Rd
Laskey Rd
Adalynn Dr
Plainview Rd
Bishop Dr
Elm Ln
Cherry Ln
Soccer Dr
Gambo Rd
Newhall Rd
Easy Way
Neighborly Way
Washout Way
Barnes Rd
Meredith Dr
Twpey Dr
Jones Hill Rd
Junco Dr
Main St
Springwater Dr
Edith Jeffords Rd
Jesses Acres Rd
Doris Ave
Noble Ln
Webb Rd
Chute Rd
Cloutier Ln
Sherbrook Ln
Revolution Dr
Susans Way
Retriever Dr
Marc Ln
Burnham
Tucker Dr
Maysens Way
Rolling Hill Dr
Miles Rd
Betty Ln
Falcon Rd
Montgomery Rd
Gentle Breez

Section 06
Abutters

Bachelder Meredith Drive

Town of Windham, ME

February 22, 2025

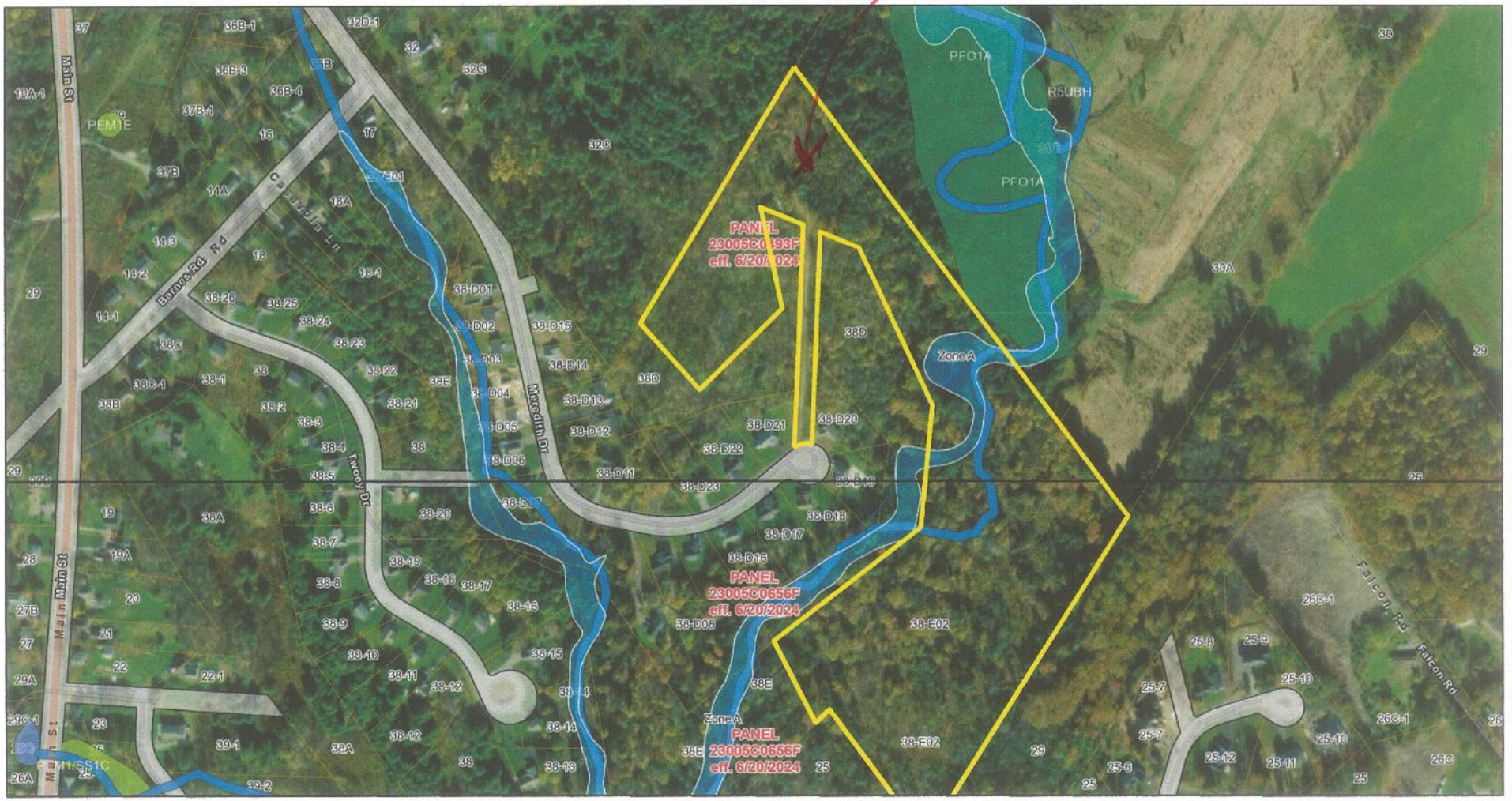
1 inch = 273 Feet

0 273 546 819

NEW MEREDITH WOODS SUBDIVISION

CAI Technologies

www.cai-tech.com



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

Section 07
Wastewater Disposal HHE 200 Forms

Mark Cenci
Geologic, Inc.

CERTIFIED GEOLOGIST/LICENSED SITE EVALUATOR

93 Mill Road • North Yarmouth, Maine 04097
Cell: 207.329.3524 • mark@markcenci.com
www.markcenci.com

Preliminary Soils and Wastewater Disposal Investigation Meredith Woods Subdivision, Windham

Date: July 21, 2025

To: Laurie Bachelder
Meredith Way, LLC
366 Route 1
Falmouth, ME 04105

Date of Investigation: June 19 and July 21, 2025

Location of Investigation:

The property investigated is located adjacent to and northerly of the cul de sac of Meredith Drive, Windham.

Purpose of Investigation:

The purpose of the investigation is to assess the suitability under the *Maine Subsurface Wastewater Disposal Rules* (the *Rules*) for on-site wastewater disposal systems to serve five First-Time single-family homes on five proposed lots.

Method of Investigation:

A hand shovel, soil auger and soil probe were used. The tested sites were located using a Leica Zeno GPS device capable of sub-meter accuracy. The *Net Density Plan, Meredith Woods Subdivision, Meredith Drive, Windham, Maine* by SJR Engineering, dated May 2025, was used in the field during the investigation.

Results of the Investigation:

The property is located on the dissected plateau of South Windham (see Figure 1). Drainage is to Black Brook and a tributary of Black Brook, by way of wetland seepage.

The property is depicted as a deposit of fine textured sediment (Pp) on the *Surficial Geology of the North Windham Quadrangle, Maine* by Maine Geological Survey (see Figure 2). This is a very generalized depiction of a more complicated depositional setting. The site is a complicated association of fine glacio-marine sediments, Degeer moraine-derived coarse sediments and redistributed medium textured erosion sediments.

A more accurate depiction is shown on the *National Cooperative Soil Survey* (see Figure 3) which maps Windsor loamy sand (WmC), Nicholville very fine sandy loam (BgB), Lamoine silt loam (BuB) and Scantic silt loam (Sn) deposits.

Multiple suitable sites for wastewater disposal were described and located on the property. An effort was made to include at least one site on each lot. A CAD file of the soil test locations was sent to SJR Engineering, to be included on a site plan. The sites depicted are not the only suitable sites on each of the five lots.

Soil description logs are included. Each site has a fine sandy loam topsoil and subsoil. The substratum varies between a sandy loam to a silt loam. The sites are characterized as Medium-Large and Large for wastewater disposal sizing and are classified as 3C, 3D, 8C and 8C, according to the *Rules*.

Disposal areas will be mounded 10 to 28 inches above existing grades. Wastewater pumping may be required, depending upon the house locations and foundation heights.

Conclusions:

A suitable site for First-Time single-family home wastewater disposal was found and located on each of five lots. Further investigation will be required to design a disposal system on any tested site.

Mark Cenci
Site Evaluator #262

Mark Cenci
Geologic, Inc.

CERTIFIED GEOLOGIST/LICENSED SITE EVALUATOR

93 Mill Road • North Yarmouth, Maine 04097
Cell: 207.329.3524 • mark@markcenci.com
www.markcenci.com

MEREDETH WAY, WINDHAM

Observation Hole # TP-1 ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0			DK BRN	
6	SANDY LOAM	FRIABLE	YELLOW BROWN	
12			OLIVE YELLOW	FEW
18		FIRM	OLIVE GRAY	
24				
30	LIMIT OF PROBE			
36				
42				
48				

Soil	Classification	Slope	Limiting Factor	Groundwater
3	C		15	☒ Groundwater
Profile	Condition	Percent	Depth	☐ Restrictive Layer
				☐ Bedrock
				☐ Pit Depth

Observation Hole # TP-2 ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FINE SANDY LOAM	FRIABLE	D.B. OLIVE YELLOW	
6				
12				FEW
18	SILT LOAM	FIRM	OLIVE GRAY	
24				
30	LIMIT OF PROBE			
36				
42				
48				

Soil	Classification	Slope	Limiting Factor	Groundwater
8	D		10	☒ Groundwater
Profile	Condition	Percent	Depth	☐ Restrictive Layer
				☐ Bedrock
				☐ Pit Depth

Observation Hole # TP-3 ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FINE SANDY LOAM	FRIABLE	DARK BRN. OLIVE YELLOW	
6				
12				
18	SILT LOAM	FIRM	OLIVE BROWN	FEW
24				
30	LIMIT OF PROBE			
36				
42				
48				

Soil	Classification	Slope	Limiting Factor	Groundwater
8	C		15	☒ Groundwater
Profile	Condition	Percent	Depth	☐ Restrictive Layer
				☐ Bedrock
				☐ Pit Depth

Observation Hole # TP-4 ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FINE SANDY LOAM	FRIABLE	DK. BRN. OLIVE YELLOW	
6				
12				
18				FEW
24	SILT LOAM	FIRM	OLIVE GRAY	
30				
36	LIMIT OF PROBE			
42				
48				

Soil	Classification	Slope	Limiting Factor	Groundwater
8	C		18	☒ Groundwater
Profile	Condition	Percent	Depth	☐ Restrictive Layer
				☐ Bedrock
				☐ Pit Depth

Mark Cenci — 262 — 7-22-25

Site Evaluator Signature — SE # — Date

Mark Cenci
Geologic, Inc.

CERTIFIED GEOLOGIST/LICENSED SITE EVALUATOR

93 Mill Road • North Yarmouth, Maine 04097
Cell: 207.329.3524 • mark@markcenci.com
www.markcenci.com

MEREDETH WAY, WINDHAM

Observation Hole # TP-5 ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0–6	SANDY LOAM	FRIABLE	DK BRN	
6–12			YELLOW BROWN	
12–18				
18–24		FIRM	GRAY BROWN	FEW
24–30				
30–36		LIMIT OF PROBE		
36–42				
42–48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
3	C		22	☒ Groundwater ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole # TP-5A ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0–6	SANDY LOAM	FRIABLE	DK BRN.	
6–12			YELLOW BROWN	
12–18				
18–24		FIRM	BROWN	FEW
24–30				
30–36		LIMIT OF BORING		
36–42				
42–48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
3	C		17	☒ Groundwater ☒ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole # TP-5B ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0–6	SANDY LOAM	FRIABLE	DK BRN	
6–12			YELLOW BROWN	
12–18				
18–24		FIRM	BROWN	FEW
24–30				
30–36		LIMIT OF PROBE		
36–42				
42–48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
3	C		21	☒ Groundwater ☒ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole # TP-6 ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0–6	SANDY LOAM	FRIABLE	DK BRN	
6–12			YELLOW BROWN	
12–18				
18–24		FIRM	GRAY BROWN	FEW
24–30				
30–36		LIMIT OF PROBE		
36–42				
42–48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
3	C		18	☒ Groundwater ☒ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Mark Cenci — 262 — 7-22-25

Site Evaluator Signature — SE # — Date

Mark Cenci
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MERIDETH WAY, WINDHAM

Observation Hole # 1-A ☐ Test Pit ☒ Boring

_____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0–3	SANDY LOAM	FRIABLE	DK BRN	
3–14			YELLOW BROWN	
14–30		FIRM	OLIVE GRAY	FEW
30	LIMIT OF PROBE			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
3	D		14	☒ Groundwater ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole # _____ ☐ Test Pit ☐ Boring

_____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0–48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
				☐ Groundwater ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole # _____ ☐ Test Pit ☐ Boring

_____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0–48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
				☐ Groundwater ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole # _____ ☐ Test Pit ☐ Boring

_____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0–48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
				☐ Groundwater ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Mark Cenci (signature) — Site Evaluator Signature

262 — SE #

7-22-25 — Date

Figure 1.

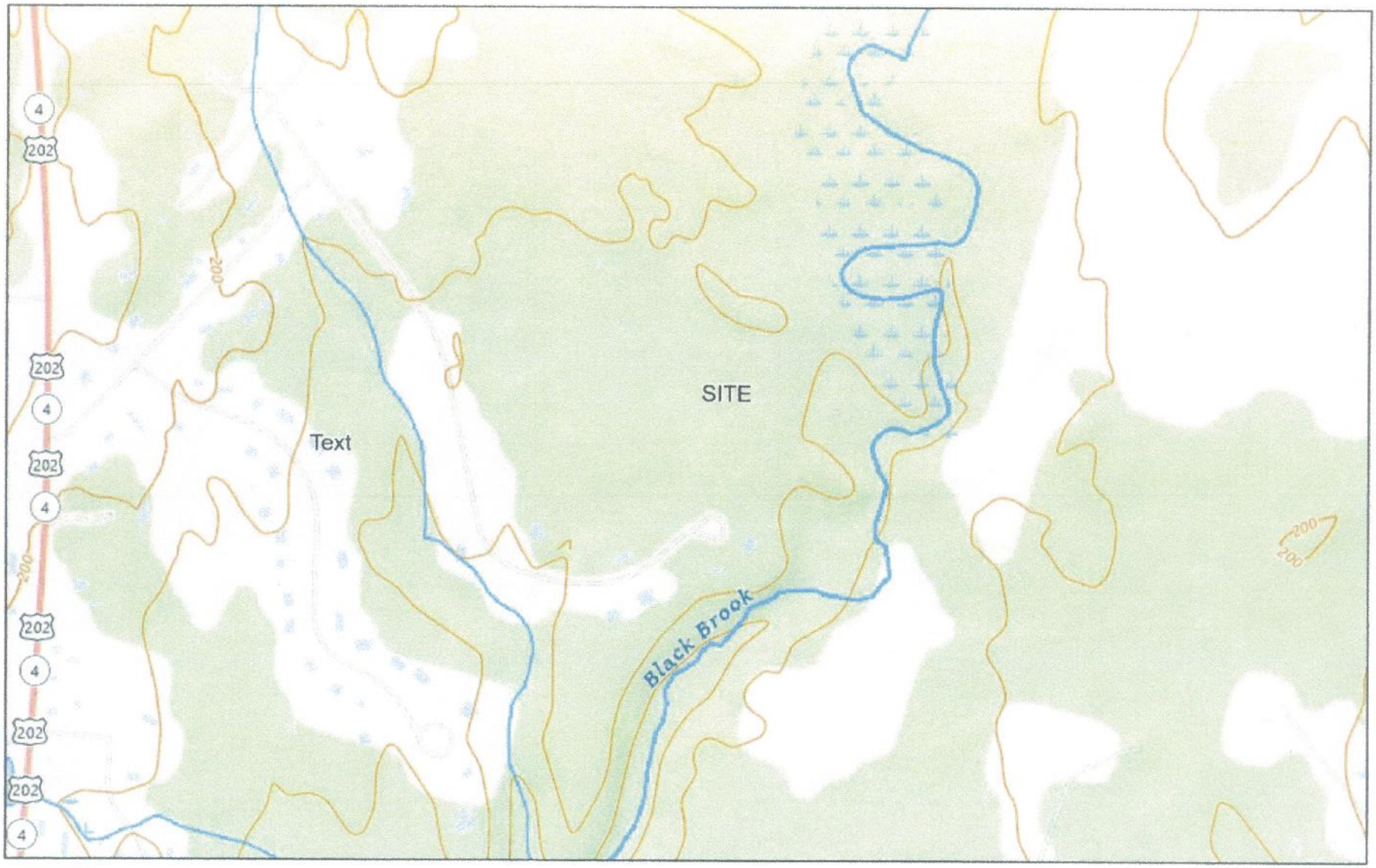
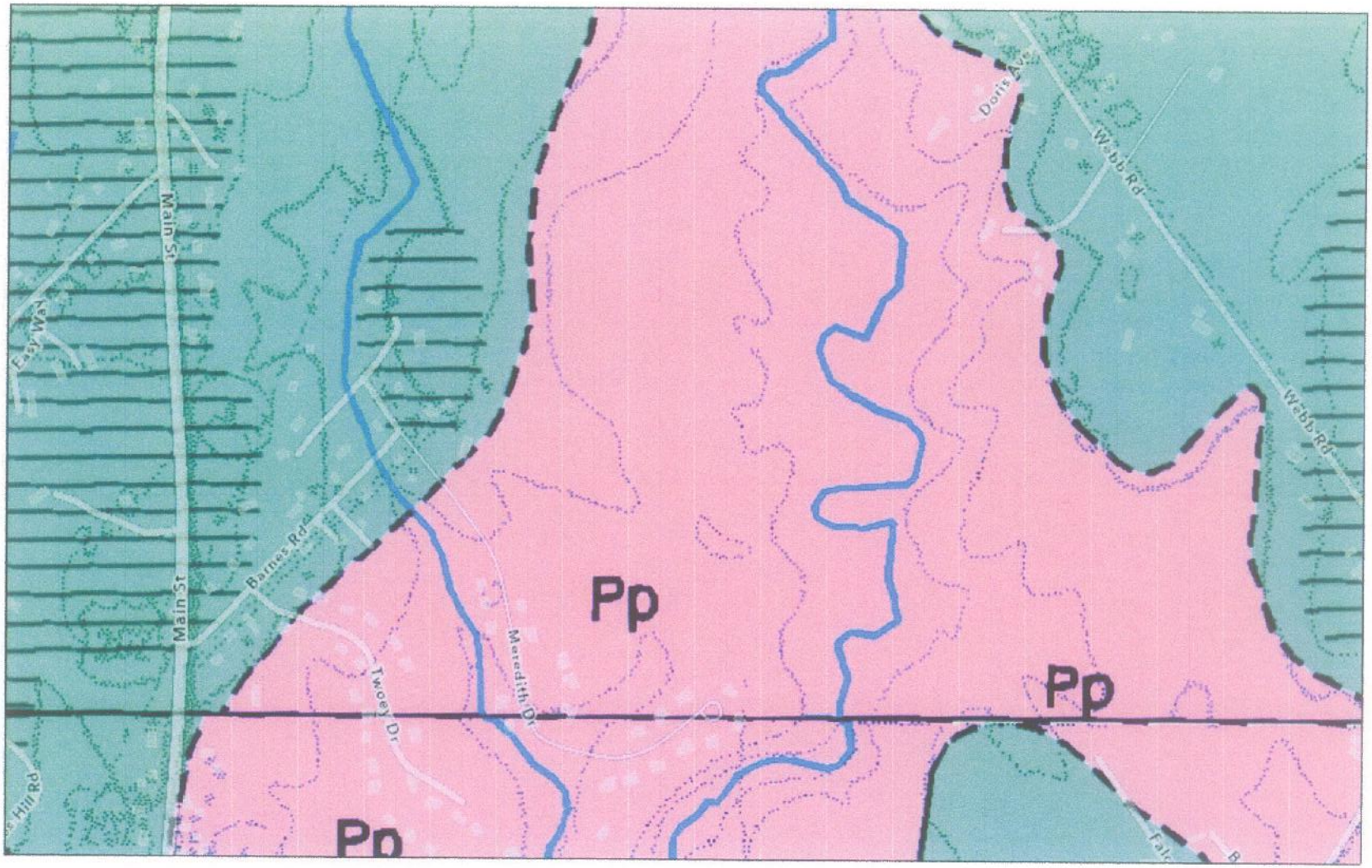

SITE
Text
Black Brook
202
4
200
7/21/2025
Secondary Highways
USGSHydroCached
Red: Band_1
Green: Band_2
Blue: Band_3
Normal Index Contours
Normal Intermediate Contours
Layers
Red: Band_1
Green: Band_2
Blue: Band_3
USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography

Figure 2. Surficial Geology



7/21/2025 4:00:54 PM

1:8,989

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

Maine Geological Survey, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

Soil Map—Cumberland County and Part of Oxford County, Maine
(Figure 3.)

Map Scale: 1:4,480 if printed on A landscape (11" x 8.5") sheet.

N

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 21, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2022—Jul 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BgB	Nicholville very fine sandy loam, 0 to 8 percent slopes	9.0	8.8%
BgC2	Nicholville very fine sandy loam, 8 to 15 percent slopes	9.6	9.4%
BuB	Lamoine silt loam, 3 to 8 percent slopes	46.0	44.7%
HrB	Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky	1.9	1.8%
Sn	Scantic silt loam, 0 to 3 percent slopes	22.5	21.8%
SuC2	Suffield silt loam, 8 to 15 percent slopes, eroded	1.0	1.0%
SuE2	Suffield silt loam, 25 to 45 percent slopes, eroded	9.8	9.6%
WmC	Windsor loamy sand, 8 to 15 percent slopes	3.0	2.9%
Totals for Area of Interest		**102.9**	**100.0%**

Section 08
Wetland

U.S. Fish and Wildlife Service

National Wetlands Inventory

Figure 4.

July 21, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Mark Cenci
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www.markcenci.com

Observation of Wetlands
Mystic Woods Open Space
and vicinity of Meredith Way, Windham

Date: July 22, 2025

To: Laurie Bachelder
Meredith Way, LLC
366 Route 1
Falmouth, ME 04105

RE: Wetlands depicted on the Meredith Woods Subdivision plan

Purpose of the wetlands observation:

The purpose of the wetlands observation is to confirm the location of previously delineated wetlands relative to the proposed Meredith Woods Subdivision plan.

Methods used:

The *Net Density Plan, Meredith Woods Subdivision* by SJR Engineering, dated May 2025, was used in the field during the observation. Wetlands were identified following the guidelines described in the 1987 Corps of Engineers Delineation Manual and the 2009 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region. This procedure uses a multiple parameter approach that requires the presence of three primary components for an area to be identified as a wetland: 1) hydric soils; 2) predominance of hydrophytic vegetation; and 3) wetland hydrology.

Background information:

Wetlands were delineated previously in the area. The wetland/ upland boundary is depicted on the SJR Engineering site plans and was taken from prior subdivision submittals.

Wetlands delineated are palustrine, forested wetlands located in low-lying areas underlain by poorly drained soils. These poorly drained soils match well with the Scantic silt loam depicted on the *National Cooperative Soil Survey* (see figure 3). *The National Wetlands Inventory* depicts wetlands associated with the Black Brook drainage system (see Figure 4) but are less extensive than on-site mapping shown on the site plans.

The proposed Meredith Way is located on uplands between two wetland areas. These wetlands are not Wetlands of Special Significance, according to the Maine Natural Resources Protection Act, and there are no buffers of no-disturbance associated with them. A small portion of wetlands is located on proposed Lot 1 of Meredith Woods. These are not Wetlands of Special Significance.

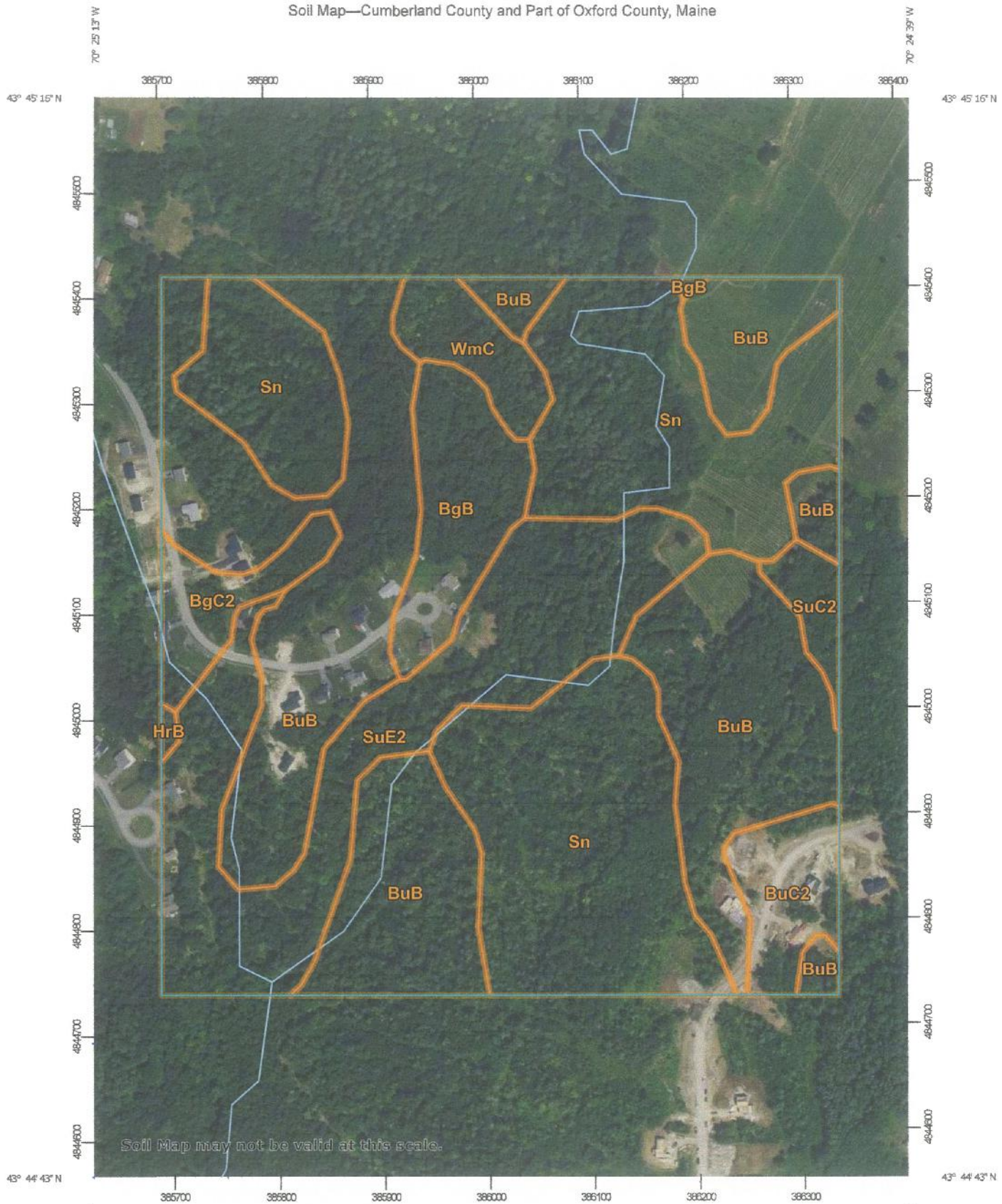
Results of Observation:

On July 21, 2025, the mapped wetlands were observed and determined to be accurate and unchanged. The proposed Meredith Way Subdivision is not affected by these wetlands. No filling or disturbance of these wetlands is needed to develop the parcel.

Mark Cenci, LG # 467

Section 09
Soils

Soil Map—Cumberland County and Part of Oxford County, Maine



Map Scale: 1:4,990 if printed on A portrait (8.5" x 11") sheet.

Meters: 0, 50, 100, 200, 300

Feet: 0, 200, 400, 800, 1200

N

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 21, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 22, 2021—Oct 7, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BgB	Nicholville very fine sandy loam, 0 to 8 percent slopes	5.7	5.3%
BgC2	Nicholville very fine sandy loam, 8 to 15 percent slopes	2.9	2.7%
BuB	Lamoine silt loam, 3 to 8 percent slopes	40.9	37.5%
BuC2	Buxton silt loam, 8 to 15 percent slopes	3.5	3.2%
HrB	Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky	0.2	0.1%
Sn	Scantic silt loam, 0 to 3 percent slopes	33.6	30.9%
SuC2	Suffield silt loam, 8 to 15 percent slopes, eroded	1.5	1.3%
SuE2	Suffield silt loam, 25 to 45 percent slopes, eroded	17.9	16.4%
WmC	Windsor loamy sand, 8 to 15 percent slopes	2.8	2.6%
Totals for Area of Interest		**109.0**	**100.0%**

Cumberland County and Part of Oxford County, Maine

BuC2—Buxton silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2x1by
Elevation: 10 to 490 feet
Mean annual precipitation: 33 to 60 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

Buxton and similar soils: 85 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Buxton

Setting

Landform: Marine terraces, river valleys
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Fine glaciomarine deposits

Typical profile

Ap - 0 to 7 inches: silt loam
Bw1 - 7 to 18 inches: silt loam
Bw2 - 18 to 23 inches: silty clay loam
BC - 23 to 35 inches: silty clay loam
C - 35 to 65 inches: silty clay

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 17 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Ecological site: F144BY402ME - Clay Hills

Hydric soil rating: No

Minor Components

Scantic

Percent of map unit: 5 percent
Landform: Marine terraces, river valleys
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 21, Aug 26, 2024

Cumberland County and Part of Oxford County, Maine

BuB—Lamoine silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t0kc
Elevation: 10 to 490 feet
Mean annual precipitation: 33 to 60 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lamoine and similar soils: 85 percent
Minor components: 11 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lamoine

Setting

Landform: Marine terraces, river valleys
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine glaciomarine deposits

Typical profile

Ap - 0 to 7 inches: silt loam
Bw - 7 to 13 inches: silt loam
Bg - 13 to 24 inches: silty clay loam
Cg - 24 to 65 inches: silty clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 6 to 17 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144BY401ME - Clay Flat

Hydric soil rating: No

Minor Components

Scantic

Percent of map unit: 10 percent
Landform: Marine terraces, river valleys
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Biddeford

Percent of map unit: 1 percent
Landform: Marine terraces, river valleys
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F144BY002ME - Marine Terrace Depression
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 21, Aug 26, 2024

Cumberland County and Part of Oxford County, Maine

BgB—Nicholville very fine sandy loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2yjg5
Elevation: 20 to 2,300 feet
Mean annual precipitation: 34 to 50 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Nicholville and similar soils: 85 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nicholville

Setting

Landform: Lakebeds (relict)
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-silty glaciomarine deposits

Typical profile

Ap - 0 to 7 inches: very fine sandy loam
Bs - 7 to 19 inches: very fine sandy loam
BC - 19 to 30 inches: very fine sandy loam
C - 30 to 65 inches: loamy very fine sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)

Hydric soil rating: No

Minor Components

Roundabout

Percent of map unit: 2 percent
Landform: Lakebeds (relict)
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 21, Aug 26, 2024

Cumberland County and Part of Oxford County, Maine

Sn—Scantic silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2slv3
Elevation: 10 to 900 feet
Mean annual precipitation: 33 to 60 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

Scantic and similar soils: 85 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Scantic

Setting

Landform: Marine terraces, river valleys
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Glaciomarine deposits

Typical profile

Ap - 0 to 9 inches: silt loam
Bg1 - 9 to 16 inches: silty clay loam
Bg2 - 16 to 29 inches: silty clay
Cg - 29 to 65 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: D
Ecological site: F144BY304ME - Wet Clay Flat
Hydric soil rating: Yes

Minor Components

Biddeford

Percent of map unit: 3 percent
Landform: Marine terraces, river valleys
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave, linear
Ecological site: F144BY002ME - Marine Terrace Depression
Hydric soil rating: Yes

Roundabout

Percent of map unit: 2 percent
Landform: River valleys, marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 21, Aug 26, 2024

Cumberland County and Part of Oxford County, Maine

SuC2—Suffield silt loam, 8 to 15 percent slopes, eroded

Map Unit Setting

National map unit symbol: blk1
Elevation: 10 to 900 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

Suffield and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Suffield

Setting

Landform: Coastal plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine glaciolacustrine deposits

Typical profile

H1 - 0 to 6 inches: silt loam
H2 - 6 to 23 inches: silt loam
H3 - 23 to 33 inches: silty clay
H4 - 33 to 65 inches: silty clay

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F144BY402ME - Clay Hills

Hydric soil rating: No

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 21, Aug 26, 2024

Cumberland County and Part of Oxford County, Maine

WmC—Windsor loamy sand, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2svkq
Elevation: 0 to 1,260 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of local importance

Map Unit Composition

Windsor and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor

Setting

Landform: — error in exists on —
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
Ap - 1 to 11 inches: loamy sand
Bw - 11 to 31 inches: loamy sand
C - 31 to 65 inches: sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 21, Aug 26, 2024

Section 10
Housekeeping/Maintenance

Meredith Woods Subdivision

Inspection and Maintenance Plan

Date: August 2025

The Earthwork Contractor will be responsible for inspection, maintenance, and operations of the stormwater system during construction. Upon approval of the final construction by the Owner, the Owner will be responsible for the inspection, maintenance, and operation of the stormwater system. We have attached the "Maine ESC BMPs (10/2016)" at the end of the narrative that more fully identifies the Party's E+S responsibilities.

INSPECTIONS – Contractor During Construction

Areas of proposed construction that will require inspections/maintenance of the stormwater system include the following:

- **Detention/Retention/Infiltration Facilities**
  - Soil Filter media inspection and maintenance
  - Outlet Control Structure inspection and maintenance
  - Sediment removal and disposal
- **Ditches, Swales, or other open stormwater channels**
  - Embankment inspection and maintenance
  - Channel inspection
  - Sediment removal and disposal
- **Culverts, catch basins, stormwater control structures**
  - Structure inspection and maintenance
  - Inlet and Outlet inspection
  - Debris removal and disposal
- **Buffers/Landscaping**
  - Landscaping inspection and maintenance
  - Landscaping turf inspection and maintenance
  - Debris removal and disposal
- **General Site Erosion Controls**
  - Sediment barriers (silt fence, erosion control berm material)
  - Stabilized Construction Exit
  - Riprap slopes

Level Lip Spreaders

Erosion Control Blankets

Temporary/Permanent Seed and Mulch

Hay mulch

There may be other areas of inspection/maintenance specific to the project during construction that may not be identified above. The Contractor is directed to utilize the 2014 Revision to the Maine Erosion and Sediment Control Field Guide for Contractors.

The Contractors representative will inspect the general erosion control items identified above including the drainage system, swales, channels, and stormwater structures to determine if a soil blockage or impaired capacity to pass flow exists. During construction, the inspection will be done prior to and within 24 hours after a storm event greater than $\frac{1}{2}$" in 24 hours. A record of inspections and maintenance or corrective measures shall be kept by the Contractor.

MAINTENANCE AND CLEANING

The earthwork contractor will regularly inspect for sediment accumulation, obstructions, debris, and other potential causes for operational difficulty in the conveyance of stormwater including the detention system. Immediate action shall be taken to remedy detrimental obstructions.

The Contractor will regularly inspect the infiltration rate of the soil filter ponds after every major storm event (1/2" rain event in 24 hours) in the first few months to ensure proper function. The sediment shall be removed and hauled off site and disposed in an approved location. Ongoing maintenance will be required as necessary.

All sand, salt, etc. accumulated when sweeping the paved access road, and snow stockpile areas, shall be trucked off-site for disposal.

RECORD KEEPING

The Contractor will maintain inspection records, with recordings of condition of items identified above and annotation of substantial precipitation events or mitigating circumstances in the intervening time for trends to develop for anticipated future preventive maintenance schedule.

INSPECTIONS - Owner Post-Construction

Areas of the completed construction that will require ongoing inspections and maintenance of the stormwater system include the following:

- **Detention/Retention/Infiltration Facilities**
  - Soil Filter media inspection and maintenance
  - Outlet Control Structure inspection and maintenance
  - Sediment removal and disposal
- **Ditches, Swales, or other open stormwater channels**
  - Embankment inspection and maintenance
  - Channel inspection
  - Sediment removal and disposal
- **Culverts, catch basins, stormwater control structures**
  - Structure inspection and maintenance
  - Inlet and Outlet inspection
  - Debris removal and disposal
- **Buffers/Landscaping**
  - Landscaping inspection and maintenance
  - Landscaping turf inspection and maintenance
  - Debris removal and disposal
- **General Site Erosion Controls**
  - Riprap slopes
  - Level Lip Spreaders
  - Permanent Seed and Mulch

There may be other areas of inspection/maintenance specific to the project identified after construction that may not be identified above. The Owner is directed to utilize the 2014 Revision to the Maine Erosion and Sediment Control Field Guide for Contractors for these situations.

The Owners representative will inspect the general erosion control items identified above including the drainage system, swales, channels, and stormwater structures to determine if a soil blockage or impaired capacity to pass flow exists. Post construction, the inspection will be done within 24 hours after a storm event greater than $\frac{1}{2}$" in 24 hours. General post-construction inspections will be performed on a monthly basis from March to November, and quarterly during the remainder of the year. A record of inspections and maintenance or corrective measures shall be kept by the owner.

MAINTENANCE AND CLEANING

The Owner will regularly inspect for sediment accumulation, obstructions, debris, and other potential causes for operational difficulty in the conveyance and detention system. Immediate action shall be taken to remedy detrimental obstructions.

The Owner will regularly inspect the infiltration rate of the soil filter ponds after every major storm event (1/2" rain event in 24 hours) in the first few months to ensure proper function. Thereafter, the soil filter basin should be inspected bi-annually to ensure that they draining within 24-48 hours. The sediment shall be removed and hauled off site and disposed in an approved location.

A mandatory scheduled maintenance will be performed every four weeks for a period of one hundred and twenty (120) days and will begin after satisfactory completion and acceptance of project construction. Ongoing maintenance may be required as necessary.

All sand, salt, etc. accumulated when vacuuming the paved parking, access road, and snow stockpile areas, shall be trucked off-site for disposal.

RECORD KEEPING

The Owner will maintain inspection records, with recordings of condition of items identified above and annotation of substantial precipitation events or mitigating circumstances in the intervening time for trends to develop the future preventive maintenance schedule.

Maintenance Log Sheet

Inspector Name	Date	Maintenance Task Completed
Soil Filter Pond A		
Pond Embankment		
Pond Vegetation		
Pond Inlet		
Pond Outlet		
Pond Outlet Control Structure		
Emergency Spillway		
Pond Volume		
Soil Filter Media		
Other		

Road Ditches		
Pavement/Grass interface		
Pavement debris/sand		
Stabilized Construction Exit		
Landscaping Buffers		
Level Spreaders		
Stone Check Dams		
ESC devices installed/removed		
Winter Construction ESC		
Mulch		
90% Vegetation		
Plunge Pools		
Roof Drip Edge		
Snowplow sand/ground surface		

Housekeeping

These performance standards apply to all projects.

1. Spill prevention. Controls must be used to prevent pollutants from being discharged from materials on site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

2. Groundwater protection. During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.

NOTE: Lack of appropriate pollutant removal best management practices (BMPs) may result in violations of the groundwater quality standard established by 38 M.R.S.A. §465-C(1).

3. Fugitive sediment and dust. Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.

NOTE: An example of the use of BMPs to control fugitive sediment and dust is as follows: Operations during wet months that experience tracking of mud off the site onto public roads should provide for sweeping of road areas at least once a week and prior to significant storm events. Where chronic mud tracking occurs, a stabilized construction entrance should be provided. Operations during dry months, that experience fugitive dust problems, should wet down the access roads once a week or more frequently as needed.

NOTE: Dewatering a stream without a permit from the department violates state water quality standards and the Natural Resources Protection Act.

4. Debris and other materials. Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.

NOTE: To prevent these materials from becoming a source of pollutants, construction and post-construction activities related to a project may be required to comply with applicable provision of rules related to solid, universal, and hazardous

waste, including, but not limited to, the Maine solid waste and hazardous waste management rules; Maine hazardous waste management rules; Maine oil conveyance and storage rules; and Maine pesticide requirements.

5. Trench or foundation de-watering. Trench de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin (or pumping water through a sediment dirtbag). Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the department.

NOTE: For guidance on de-watering controls, consult the latest edition of the Maine Erosion and Sediment Control BMPs", Maine Department of Environmental Protection."

6. Non-stormwater discharges. Identify and prevent contamination by non-stormwater discharges.

7. Additional requirements. Additional requirements may be applied on a site-specific basis.

Maintenance Plan & Best Management Practices

Site Inspection & Maintenance During Construction: Weekly inspections, as well as routine inspections following rainfalls, shall be conducted by the General Site Contractor of all temporary and permanent erosion control devices until final acceptance of the project (90% grass catch) by the Owner. Necessary repairs shall be made to correct undermining or deterioration. Final acceptance shall include a site inspection to verify the stability of all disturbed areas and slopes. Until final inspection, all erosion and sedimentation control measures shall immediately be cleaned, and repaired by the General Contractor as required. Disposal of all temporary erosion control devices shall be the responsibility of the General Contractor.

It is recommended that the Owner hire the services of the design engineer, or other qualified individual, to provide compliance inspections (during active construction) relative to implementation of the Stormwater and Erosion Control Plans. Such inspections should be limited to once a week or as necessary based on weather patterns, and be reportable to the Owner for record keeping purposes.

Maintenance Agreement: Short-term sedimentation maintenance shall be the responsibility of the Contractor to clean out all swales, structures, and soil filter basins prior to turning project over to the Owners. After project turnover, the Owner shall be the responsible party for inspecting and maintaining proper functioning of all stormwater conveyance practices and measures. The Owner may assign an environmental manager to carry out specific tasks identified below.

Structures and Other Measures

Stabilized Construction Entrance: A stabilized construction entrance is required at all locations that utilize vehicle access points from the project onto public or private paved roadways during construction operations. Tracked sediment onto public road systems shall be vacuum swept prior to the next significant rain event (1/2" rain/24 hours). Sweeping of sediment into ditches, storm drains or waterways is not acceptable

Winter Sanding/Sweeping: Post construction, paved parking lots, streets, and access driveways shall be vacuum swept a minimum of twice per year. The first shall take place in the Fall. The second vacuum sweeping shall take place after winter sanding operations terminate, prior to May 1.

Ditches/Swales: Open swales and ditches need to be inspected on a monthly basis and after a major rainfall event to assure that debris or sediments do not reduce the effectiveness of the system. Debris needs to be removed at that time. Any sign of

erosion or blockage shall be immediately repaired to assure a vigorous growth to vegetation for the stability of the structure and proper functioning.

Vegetated Ditches: Vegetative should be mowed at least monthly during the growing season to a height of not less than 3 inches. Larger brush or trees must not be allowed to become established in the channel. Unless finely mulched, clippings should be removed to minimize the amount of organic material accumulating in the swales. Any areas where the vegetation fails will be subject to erosion and should be repaired and revegetated. Sediment should be removed when the ditch cross section is 33% full of sediment.

Stone Lined Channels: Where stone is displaced from constructed riprap areas, it should be replaced and chinked to assure stability. With time, riprap may need to be added. Vegetation growing through riprap should be removed on a yearly schedule.

Stone Check Dams: Observe the center of the check dam to make sure it is lower that the edges. Sediment trapped behind the dams should be removed once it reaches half the height of the dam. Check to insure erosion around the sides of the dam has not occurred.

Level Lip Spreaders: Sediment/debris buildup should be removed when the pool volume is reduced by 33%. Observation of the front side of the level spreader is neessary to determine erosion along the existing vegetation/spreader interface.

Culverts: If sediment in culverts or piped drainage systems exceeds 20% of the diameter of the pipe, it should be removed. This may be accomplished by mechanical means or hydraulic flushing. Care should be taken to prevent the release of the sediments into the downstream receiving areas. All. pipes should be inspected on an annual basis.

Trench Dewatering: Water is to be pumped to a soil filter bag prior to discharge from the area. Placement of the filter bag is to be greater than 100' from an environmental resource. Careful monitoring of the discharge water must be taken to insure sediment laden water does not enter downslope resources.

Catch Basin/Field Inlets: All catch basins, and any other field inlets throughout the collection system, need to be inspected on a monthly basis to assure that the inlet entry point is clear of debris and will allow the intended water entry. In many cases, a silt sack has been installed within the rim of the CB and should be emptied/replaced after each storm event in a disturbed soil area as necessary. On a yearly basis, or when sediment reaches two thirds of the total sump volume, catch basins will be vacuumed and cleaned of all accumulated sediment. Work must be done by a vacuum truck. The removed material must be disposed of in accordance with State of Maine Solid Waste Disposal Rules.

Soil Filter, Infiltration, and Wet Ponds

Clearing Inlets and Outlets of Ponds (where applicable): The inlet and outlet of a pond shall be checked periodically to ensure that flow structures are not blocked by debris. All ditches and pipes connecting ponds in series shall be checked for debris that may obstruct flow. Inspections shall be conducted monthly during wet weather conditions from March to November.

Basin Inspections: Ponds shall be inspected on an annual basis for erosion, destabilization of side slopes, embankment settling, and other signs of structural failure. Brief inspections shall be conducted following major storms. Corrective action shall be taken immediately upon identification of problem area. Records shall be kept of all maintenance operations at jobsite to help plan future work and identify problem areas.

Maintenance Dredging: Wet ponds typically lose 1% of their volume annually due to sediment accumulation. Dredging is required when accumulated volume loss reaches 15% or approximately every 15-20 years.

Drainage Area Inspections: The owners' environmental manager shall inspect the basin's drainage area semi-annually for eroding soil and other sediment sources. Repair eroding areas using appropriate erosion control BMP's immediately. Control sediment sources, such as stockpiles of winter sand, by removing them from the basin's drainage area or surrounding them with sediment control BMP's.

Mowing: A basin with a turf lining shall have its side-slopes and top of berm mowed at least twice a year to prevent woody growth. Clippings shall be removed to minimize the amount of organic material accumulating in the basin.

Sediment Removal: Remove accumulated debris and sediments from the sediment forebays, inlet plunge pools, and pre-treatment BMP's at least annually.

Snow Storage: The ponds are not to be used for snow storage. Snow storage shall be sited so that snowmelt flows to a pre-treatment BMP before reaching the infiltration basin.

Pedestrian Access: Limit access to ponds to passive recreational use.

Vehicle Access: Prohibit vehicle access to all ponds, except that authorized for maintenance.

Section 11
Erosion/Sediment Control

SJR ENGINEERING, INC.
STEVE@SJRENG.COM. 16 THURSTON DRIVE, MONMOUTH, ME. TEL: (207) 242-6248

August 10, 2025

Laurie Bachelder
Meredith Way LLC
366 Route 1
Falmouth, Maine 04105

Re: Meredith Woods Subdivision, Windham, Maine
Erosion Control Narrative

Dear Laurie,

Meredith Way, LLC owns a parcel of land off Meredith Road in Windham, Maine. You are proposing to construct a new 5 lot subdivision to be named Meredith Woods Subdivision with a new access road and stormwater facility. The lots will utilize underground electricity, telephone, private sewer and public water supply. It is anticipated that this projects site infrastructure will be started in 2025.

The site is identified as Tax Map 6 Lot 38-E02 of the Town's Tax Map. The total parcel size is 23.64 acres. The subdivision is designed to Town of Windham Conservation Subdivision standards. Each of the 5 lots will have roughly 30,000 sf of developed area with the remaining area dedicated to Conservation "Open Space". An upgraded 750' long Betty Lane will have a cul-de-sac turnaround at the end. The road is to be private and paved with ditches on both sides of the road except around the cul-de-sac where curbing will redirect stormwater to catch basins. Road drainage will be diverted into a soil filter pond near the back of lot 5 and the open space. The parcel lies within the Farm Zoning District.

Existing Site Conditions

The existing site consists mostly of existing woods with several large delineated wetland areas. The topography of the proposed developed site is shown at two-foot contour interval that have been taken from the MeGIS website. The slope of the property varies from 1% along the flatter areas to 30% along the banks of the steeper slopes of the property. Wetland areas have been reviewed and re-delineated by Mark Censi in 2025 and are shown on the plan.

Adjacent Areas

Adjacent areas and land uses are similar in nature to that being proposed (residential). Much of the area is currently being used for residential properties or remains undeveloped. Runoff from the property enters into large wetland areas which eventually flows into Colley Brook watershed.

We have prepared stormwater quantity/quality narratives and calculations under separate cover. This narrative is to address erosion and sediment control during (and after) the construction of the project.

Soils

Soils delineation was taken from the medium intensity soils maps of the Cumberland County Soil Survey. I have overlaid the proposed developed site onto this map. Soils are identified as being Lamoine (hydro group "C/D", K= 0.32), Scantic (hydro group "D", K= 0.32), Windsor (hydro group "A", K= 0.17) and Nicholville (hydro group "C", K= 0.49) within the parcel.

The K number is an erodibility index number which is a value assigned to the soil based on a no erosion potential of .10 to a high erosion potential of .64. An index number greater than .32 indicates a high level of erosion control measures must be taken in order to control erosion of this soil. The hydrological group rating is a rating system of the relative permeability of the soil with Group "A" being extremely permeable such as a beach sand, to Group "D" being slow draining such as a wetland area.

Erosion and Sediment Control Practices

This plan has been developed to provide a strategy for dealing with soil erosion during and after the construction of the project. This plan is based on the standards and specifications for erosion prevention as contained in the "2016 Best Management Practices Manual for Designers and Engineers" by the Soil and Water Conservation District and Maine DEP.

The Contractor shall limit construction disturbance to (ie disturbed unstable ground surface) to no more than 10 acres at any one time. An area considered "opened" includes any area not stabilized with pavement, vegetation, mulch, mats, riprap, or gravel base on road/pavement locations. Open areas must have temporary erosion control installed within 14 days of disturbance (and

prior to a ½" or more rain event). Areas opened within 100' of environmental resources must have temporary erosion controls installed within 7 days. While the erosion control plan is comprehensive, additional measures may be necessary to control erosion from the site.

It shall be the Contractors responsibility to be aware of weather conditions at any time during the construction of the project, and to make appropriate erosion control decisions regarding the current condition of the site for the anticipated rainfall event. The site erosion controls must be able to prevent significant erosion during the expected event.

A pre-construction meeting with the Town, Owner, and Contractor shall be required to specifically discuss how the erosion control plan will be constructed and monitored.

Construction is expected to begin following obtaining permits for approval. It is expected that construction activities will be started in the early Fall of 2025. Special attention should be given to the sections pertaining to Fall and Winter seeding, as the project may overlap into the winter construction season.

The principal erosion control devices will be silt fences (or erosion control mulch berms), hay mulch, stabilized construction entrance, and seed to protect existing trees, buildings, and drainage paths from the regions undergoing construction. Features such as grassed waterways and landscaping will be constructed as permanent erosion controls.

Erosion control measures must be in place before the activity begins. Erosion control measures must remain in place and functional until the site is permanently stabilized. Prior to construction, the Contractor will install the stabilized construction entrance to minimize potential tracking of soils from the project construction onto paved public roads.

Structural Measures

1. Silt fencing/erosion control mix berm shall be installed along the contour and perpendicular to the predominant slope of the land just beyond the downslope limits of clearing and grubbing and/or just above any adjacent property line and streams where indicated on the plan to protect against construction related erosion. Installation shall be as shown on the plans or approved equal.

2. Riprap materials shall be placed in all inlets/outlets of pipe culverts. These aprons will prevent scour at stormwater outlets and minimize the potential for downstream erosion by reducing the velocity of concentrated stormwater flows. Average design size stone, D50, shall be as called out in the detail on the plans. Largest size of stone in the riprap is to be 1.5 times the D50 size.

3. Protective mats on steep slopes will aid in controlling erosion on critical areas during the establishment period of vegetation.

4. Naturally vegetated buffers and grass filter strips remove sediment and other pollutants from runoff by infiltration, deposition, absorption and decomposition. Filters are effective only if used to remove sediment from sheet (overland) flow.

5. Stabilized construction entrance is to be placed during construction, where traffic is entering or leaving construction site. This will reduce or eliminate the tracking or flowing of sediment onto public rights of way. An 8" thick layer of 3"-4" crushed stone 50' in length has been designed and shown on the plan. If soil tracking does occur, the Contractor shall vacuum sweep the paved surface of the roadway by the close of business that day.

6. Temporary storm drain inlet protection (crushed stone, silt sack in the catch basin, waddles, etc.) will prevent sediment from entering the storm drain system during construction and also stop erosion at its' source. The idea is to provide a filtering device at the entrance to the storm drain system such that sediments become trapped.

7. A stone check dam is a filtering and energy dissipation device that limits the erosion process. These dams are 2"-3" crushed stone, 24" in height and are placed in drainage ditches as a temporary erosion control measure. The dams are to be removed prior to final acceptance of the project and riprap installed in its' place.

8. Soil stockpiles shall be hay mulched within 24 hours of stockpiling. The downslope side of the stockpile shall have a ring of erosion control barrier placed (silt fence, erosion control berm mix, waddles). Stockpiles are not to be located within 100' of environmental resources where possible.

9. Trench dewatering shall be pumped to filter bags prior to discharge from the site. They shall be located in upland areas greater than 100' from environmental resources.

10. Dust control will be addressed through the use of water trucks spraying the ground with water and/or applying calcium chloride to the surface to minimize dust creation.

Vegetative Measures

1. Topsoil on site shall be stockpiled at a stable location on site and covered with anchored mulch for temporary erosion control.

2. If any disturbed area of soil will be left bare for more than two weeks, or if construction is to be completed in phases over an extended duration, temporary seeding and mulching shall commence immediately following initial fine grading of site. **In sensitive areas (within 100' of wetlands) temporary mulch must applied within 7 days or prior to any storm event on all disturbed surfaces.** It shall be maintained and reseeded as necessary to insure good vegetative cover for the entire duration of construction. Seed will be selected from the following table, according to the time of the year:

Temporary Seed Mixture

Seed Type	lbs acre	lbs 1000 sf	Seeding Depth	Recommended Seeding Date
Winter Rye	112	2.6	1"-1.5"	8/15 - 10/1
Oats	80	1.8	1"-1.5"	4/1 - 7/1
or				and
Annual Ryegrass	40	0.9	.25"	8/15 - 9/15
Sudangrass	40	0.9	.5"-1"	5/15 - 8/15
Perennial Ryegrass	40	0.9	.25"	8/15 - 9/15
Temporary Mulch with or without dormant seeding				10/1 - 4/1

Mulch will be applied with seeding according to mulch table. If it is not possible to seed 45 days or more prior to frost, than dormant seeding and anchored mulch shall be applied. The application of mulch shall be such that the bare ground is barely visible.

3. Permanent seedings of grass cover shall be applied to all disturbed areas. All surface water control measures and final land grading in the vicinity should be completed. Ground preparation shall include tilling to a minimum 3" depth of fine but friable soil free of clods or stones. Permanent seed shall be selected according to its final destination. (See permanent seed mixture table)

4. All seeding will require mulch. Mulch provides several benefits: conserves moisture, prevents surface compaction, improves water quality, reduces runoff and erosion, controls weeds, and helps establish plant cover.

Mulch shall be applied according to the following tables:

Permanent Seed Mix	Application Rate	
	Parks & Lawns lbs/1000 sf	Roadside Areas ditches, basins lbs/1000 sf
Kentucky Bluegrass	.46	
Creeping Red Fescue	.46	.46
Perennial Ryegrass	.11	
Redtop		.05
Tall Fescue		.46
Total Seed Rate	1.03	0.97

Note: 1. The contractor may wish to final seed from 10/1 to 11/1 with the same soil preparations, seeding mixes (doubling the seed rate) and mulching, but it may result in winter kill. Vegetation must be inspected and reseeded as necessary in the following spring to assure good vegetative cover.

2. No seeding shall be permitted on the snow.

3. Mulch shall be applied after all seed applications (see mulch) and in enough quantity to cover all bare spots such that bare ground is not visible. Any site grading performed in winter conditions shall be covered with mulch on a daily basis. Mulch rate shall be twice the normal rate.

4. Permanent seedings should be made 45 days or more prior to the first killing frost (Seed by September 15th) or as a temporary and dormant seeding after the first killing frost.

Maintenance

During the period of construction and/or until long term vegetation is established:

1. Seeded areas will be fertilized and reseeded as necessary to insure 90% vegetative establishment.

2. At a minimum, the hay bale/silt fence barriers shall be inspected and repaired once a week and immediately following all significant rainfall or snow melt. Sediment trapped behind these barriers shall be excavated when it reaches a depth of 6 six inches and regraded onto the site.

3. Diversion ditches and swales will be checked weekly and repaired as necessary until adequate vegetation is established.

4. The Owner and contractor shall be responsible for the construction and maintenance of all proposed temporary and permanent erosion control measures including vegetation. The contractor must install or construct all required improvements shown on the plans. The contractor must incorporate all other site improvements, restrictions, construction limits, drainage improvements, natural vegetated buffers, proposed landscaping, etc. The contractor must obtain a complete set of plans, reports, permit approvals, and documents pertaining to the project before beginning construction.

5. The contractor shall remove all temporary erosion control devices from the site after construction is complete and the site is permanently stabilized.

WINTER CONSTRUCTION (as applicable)

The winter construction period is from November 1 through April 15. If the construction site is not stabilized with pavement, a road gravel base, 75 % mature vegetation cover or riprap by November 15, then the site needs to be protected with over-winter stabilization. An area considered open is any area not stabilized with pavement; vegetation, mulching, erosion control

mats, riprap or gravel base on a road. Winter excavation and earthwork shall be completed such that no more than 1 acre of the site is without stabilization at any one time. Limit the exposed area to those areas in which work is expected to be undertaken during the proceeding 15 days and that can be mulched in one day prior to any snow event.

All areas shall be considered to be denuded until the subbase gravel is installed in roadway areas or the areas of future loam and seed have been loamed, seeded and mulched. Hay and straw mulch rate shall be a minimum of 150 lbs./1,000 s.f. (3 tons/acre) and shall be properly anchored.

The contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions.

Continuation of earthwork operations on additional areas shall not begin until the exposed soil surface on the area being worked has been stabilized, in order to minimize areas without erosion control protection.

SOIL STOCKPILES

Stockpiles of soil or subsoil will be mulched for over winter protection with hay or straw at twice the normal rate or at 150 lbs/1,000 s.f. (3 tons per acre) or with a four-inch (4") layer of erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall. Any soil stockpile will not be placed (even covered with hay or straw) within 100 feet from any natural resources.

NATURAL RESOURCES PROTECTION

Any areas within 100 feet from any natural resources, if not stabilized with a minimum of 75 % mature vegetation catch, shall be mulched by December 1 and anchored with plastic netting or protected with erosion control mats.

During winter construction, a double line of sediment barriers (i.e. silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area.

Projects crossing a natural resource shall be protected a minimum distance of 100 feet on either side from the resource. Existing projects not

stabilized by December 1 shall be protected with the second line of sediment barrier to ensure functionality during the spring thaw and rains.

SEDIMENT BARRIERS

During frozen conditions, sediment barriers shall consist of erosion control filter berms as frozen soil prevents the proper installation of hay bales and sediment silt fences.

MULCHING

All area shall be considered to be denuded until areas of future loam and seed have been loamed, seeded and mulched. Hay and straw mulch shall be applied at a rate of 150 lb. per 1.000 square feet or 3 tons/acre (twice the normal accepted rate of 75-lbs./1,000 s.f. or 1.5 tons/acre) and shall be properly anchored.

Mulch shall not be spread on top of snow. The snow will be removed down to a one-inch depth or less prior to application.

After each day of final grading, the area will be properly stabilized with anchored hay or straw or erosion control matting.

An area shall be considered to have been stabilized when exposed surfaces have been either mulched with straw or hay at a rate of 150 lb. per 1.000 square feet (3 tons/acre) and adequately anchored so that the ground surface is not visible through the mulch.

Between the dates of November 1 and April 15, all mulch shall be anchored by either peg line, mulch netting, asphalt emulsion chemical, tracking into the surface or wood cellulose fiber. The mulch cover is sufficient when the ground surface is not visible. After November 1, mulch and anchoring of all bare soil shall occur at the end of each final grading workday.

MULCHING ON SLOPES AND DITCHES

Slopes shall not be left exposed for any extended time of work suspension unless fully mulched and anchored with peg and netting or with erosion control blankets. Mulching shall be applied at a rate of 230 lbs/1,000 sf on all slopes greater than 8%.

Mulch netting shall be used to anchor mulch in all drainage ways with a slope greater than 3 % for slopes exposed to direct winds and for all other slopes greater that 8%.

Erosion control blankets shall be used in lieu of mulch in all drainage ways with slopes 8% or greater. Erosion control mix can be used to substitute erosion control blankets on all slopes except ditches.

SEEDING

Between the dates of October 15 and April 1, loam or seed will not be required. During periods of above freezing temperatures, finished areas shall be fine graded and either protected with mulch or temporarily seeded and mulched until such time as the final treatment can be applied. If the date is after November 1 and the exposed area has been loamed and final graded with a uniform surface, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

Dormant seeding may be selected to be placed prior to the placement of mulch and fabric netting anchored with staples. If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5lbs/1000 s.f. All areas seeded during the winter will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 75 % catch) shall be revegetated by removing the mulch and reseeding and remulching.

If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

TRENCH DEWATERING AND TEMPORARY STREAM DIVERSION

Water from construction trench dewatering or temporary stream diversion will pass first through a filter bag or secondary containment structure (e.g. hay bale lined pool) prior to discharge. The discharge site shall be selected to avoid flooding, icing, and sediment discharges to a protected resource. In no case shall the filter bag or containment structure be located within 100 feet of a protected natural resource.

INSPECTION AND MONITORING

Maintenance measures shall be applied as needed during the entire construction season. After each rainfall, snow storm or period of thawing and runoff, the site contractor shall perform a visual inspection of all installed erosion control measures and perform repairs as needed to insure their continuous function. Following the temporary and/or final seeding and mulching, the contractor shall inspect and repair any damages and unvegetated spots. Established vegetative cover means a minimum of 85 to 90 % of areas vegetated with vigorous growth.

STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITES DURING WINTER

1.Standard for the timely stabilization of ditches and channels: The contractor will construct and stabilize all stone-lined ditches and channels on the site by November 15. The contractor will construct and stabilize all grass-lined ditches and channels on the site by September 15. If the contractor fails to stabilize a ditch or channel to be grass-lined by September 15, then the contractor will take one of the following actions to stabilize the ditch for late fall and winter.

Install a sod lining in the ditch: The contractor will line the ditch with properly installed sod by October 1. Proper installation includes the contractor pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

Install a stone lining in the ditch: The contractor will line the ditch with stone riprap by November 15. The contractor will hire a registered professional engineer to determine the stone size and lining thickness needed to withstand the anticipated flow velocities and flow depths within the ditch. If necessary, the contractor will regrade the ditch prior to placing the stone lining so to prevent the stone lining, from reducing the ditch's cross-sectional area.

2. Standard for the timely stabilization of disturbed slopes: The contractor will construct and stabilize stone-covered slopes by November 15. The contractor will seed and mulch all slopes to be vegetated by September 15. The department will consider any area having a grade greater than 15% to be a slope. If the contractor fails to stabilize any slope to be vegetated by September 15, then the contractor will take one of the following actions to stabilize the slope for late fall and winter.

Stabilize the soil with temporary vegetation and erosion control mats: By October 1, the contractor will seed the disturbed slope with winter rye at a seeding rate of 3 pounds per 1000 square feet and apply erosion control mats (or mulch with jute netting) over the mulched slope. The contractor will monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or cover at least 75% of the disturbed slope by November 1, then the contractor will cover the slope with an additional layer of winter mulch application, stone riprap, or erosion control mix as described below.

Stabilize the slope with sod: The contractor will stabilize the disturbed slope with properly installed sod by October 1. Proper installation includes the contractor pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. The contractor will not use late-season sod installation to stabilize slopes having a grade greater than 33%.

Stabilize the slope with erosion control mix: The contractor will place a six-inch layer of erosion control mix on the slope by November 15. Prior to placing the erosion control mix, the contractor will remove any snow accumulation on the disturbed slope. The contractor will not use erosion control mix to stabilize slopes having grades greater than 50% or having groundwater seeps on the slope face.

Stabilize the slope with stone riprap: The contractor will place a layer of stone riprap on the slope by November 15. The contractor will hire a registered professional engineer to determine the stone

size needed for stability and to design a filter layer for underneath the riprap.

2. **Standard for the timely stabilization of disturbed soils:** By September 15 the contractor will seed and mulch all disturbed soils on areas having a slope less than 15%. If the contractor fails to stabilize these soils by this date, then the contractor will take one of the following actions to stabilize the soil for late fall and winter:

   Stabilize the soil with temporary vegetation: By October 1, the contractor will seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic or jute netting. The contractor will monitor growth of the rye over the next 30 days. If the rye fails grow at least three inches or cover at least 75% of the disturbed soil before November 15, then the contractor will mulch the area for over-winter protection as described in one of the items below of this standard.

   Stabilize the soil with sod: The contractor will stabilize the disturbed soil with properly installed sod by October 1. Proper installation includes the contractor pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

   Stabilize the soil with mulch: By November 15, the contractor will mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch. Prior to applying the mulch, the contractor will remove any snow accumulation on the disturbed area. Immediately after applying the mulch, the contractor will anchor the mulch with plastic or jute netting to prevent wind from moving the mulch off the disturbed soil.

Please feel free to contact me if you have any questions concerning the use of these measures. We feel that these measures if properly constructed and maintained will be sufficient to control erosion on your project without any

adverse impact to the area. Thank you for involving this firm on your project.

Sincerely yours,

Stephen Roberge

Stephen Roberge, PE
for SJR Engineering Inc.

Section 12
Stormwater Management

August 12, 2025

Laurie Bachelder
Meredith Way LLC
366 Route 1
Falmouth, Maine 04105

Re: Stormwater Quantity/Quality Narrative, Meredith Woods Subdivision, Windham, Me

Dear Laurie,

Meredith Way, LLC owns a parcel of land off Meredith Road in Windham, Maine. You are proposing to construct a new 5 lot subdivision to be named Meredith Woods Subdivision with a new access road and stormwater facility. The lots will utilize underground electricity, telephone, private sewer and public water supply. It is anticipated that this projects site infrastructure will be started in 2025.

The site is identified as Tax Map 6 Lot 38-E02 of the Town's Tax Map. The total parcel size is 23.64 acres. The subdivision is designed to Town of Windham Conservation Subdivision standards. Each of the 5 lots will have roughly 30,000 sf of developed area with the remaining area dedicated to Conservation "Open Space". An upgraded 750' long Betty Lane will have a cul-de-sac turnaround at the end. The road is to be private and paved with ditches on both sides of the road except around the cul-de-sac where curbing will redirect stormwater to catch basins. Road drainage will be diverted into a soil filter pond near the back of lot 5 and the open space. The parcel lies within the Farm Zoning District.

Existing Site Conditions

The existing site consists mostly of existing woods with several large delineated wetland areas. The topography of the proposed developed site is shown at two-foot contour interval that have been taken from the MeGIS website. The slope of the property varies from 1% along the flatter areas to 30% along the banks of the steeper slopes of the property. Wetland areas have been reviewed and re-delineated by Mark Cenci in 2025 and are shown on the plan.

SJR ENGINEERING, INC.
STEVE@SJRENG.COM. 16 THURSTON DRIVE, MONMOUTH, ME. TEL: (207) 242-6248

Adjacent Areas

Adjacent areas and land uses are similar in nature to that being proposed (residential). Much of the area is currently being used for residential properties or remains undeveloped. Runoff from the property enters into large wetland areas which eventually flows into the Black Brook watershed.

We have prepared an erosion control narrative under separate cover. This narrative is to address stormwater quantity/quality control during (and after) the construction of the project.

Soils

Soils delineation was taken from the medium intensity soils maps of the Cumberland County Soil Survey. I have overlaid the proposed developed site onto this map. Soils are identified as being Lamoine (hydro group "C/D", K= 0.32), Scantic (hydro group "D", K= 0.32), Windsor (hydro group "A", K= 0.17) and Nicholville (hydro group "C", K= 0.49) within the parcel.

Summary Overview

We have prepared stormwater quantity and quality analysis in order to properly evaluate existing and proposed stormwater quantity impacts from the development. The Maine DEP Chapter 500 rules of the Maine DEP stormwater rules require proposed flow rates for 2/10/25 year storm events to be the same or less than existing flows at the property line of the parcel. We have designed this project to meet these standards by use of a combined soil filter pond/detention pond to be constructed with the project infrastructure.

Runoff from the developed portions of the parcel (see stormwater plan for proposed watershed boundaries) are directed to a proposed soil filter pond along the rear of Lot 5. Stormwater runoff is captured and treatment is provided within the pond. Discharge from the pond eventually enters a wetland area that combines with Black Brook within the project site in the open space.

We have designed the soil filter/detention pond to provide water quantity/quality enhancement. The pond will function as a detention pond to limit flows to approximate pre-construction flow rates. Proposed soil filter/detention ponds are necessary to control flows to pre-existing

conditions and to treat the stormwater quality within the pond.
The existing/proposed flow rates are as follows at the Desing point indicated on the watershed plan:

Stormwater Summary at Design Point

	2 year storm (cfs)	10 year storm (cfs)	25 year storm (cfs)
Existing flows	0.00	0.01	0.05
Proposed flows	0.05	0.05	0.06

Stormwater flows will be attenuated by diverting and capturing stormwater flows from the new construction into the new soil filter/detention pond with a stormwater control outlet being utilized to control runoff water discharges to pre-exiting conditions as well as providing stormwater quality treatment for the developed runoff water. In summary, the proposed stormwater flows will be insignificant relative to the existing condition. No significant downstream impacts from stormwater flows are expected with this proposal.

Approximately 9,565 sf of new impervious surface (roads and driveways) will be treated during proposed construction improvements. Proposed impervious surfaces will be treated through the soil filter ponds. In addition, we have provided notation that requires all building to incorporate roof drip strip infiltration for lot construction. Building roof water will be infiltrated into 3' wide stone drip edges for water quantity/quality treatment within the lots.

Stormwater Quantity

I have reviewed the drainage characteristics of the watershed area which includes impervious areas, lawn areas, and woods, as well upslope watershed areas. The analysis requires post construction stormwater flow rates to be approximately equal to or less than the existing stormwater rates.

I have used the SCS TR-20 (HydroCad 10.2 computer model) method of computing stormwater runoff peak flow rates. This method accounts for soil types, existing land uses, topography, vegetative cover, and proposed land use for the parcel to be developed. The proposed conditions were analyzed using data for Cumberland County type III, 24-hour storm distribution (Northeast Regional Climate Center June 2014) with a design frequency of occurrence of 2/10/25/100 years. One day precipitation values of 3.19"/4.77"/6.01"/8.54"

have been used for each respective event. All supporting calculations and data are submitted with this report.

The existing and proposed site conditions were analyzed using information taken from existing/proposed topographic plan of the parcel to be developed. Impervious areas, lawns, meadows, and woods areas for each hydrological soil condition were measured within AutoCad in order to calculate a weighted curve number that typifies the drainage condition of the site.

Watershed calculations (pre and post construction)

Please see the attached stormwater plans for both the existing and proposed conditions to help determine location of each watershed and drainage flow path.

The project has one larger watershed area within the developed parcel that will be captured to control runoff and provide water quality enhancement. Watershed "1A" consists of the land area that will be disturbed with road/driveway construction and flows into the soil filter pond. Watershed 1B is the remaining land area that also drains to the Design Point. We have designated the Design Point of interest on the plan as being the beginning of the open space area.

Soil Filter Ponds:

In the proposed development condition, the watershed area has significant increases in impervious and developed areas as compared with the existing condition. The increased flows are captured in the soil filter/detention pond within the parcel. Runoff water within the soil filter pond will be detained and treated in the pond.

The soil filter pond has been sized to accommodate and store flows for stormwater quantity and quality functions and to control flows to pre-development runoff conditions. We have calculated increases in flow rates in the developed portion of the project for the 2/10/25 year storm events. However, by constructing the soil filter/detention pond and sizing the inlets within the stormwater control structure, stormwater flows are captured and contained. These increased flows are then stored (detained and treatment provided) within the pond for short periods of time (24-48 hours) allowing existing peak flow rates to remain approximately the same.

Design Point A - Rear of Lot 5

The stormwater existing/proposed Design Point A is located along the rear property line of Lot 5. We have calculated the existing flows with the proper land surface cover and soils hydrological group in order to compare these flows with the proposed flows. Existing flows at this design point location have been calculated to be 0.00/0.01/0.05 cfs for the 2/10/25 year storm events.

Soil Filter Pond: Our analysis indicates that the incoming flow rates to the Soil Filter Pond 1 are 0.30/0.33/1.11 cfs and are reduced to 0.05/0.05/0.06 cfs for the 2/10/25 year storm events at the outlet from the soil filter pond control structure. The soil filter ground elevation is set at elevation 164.0. The water elevation within the pond is expected to peak at elevations 164.63/165.82/166.81 for the 2/10/25 year storm events.

Pond construction Control structure

Pond 1: The soil filter pond will need to be configured with a control manhole structure that has a 15" diameter outlet pipe at invert 161.15. The control structure has inlet connection to the 6" diameter underdrain pipe within the pond filter area at elev 161.50. The manhole has a 48" wide by 12" tall orifice cut into the manhole structure on the pond side at elevation 165.5 to allow water into the structure. The control structure has a steel panel installed along the center of the structure with a 1" orifice cut at elevation 161.50. No water will flow from the pond (except filtered water within the filter media underdrain) until the water elevation reaches 166.88 (top of steel plate). A 10' wide emergency spillway is to be constructed at elevation 166.88. The top of the berm is to be constructed to elevation 168.11. We have checked the spillway design for a 25-year storm event with the control structure plugged (ie all flows through the spillway). Calculated flows reach elevation 166.93. The top of berm is 14" higher than this water surface. We have also checked the spillway design for a 100-year storm event. Calculated flows reach elevation 167.11. The top of berm is 12" higher than this water surface.

Water quality - Soil Filter Pond

The Maine DEP Chapter 500 rules of the Maine DEP stormwater rules require a 75% impervious surface stormwater treatment and an 50% disturbed area stormwater treatment for linear type projects (subdivision roads). We have designed this project to meet and exceed these standards by use of a combined soil filter pond/detention pond to be constructed with the project

infrastructure. Roof drip edges for residential structures have also been designed into the project that will also treat stormwater runoff from the building roof surfaces.

Soil Filter Pond 1: We have designed the project to redirect impervious and lawn areas runoff into a soil filter pond downslope from the developed areas. We have identified watershed A will be captured and diverted to the soil filter pond. The total disturbed area draining to the pond 1 is 27,635 sf. We have calculated 9,565 sf of the new impervious area (portion of street and driveways) and 18,070 sf of the grassed area of the project would be treated through the proposed soil filter pond.

The soil filter/detention pond is designed to act such that initial and ending runoff flows are captured and infiltrated through the soil filter media within the pond. The higher flows will be bypassed through the pond control structure and emergency riprap spillway.

The soil filter pond is to be constructed to a ground elevation of 164.0 (top of ground surface for filtering system). The pond is to be sized such that the surface area meets (or exceeds) 5% of the impervious area plus 2% of the landscape area that drains to the pond. As noted above, we have calculated 9,565 sf of impervious area runoff and 18,070 sf of landscape area runoff will enter the pond. Therefore, we are required to have a minimum of 839 sf of surface filter area. We have provided 877 sf of available area within contour 164.0.

In addition, a minimum treatment volume must be contained such that the required volume contained is less than 18" deep over the surface filter area. The channel protection volume is based on 1" of impervious surface area and .4" of vegetative area entering the pond. Using the same impervious and landscape areas noted above, we are required to have 1399 cf of pond storage above the soil filter surface area. Our design has provided 1416 cf of storage area at elevation 165.35 (16" deep).

Pond 1 is controlled by a stormwater control manhole that has a steel plate (or concrete panel) with specific holes cut into the control panel to limit flows leaving the ponds and provide adequate holding time to be treated by the filter media. Water quality enhancement flows are detained within the soil filter pond by restricting the discharge flow through a small 1" orifice control in the control structure steel plate at invert elevation 161.50. The hole has been

sized using the DEP orifice Regression Equation for both filter area and quality area sizing requirements. Holes smaller than this size are susceptible to plugging frequently.

We have provided concept building locations as required by the ordinance, but this should not be interpreted as being the only development that can be located on the project. We have noted that each building be constructed with a roof drip edge that runoff will be infiltrated through a filter media and drain to an underdrain to daylight.

The proposed development of the parcel can be constructed utilizing the soil filter pond as designed to the berm height and control structure in the ponds as noted above.

Summary

Please feel free to contact me if you have any questions concerning the calculations of stormwater from this project. It is important to note that proper erosion control and revegetation of disturbed areas are essential for the proper operation of the stormwater facilities. Maintenance of the yard impervious areas, careful attention to the pavement/seeded interface, and continued maintenance to the pond system must be a top priority in order for the system to function properly. Thank you for involving this firm on your project.

Sincerely yours,

Stephen Roberge

Stephen Roberge, PE
for SJR Engineering Inc.

Stage-Area-Storage for Pond P: Soil Filter pond

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
164.00	877	0
164.05	890	44
164.10	902	89
164.15	915	134
164.20	928	180
164.25	940	227
164.30	953	274
164.35	966	322
164.40	978	371
164.45	991	420
164.50	1,004	470
164.55	1,016	521
164.60	1,029	572
164.65	1,041	623
164.70	1,054	676
164.75	1,067	729
164.80	1,079	783
164.85	1,092	837
164.90	1,105	892
164.95	1,117	947
165.00	1,130	1,004
165.05	1,144	1,060
165.10	1,158	1,118
165.15	1,172	1,176
165.20	1,186	1,235
165.25	1,200	1,295
165.30	1,214	1,355
165.35	1,228	1,416
165.40	1,242	1,478
165.45	1,256	1,540
165.50	1,270	1,603
165.55	1,283	1,667
165.60	1,297	1,732
165.65	1,311	1,797
165.70	1,325	1,863
165.75	1,339	1,929
165.80	1,353	1,997
165.85	1,367	2,065
165.90	1,381	2,133
165.95	1,395	2,203
166.00	1,409	2,273
166.05	1,424	2,344
166.10	1,439	2,415
166.15	1,455	2,488
166.20	1,470	2,561
166.25	1,485	2,635
166.30	1,500	2,709
166.35	1,515	2,785
166.40	1,531	2,861
166.45	1,546	2,938
166.50	1,561	3,016
166.55	1,576	3,094
166.60	1,591	3,173
166.65	1,607	3,253
166.70	1,622	3,334
166.75	1,637	3,415
166.80	1,652	3,497
166.85	1,667	3,580
166.90	1,683	3,664
166.95	1,698	3,749
167.00	1,713	3,834
167.05	1,729	3,920
167.10	1,746	4,007
167.15	1,762	4,095
167.20	1,779	4,183
167.25	1,795	4,273
167.30	1,812	4,363
167.35	1,828	4,454
167.40	1,845	4,546
167.45	1,861	4,638
167.50	1,878	4,732
167.55	1,894	4,826
167.60	1,910	4,921
167.65	1,927	5,017
167.70	1,943	5,114
167.75	1,960	5,211
167.80	1,976	5,310
167.85	1,993	5,409
167.90	2,009	5,509
167.95	2,026	5,610
168.00	**2,042**	**5,712**

REQUIRED STORAGE 1399 CF

Sub to Design Point 1

Subcat Reach Pond Link

Routing Diagram for Existing Condition
Prepared by SJR Engineering, Printed 8/11/2025
HydroCAD® 10.20-3h s/n 00591 © 2024 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	NRCC 24-hr	D	Default	24.00	1	3.19	2
2	10-Year	NRCC 24-hr	D	Default	24.00	1	4.77	2
3	25-Year	NRCC 24-hr	D	Default	24.00	1	6.01	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.390	30	Woods, Good, HSG A (1S)
0.113	70	Woods, Good, HSG C (1S)
0.503	**39**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.390	HSG A	1S
0.000	HSG B	
0.113	HSG C	1S
0.000	HSG D	
0.000	Other	
0.503		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.390	0.000	0.113	0.000	0.000	0.503	Woods, Good	1S
0.390	**0.000**	**0.113**	**0.000**	**0.000**	**0.503**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Sub to Design Point 1 Runoff Area=21,900 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=280' Slope=0.0600 '/' Tc=16.3 min CN=39 Runoff=0.00 cfs 0.000 af

Total Runoff Area = 0.503 ac Runoff Volume = 0.000 af Average Runoff Depth = 0.00"
100.00% Pervious = 0.503 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Sub to Design Point 1

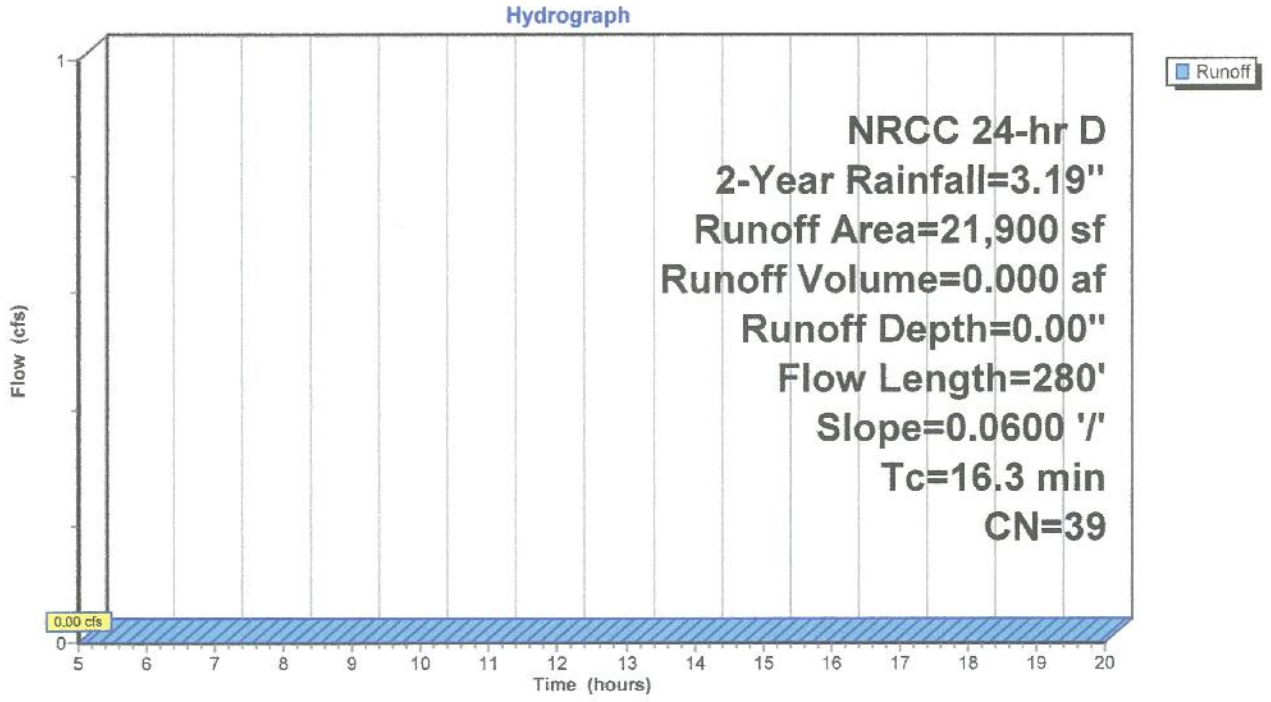
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 2-Year Rainfall=3.19"

Area (sf)	CN	Description
16,980	30	Woods, Good, HSG A
4,920	70	Woods, Good, HSG C
21,900	39	Weighted Average
21,900		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0600	0.12		**Sheet Flow, woods** Woods: Light underbrush n= 0.400 P2= 3.19"
2.4	180	0.0600	1.22		**Shallow Concentrated Flow, woods** Woodland Kv= 5.0 fps
16.3	280	Total			

Subcatchment 1S: Sub to Design Point 1



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Sub to Design Point 1 Runoff Area=21,900 sf 0.00% Impervious Runoff Depth>0.10"
Flow Length=280' Slope=0.0600 '/' Tc=16.3 min CN=39 Runoff=0.01 cfs 0.004 af

Total Runoff Area = 0.503 ac Runoff Volume = 0.004 af Average Runoff Depth = 0.10"
100.00% Pervious = 0.503 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Sub to Design Point 1

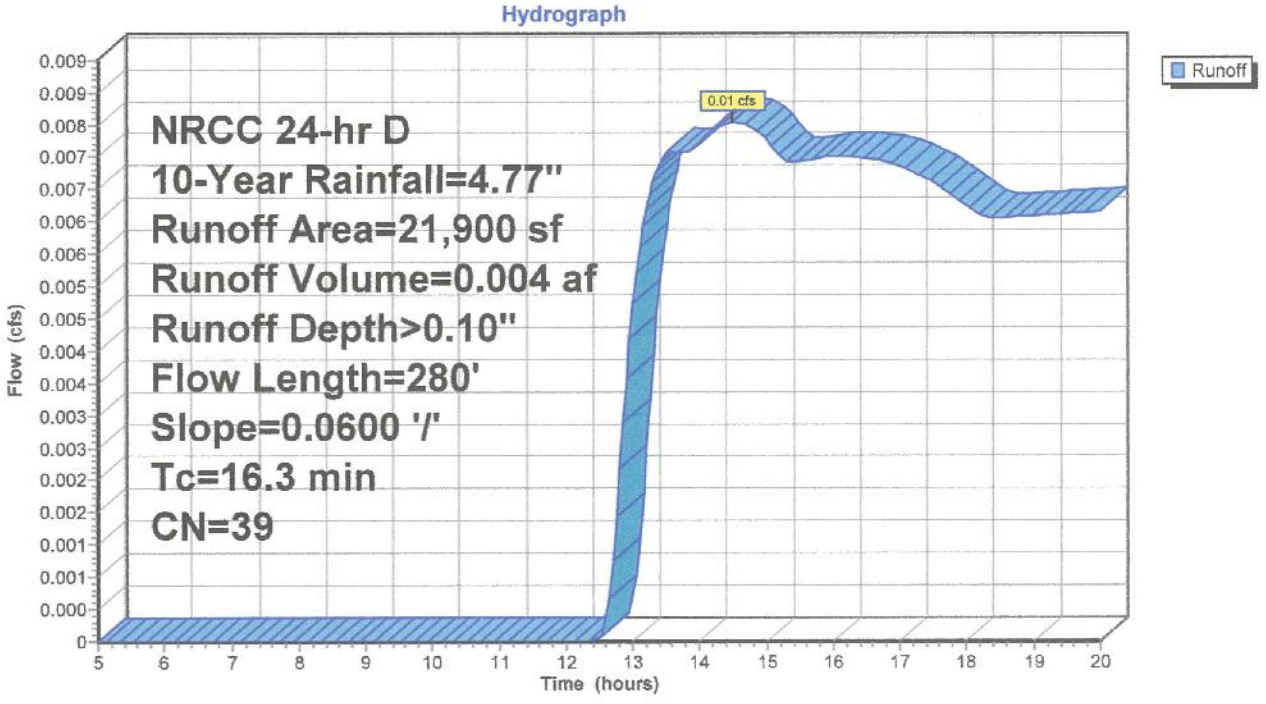
Runoff = 0.01 cfs @ 14.47 hrs, Volume= 0.004 af, Depth> 0.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 10-Year Rainfall=4.77"

Area (sf)	CN	Description
16,980	30	Woods, Good, HSG A
4,920	70	Woods, Good, HSG C
21,900	39	Weighted Average
21,900		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0600	0.12		**Sheet Flow, woods** Woods: Light underbrush n= 0.400 P2= 3.19"
2.4	180	0.0600	1.22		**Shallow Concentrated Flow, woods** Woodland Kv= 5.0 fps
16.3	280	Total			

Subcatchment 1S: Sub to Design Point 1



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Sub to Design Point 1 Runoff Area=21,900 sf 0.00% Impervious Runoff Depth>0.34"
Flow Length=280' Slope=0.0600 '/' Tc=16.3 min CN=39 Runoff=0.05 cfs 0.014 af

Total Runoff Area = 0.503 ac Runoff Volume = 0.014 af Average Runoff Depth = 0.34"
100.00% Pervious = 0.503 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Sub to Design Point 1

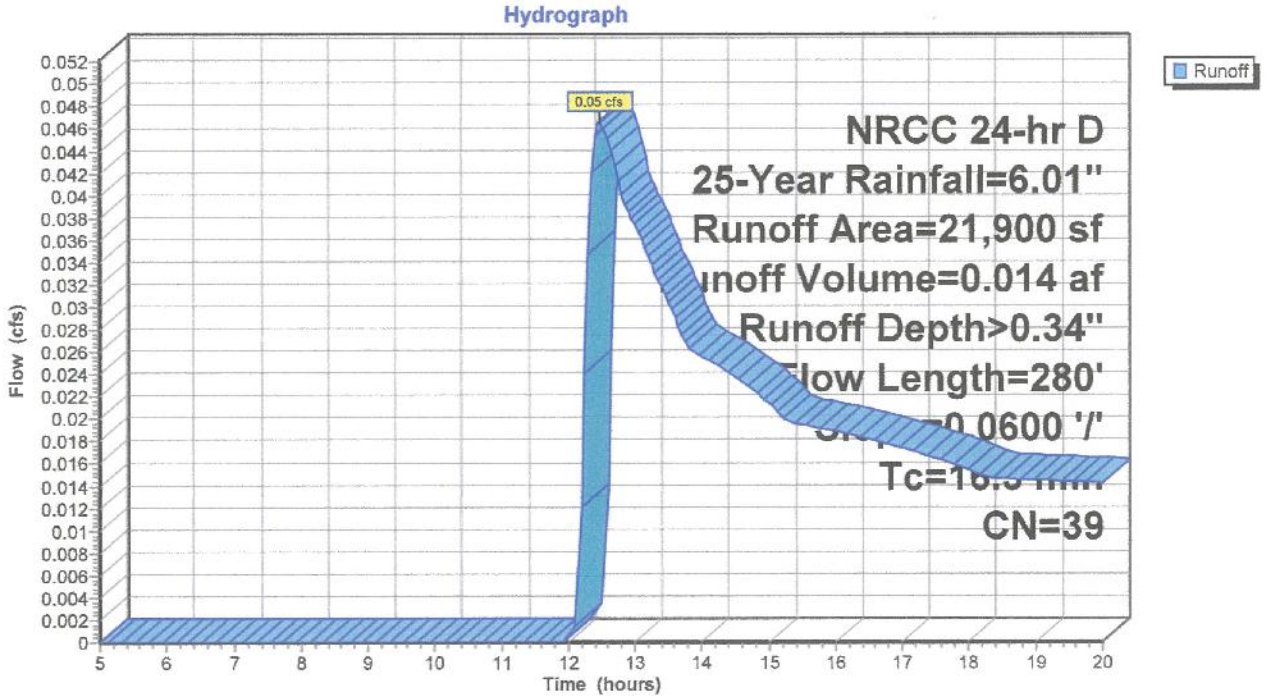
Runoff = 0.05 cfs @ 12.47 hrs, Volume= 0.014 af, Depth> 0.34"

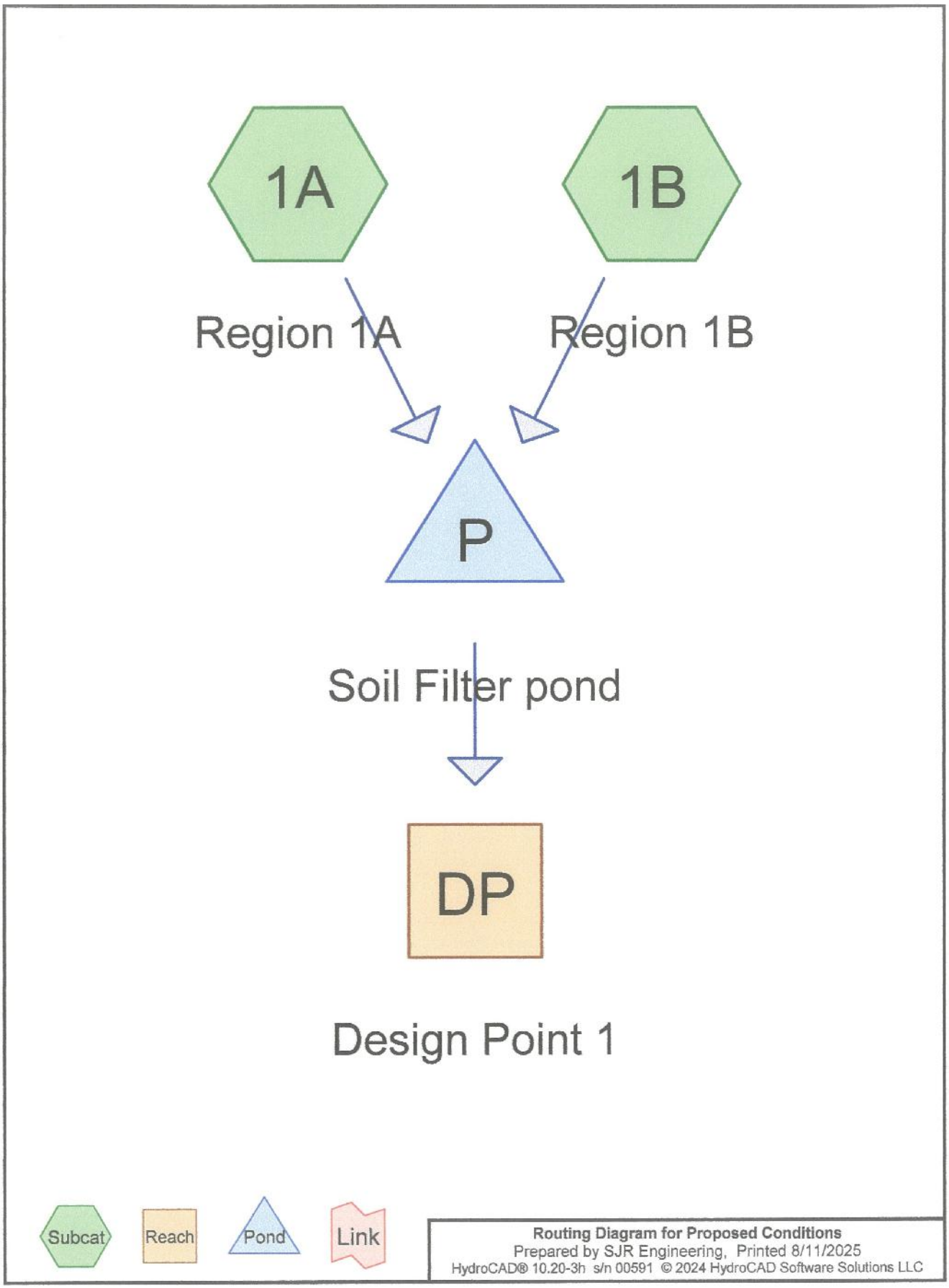
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 25-Year Rainfall=6.01"

Area (sf)	CN	Description
16,980	30	Woods, Good, HSG A
4,920	70	Woods, Good, HSG C
21,900	39	Weighted Average
21,900		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0600	0.12		**Sheet Flow, woods** Woods: Light underbrush n= 0.400 P2= 3.19"
2.4	180	0.0600	1.22		**Shallow Concentrated Flow, woods** Woodland Kv= 5.0 fps
16.3	280	Total			

Subcatchment 1S: Sub to Design Point 1




1A
1B
Region 1A
Region 1B
P
Soil Filter pond
DP
Design Point 1
Subcat
Reach
Pond
Link
Routing Diagram for Proposed Conditions
Prepared by SJR Engineering, Printed 8/11/2025
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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	NRCC 24-hr	D	Default	24.00	1	3.19	2
2	10-Year	NRCC 24-hr	D	Default	24.00	1	4.77	2
3	25-Year	NRCC 24-hr	D	Default	24.00	1	6.01	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.246	39	>75% Grass cover, Good, HSG A (1A, 1B)
0.169	74	>75% Grass cover, Good, HSG C (1A, 1B)
0.220	98	Paved roads w/curbs & sewers, HSG A (1A)
0.634	**69**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.465	HSG A	1A, 1B
0.000	HSG B	
0.169	HSG C	1A, 1B
0.000	HSG D	
0.000	Other	
0.634		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.246	0.000	0.169	0.000	0.000	0.415	>75% Grass cover, Good	1A, 1B
0.220	0.000	0.000	0.000	0.000	0.220	Paved roads w/curbs & sewers	1A
0.465	**0.000**	**0.169**	**0.000**	**0.000**	**0.634**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	1A	0.00	0.00	277.0	0.0100	0.012	0.0	15.0	0.0	
2	P	161.15	161.00	15.0	0.0100	0.012	0.0	15.0	0.0	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: Region 1A Runoff Area=16,075 sf 59.50% Impervious Runoff Depth>0.99"
Flow Length=537' Tc=24.4 min CN=76 Runoff=0.26 cfs 0.030 af

Subcatchment 1B: Region 1B Runoff Area=11,560 sf 0.00% Impervious Runoff Depth>0.29"
Flow Length=170' Tc=14.9 min CN=59 Runoff=0.04 cfs 0.006 af

Reach DP: Design Point 1 Inflow=0.05 cfs 0.031 af
Outflow=0.05 cfs 0.031 af

Pond P: Soil Filter pond Peak Elev=164.63' Storage=604 cf Inflow=0.30 cfs 0.037 af
Outflow=0.05 cfs 0.031 af

Total Runoff Area = 0.634 ac Runoff Volume = 0.037 af Average Runoff Depth = 0.70"
65.39% Pervious = 0.415 ac 34.61% Impervious = 0.220 ac

Summary for Subcatchment 1A: Region 1A

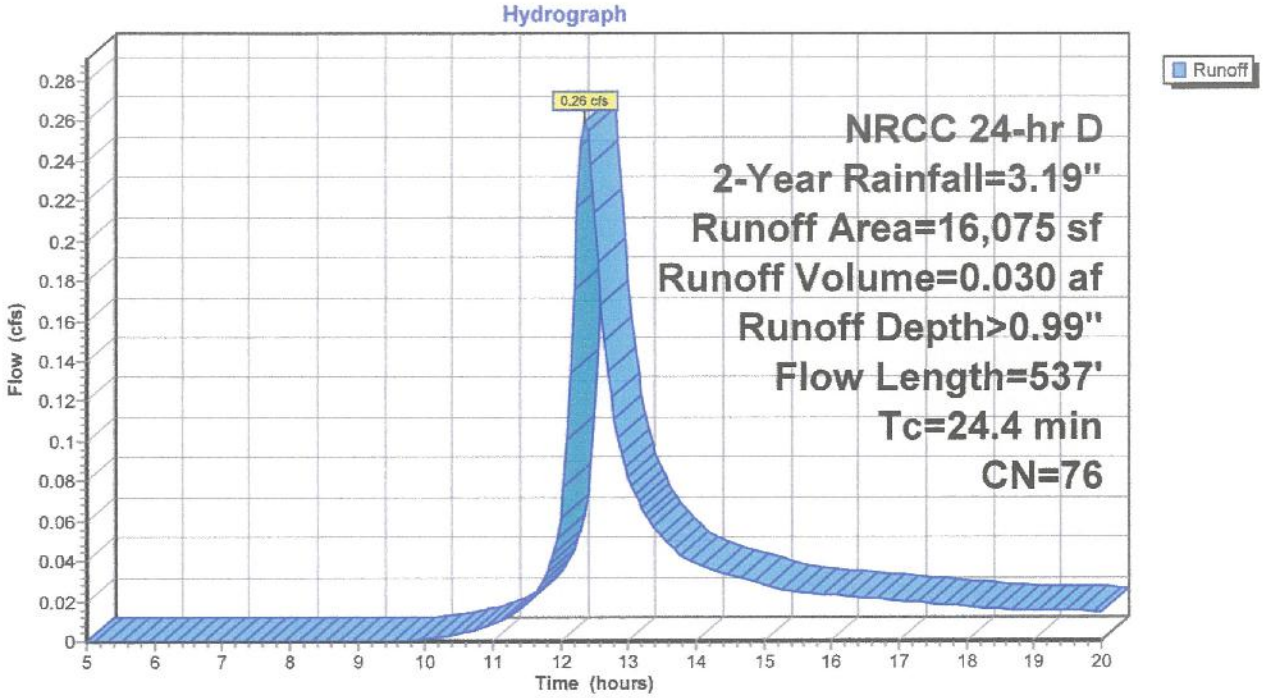
Runoff = 0.26 cfs @ 12.36 hrs, Volume= 0.030 af, Depth> 0.99"
Routed to Pond P : Soil Filter pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 2-Year Rainfall=3.19"

Area (sf)	CN	Description
9,565	98	Paved roads w/curbs & sewers, HSG A
650	74	>75% Grass cover, Good, HSG C
5,860	39	>75% Grass cover, Good, HSG A
16,075	76	Weighted Average
6,510		40.50% Pervious Area
9,565		59.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	60	0.0700	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.19"
1.1	150	0.0125	2.27		**Shallow Concentrated Flow, road gutter** Paved Kv= 20.3 fps
0.8	277	0.0100	5.70	7.00	**Pipe Channel, Pipe** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
16.7	50	0.0010	0.05		**Sheet Flow,** Range n= 0.130 P2= 3.19"
24.4	537	Total			

Subcatchment 1A: Region 1A



Summary for Subcatchment 1B: Region 1B

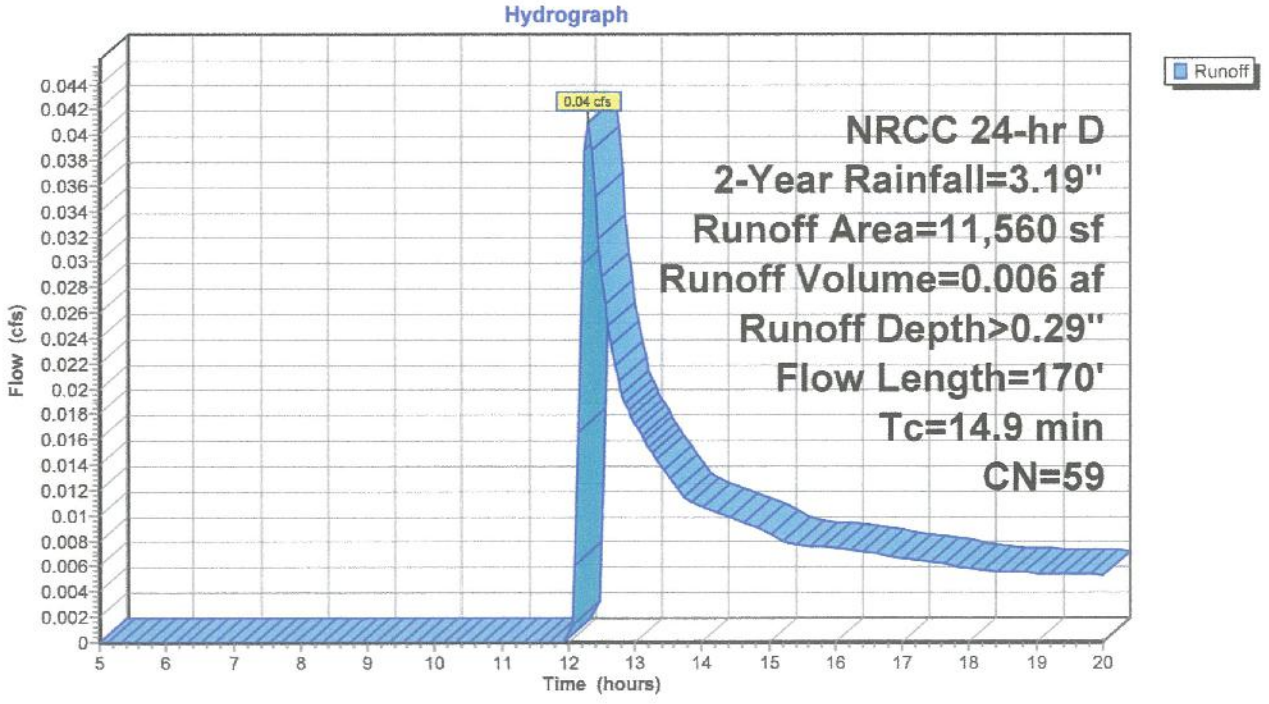
Runoff = 0.04 cfs @ 12.30 hrs, Volume= 0.006 af, Depth> 0.29"
Routed to Pond P : Soil Filter pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 2-Year Rainfall=3.19"

Area (sf)	CN	Description
4,850	39	>75% Grass cover, Good, HSG A
6,710	74	>75% Grass cover, Good, HSG C
11,560	59	Weighted Average
11,560		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	100	0.0600	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.19"
0.6	50	0.0700	1.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
8.0	20	0.0010	0.04		**Sheet Flow,** Range n= 0.130 P2= 3.19"
14.9	170	Total			

Subcatchment 1B: Region 1B

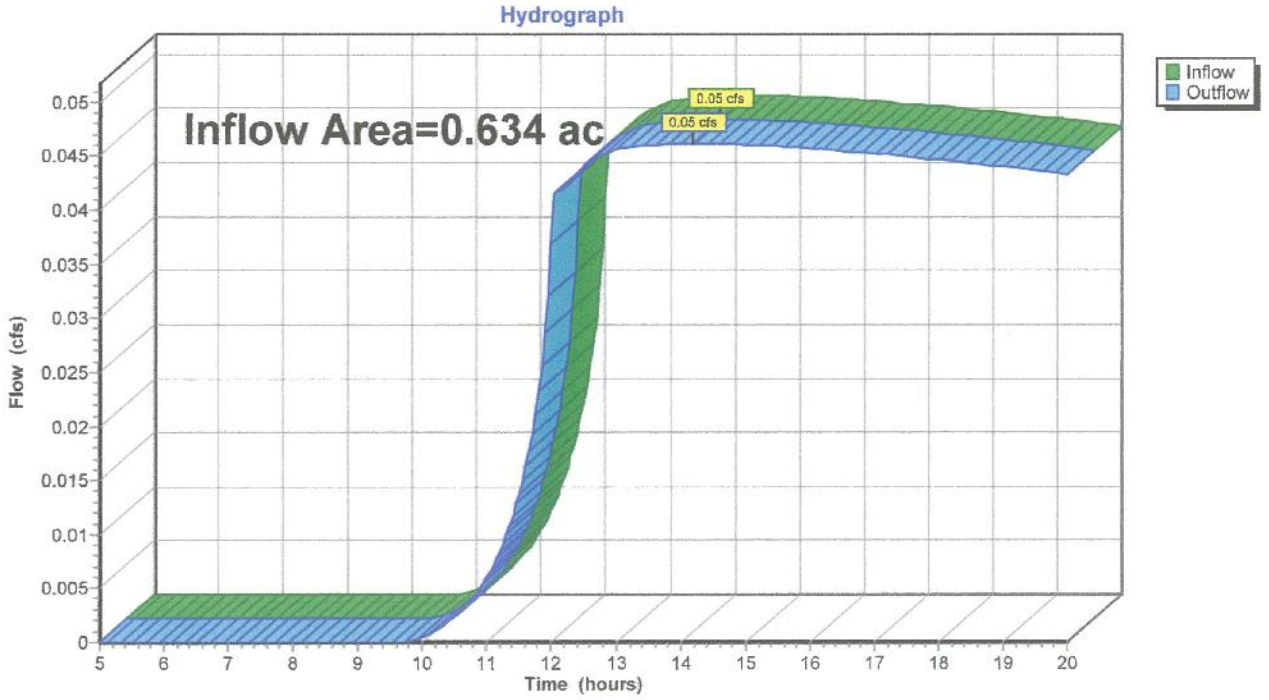


Summary for Reach DP: Design Point 1

Inflow Area = 0.634 ac, 34.61% Impervious, Inflow Depth > 0.59" for 2-Year event
Inflow = 0.05 cfs @ 14.19 hrs, Volume= 0.031 af
Outflow = 0.05 cfs @ 14.19 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP: Design Point 1



Summary for Pond P: Soil Filter pond

Inflow Area = 0.634 ac, 34.61% Impervious, Inflow Depth > 0.70" for 2-Year event
Inflow = 0.30 cfs @ 12.35 hrs, Volume= 0.037 af
Outflow = 0.05 cfs @ 14.19 hrs, Volume= 0.031 af, Atten= 85%, Lag= 110.5 min
Primary = 0.05 cfs @ 14.19 hrs, Volume= 0.031 af
Routed to Reach DP : Design Point 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 164.63' @ 14.19 hrs Surf.Area= 1,037 sf Storage= 604 cf

Plug-Flow detention time= 144.6 min calculated for 0.031 af (85% of inflow)
Center-of-Mass det. time= 98.9 min (946.6 - 847.6)

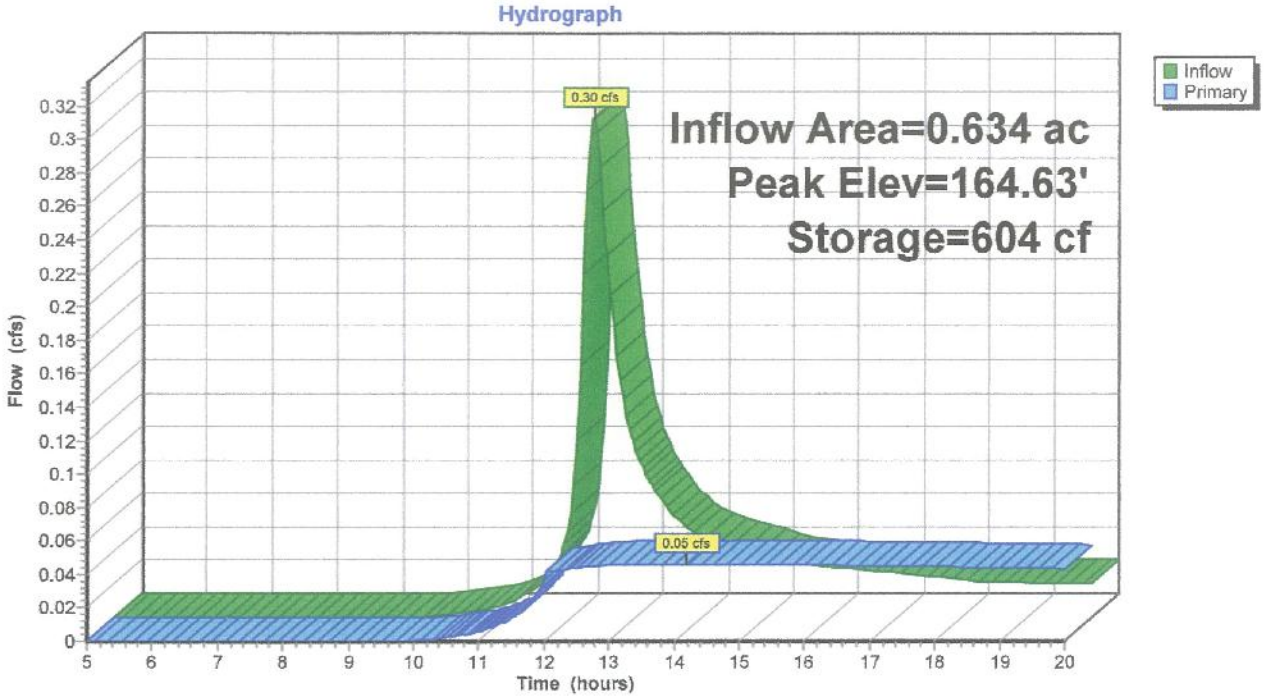
Volume	Invert	Avail.Storage	Storage Description
#1	164.00'	5,712 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
164.00	877	0	0
165.00	1,130	1,004	1,004
166.00	1,409	1,270	2,273
167.00	1,713	1,561	3,834
168.00	2,042	1,878	5,712

Device	Routing	Invert	Outlet Devices
#1	Primary	161.15'	**15.0" Round Culvert** L= 15.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 161.15' / 161.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Device 1	161.50'	**1.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	166.88'	**48.0" W x 12.0" H Vert. Orifice/Grate Emergency Spillway** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.05 cfs @ 14.19 hrs HW=164.63' (Free Discharge)
↑**1=Culvert** (Passes 0.05 cfs of 9.99 cfs potential flow)
↑**2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 8.46 fps)
3=Orifice/Grate Emergency Spillway (Controls 0.00 cfs)

Pond P: Soil Filter pond



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: Region 1A Runoff Area=16,075 sf 59.50% Impervious Runoff Depth>2.08"
Flow Length=537' Tc=24.4 min CN=76 Runoff=0.55 cfs 0.064 af

Subcatchment 1B: Region 1B Runoff Area=11,560 sf 0.00% Impervious Runoff Depth>0.93"
Flow Length=170' Tc=14.9 min CN=59 Runoff=0.20 cfs 0.021 af

Reach DP: Design Point 1 Inflow=0.05 cfs 0.041 af
Outflow=0.05 cfs 0.041 af

Pond P: Soil Filter pond Peak Elev=165.82' Storage=2,019 cf Inflow=0.73 cfs 0.084 af
Outflow=0.05 cfs 0.041 af

Total Runoff Area = 0.634 ac Runoff Volume = 0.084 af Average Runoff Depth = 1.60"
65.39% Pervious = 0.415 ac 34.61% Impervious = 0.220 ac

Summary for Subcatchment 1A: Region 1A

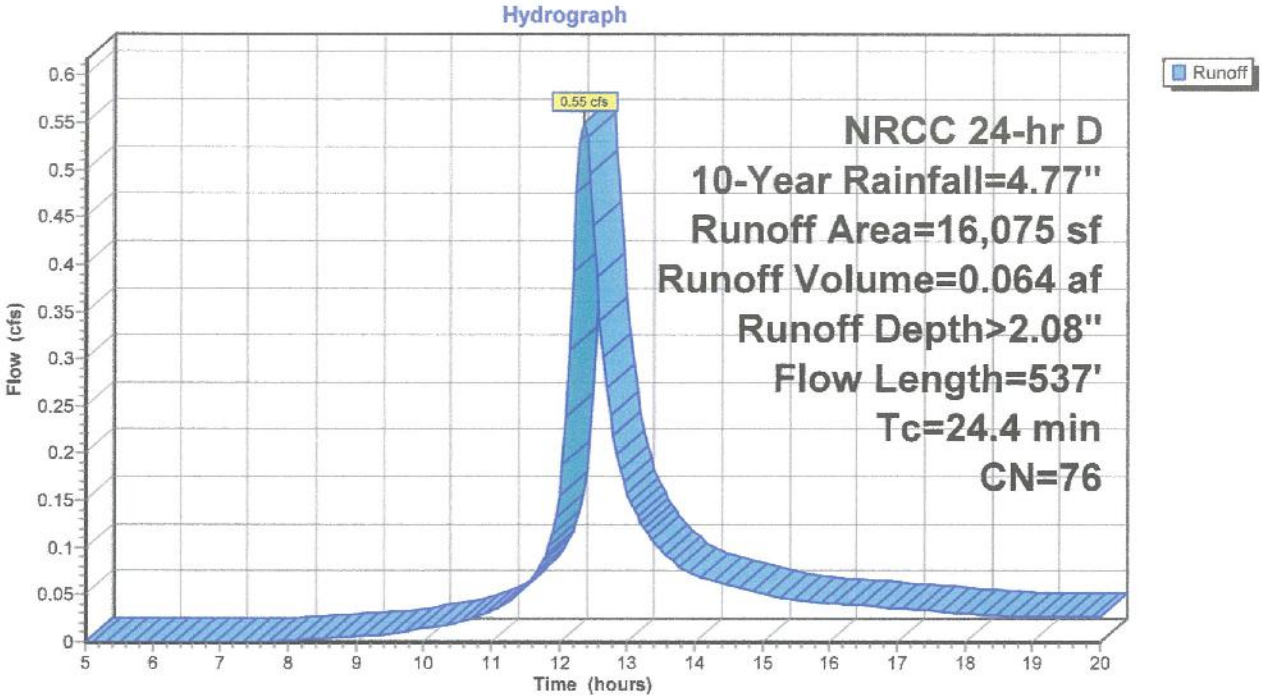
Runoff = 0.55 cfs @ 12.35 hrs, Volume= 0.064 af, Depth> 2.08"
Routed to Pond P : Soil Filter pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 10-Year Rainfall=4.77"

Area (sf)	CN	Description
9,565	98	Paved roads w/curbs & sewers, HSG A
650	74	>75% Grass cover, Good, HSG C
5,860	39	>75% Grass cover, Good, HSG A
16,075	76	Weighted Average
6,510		40.50% Pervious Area
9,565		59.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	60	0.0700	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.19"
1.1	150	0.0125	2.27		**Shallow Concentrated Flow, road gutter** Paved Kv= 20.3 fps
0.8	277	0.0100	5.70	7.00	**Pipe Channel, Pipe** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
16.7	50	0.0010	0.05		**Sheet Flow,** Range n= 0.130 P2= 3.19"
24.4	537	Total			

Subcatchment 1A: Region 1A



Summary for Subcatchment 1B: Region 1B

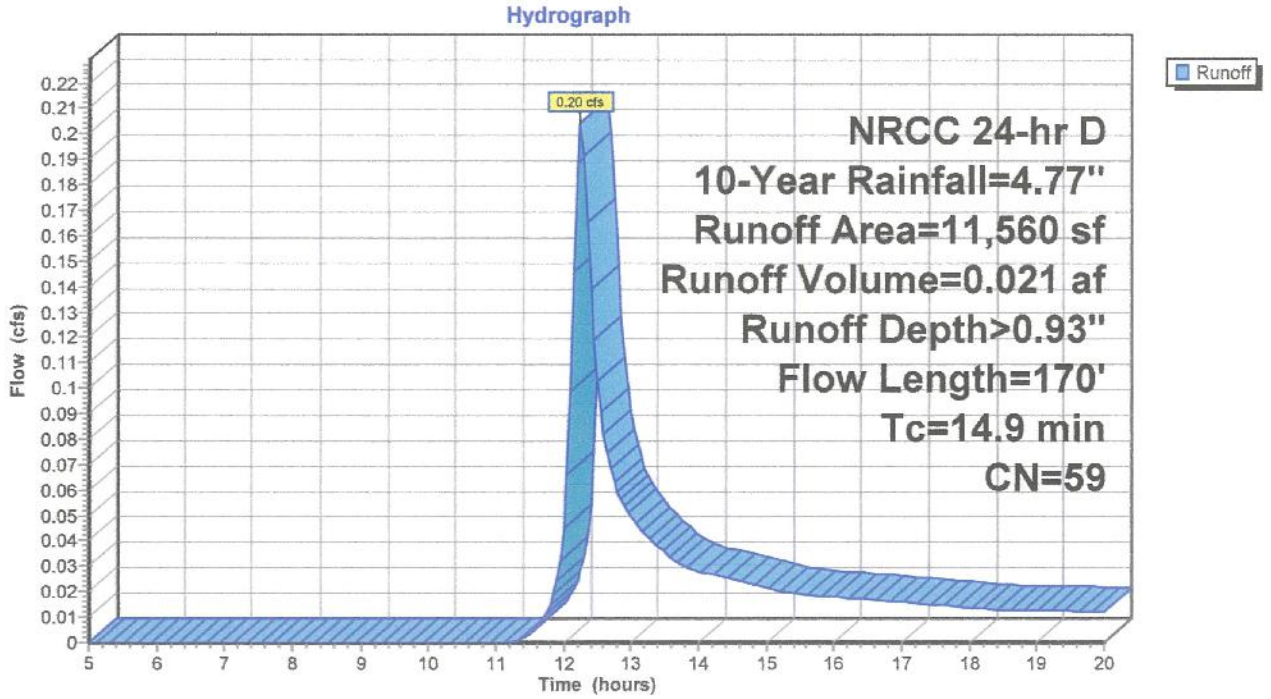
Runoff = 0.20 cfs @ 12.25 hrs, Volume= 0.021 af, Depth> 0.93"
Routed to Pond P : Soil Filter pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 10-Year Rainfall=4.77"

Area (sf)	CN	Description
4,850	39	>75% Grass cover, Good, HSG A
6,710	74	>75% Grass cover, Good, HSG C
11,560	59	Weighted Average
11,560		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	100	0.0600	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.19"
0.6	50	0.0700	1.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
8.0	20	0.0010	0.04		**Sheet Flow,** Range n= 0.130 P2= 3.19"
14.9	170	Total			

Subcatchment 1B: Region 1B

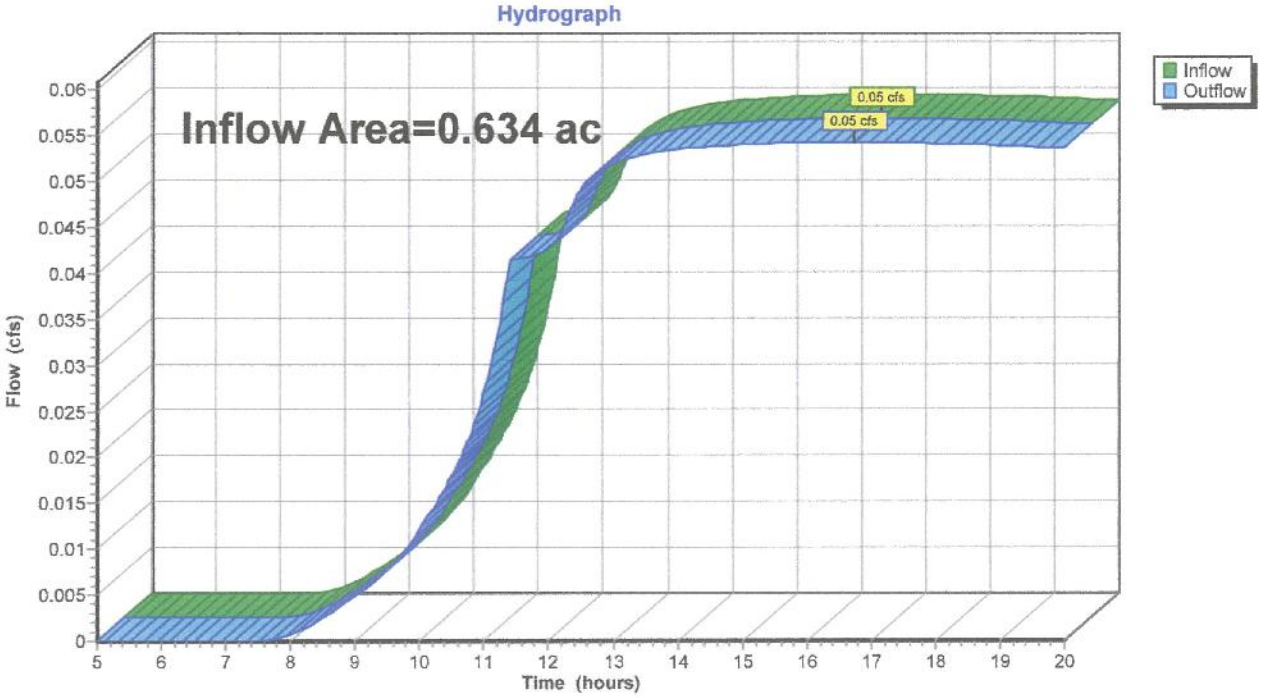


Summary for Reach DP: Design Point 1

Inflow Area = 0.634 ac, 34.61% Impervious, Inflow Depth > 0.77" for 10-Year event
Inflow = 0.05 cfs @ 16.72 hrs, Volume= 0.041 af
Outflow = 0.05 cfs @ 16.72 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP: Design Point 1



Summary for Pond P: Soil Filter pond

Inflow Area = 0.634 ac, 34.61% Impervious, Inflow Depth > 1.60" for 10-Year event
Inflow = 0.73 cfs @ 12.32 hrs, Volume= 0.084 af
Outflow = 0.05 cfs @ 16.72 hrs, Volume= 0.041 af, Atten= 93%, Lag= 264.2 min
Primary = 0.05 cfs @ 16.72 hrs, Volume= 0.041 af
Routed to Reach DP : Design Point 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 165.82' @ 16.72 hrs Surf.Area= 1,358 sf Storage= 2,019 cf

Plug-Flow detention time= 195.5 min calculated for 0.041 af (48% of inflow)
Center-of-Mass det. time= 94.7 min (921.8 - 827.1)

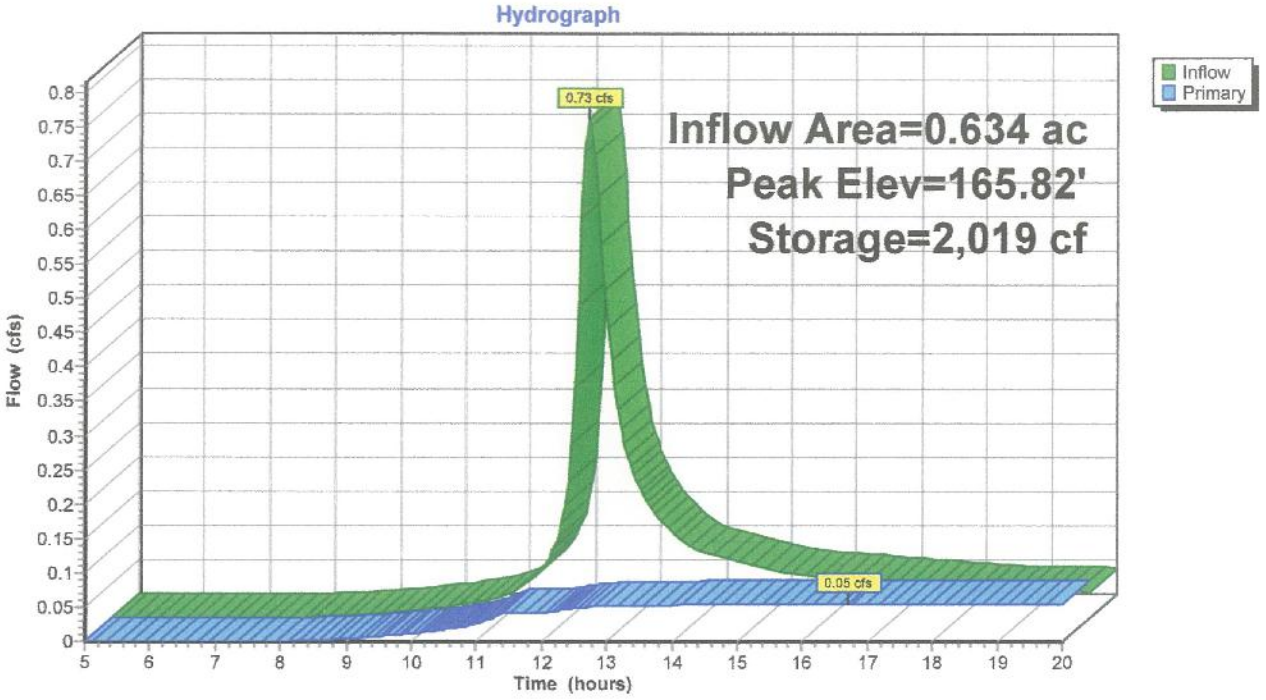
Volume	Invert	Avail.Storage	Storage Description
#1	164.00'	5,712 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
164.00	877	0	0
165.00	1,130	1,004	1,004
166.00	1,409	1,270	2,273
167.00	1,713	1,561	3,834
168.00	2,042	1,878	5,712

Device	Routing	Invert	Outlet Devices
#1	Primary	161.15'	**15.0" Round Culvert** L= 15.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 161.15' / 161.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Device 1	161.50'	**1.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	166.88'	**48.0" W x 12.0" H Vert. Orifice/Grate Emergency Spillway** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.05 cfs @ 16.72 hrs HW=165.82' (Free Discharge)
└**1=Culvert** (Passes 0.05 cfs of 11.88 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 9.95 fps)
└**3=Orifice/Grate Emergency Spillway** (Controls 0.00 cfs)

Pond P: Soil Filter pond



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: Region 1A Runoff Area=16,075 sf 59.50% Impervious Runoff Depth>3.02"
Flow Length=537' Tc=24.4 min CN=76 Runoff=0.80 cfs 0.093 af

Subcatchment 1B: Region 1B Runoff Area=11,560 sf 0.00% Impervious Runoff Depth>1.59"
Flow Length=170' Tc=14.9 min CN=59 Runoff=0.37 cfs 0.035 af

Reach DP: Design Point 1 Inflow=0.06 cfs 0.048 af
Outflow=0.06 cfs 0.048 af

Pond P: Soil Filter pond Peak Elev=166.81' Storage=3,522 cf Inflow=1.11 cfs 0.128 af
Outflow=0.06 cfs 0.048 af

Total Runoff Area = 0.634 ac Runoff Volume = 0.128 af Average Runoff Depth = 2.42"
65.39% Pervious = 0.415 ac 34.61% Impervious = 0.220 ac

Summary for Subcatchment 1A: Region 1A

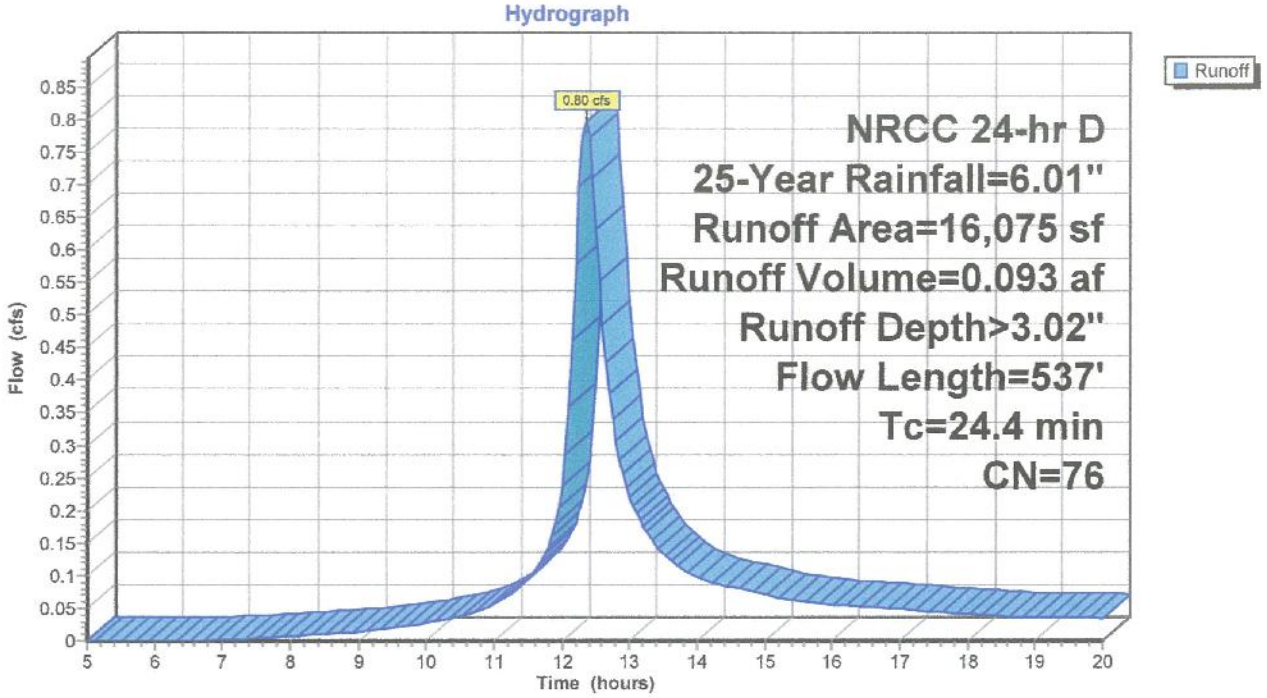
Runoff = 0.80 cfs @ 12.35 hrs, Volume= 0.093 af, Depth> 3.02"
Routed to Pond P : Soil Filter pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 25-Year Rainfall=6.01"

Area (sf)	CN	Description
9,565	98	Paved roads w/curbs & sewers, HSG A
650	74	>75% Grass cover, Good, HSG C
5,860	39	>75% Grass cover, Good, HSG A
16,075	76	Weighted Average
6,510		40.50% Pervious Area
9,565		59.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	60	0.0700	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.19"
1.1	150	0.0125	2.27		**Shallow Concentrated Flow, road gutter** Paved Kv= 20.3 fps
0.8	277	0.0100	5.70	7.00	**Pipe Channel, Pipe** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
16.7	50	0.0010	0.05		**Sheet Flow,** Range n= 0.130 P2= 3.19"
24.4	537	Total			

Subcatchment 1A: Region 1A



Summary for Subcatchment 1B: Region 1B

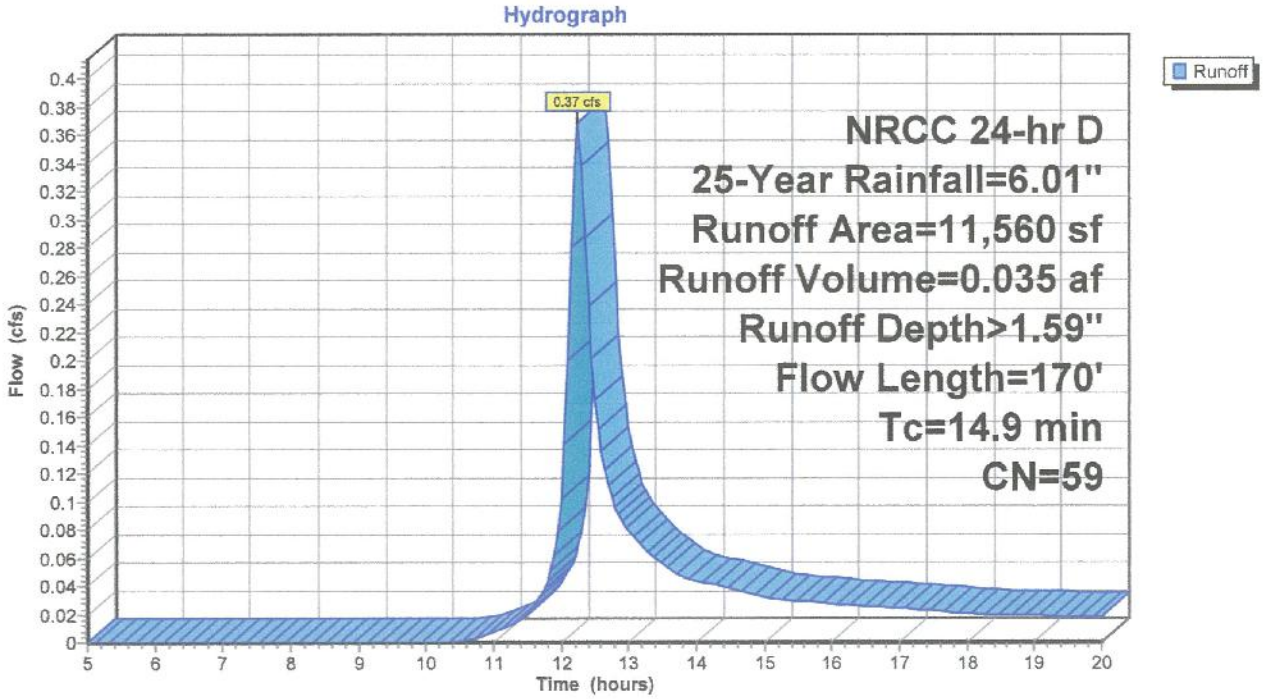
Runoff = 0.37 cfs @ 12.24 hrs, Volume= 0.035 af, Depth> 1.59"
Routed to Pond P : Soil Filter pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 25-Year Rainfall=6.01"

Area (sf)	CN	Description
4,850	39	>75% Grass cover, Good, HSG A
6,710	74	>75% Grass cover, Good, HSG C
11,560	59	Weighted Average
11,560		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	100	0.0600	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.19"
0.6	50	0.0700	1.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
8.0	20	0.0010	0.04		**Sheet Flow,** Range n= 0.130 P2= 3.19"
14.9	170	Total			

Subcatchment 1B: Region 1B

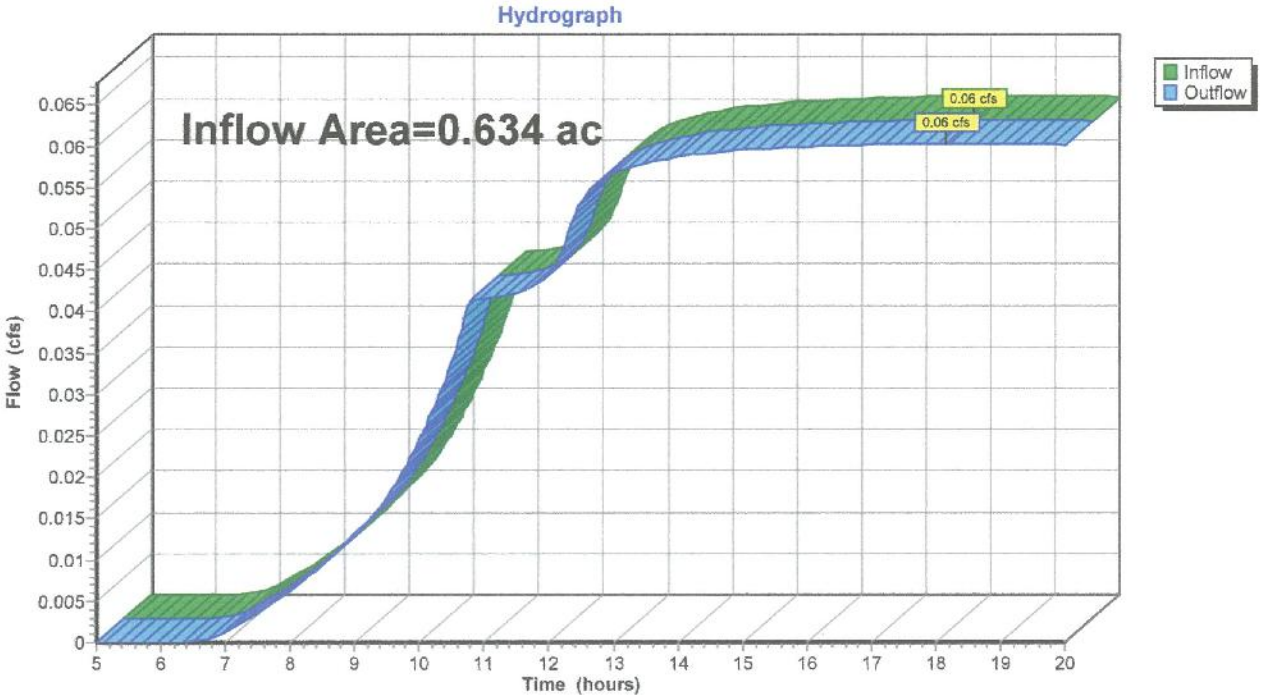


Summary for Reach DP: Design Point 1

Inflow Area = 0.634 ac, 34.61% Impervious, Inflow Depth > 0.91" for 25-Year event
Inflow = 0.06 cfs @ 18.15 hrs, Volume= 0.048 af
Outflow = 0.06 cfs @ 18.15 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP: Design Point 1



Summary for Pond P: Soil Filter pond

Inflow Area = 0.634 ac, 34.61% Impervious, Inflow Depth > 2.42" for 25-Year event
Inflow = 1.11 cfs @ 12.31 hrs, Volume= 0.128 af
Outflow = 0.06 cfs @ 18.15 hrs, Volume= 0.048 af, Atten= 95%, Lag= 350.5 min
Primary = 0.06 cfs @ 18.15 hrs, Volume= 0.048 af
Routed to Reach DP : Design Point 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 166.81' @ 18.15 hrs Surf.Area= 1,657 sf Storage= 3,522 cf

Plug-Flow detention time= 195.3 min calculated for 0.048 af (37% of inflow)
Center-of-Mass det. time= 86.0 min (902.5 - 816.5)

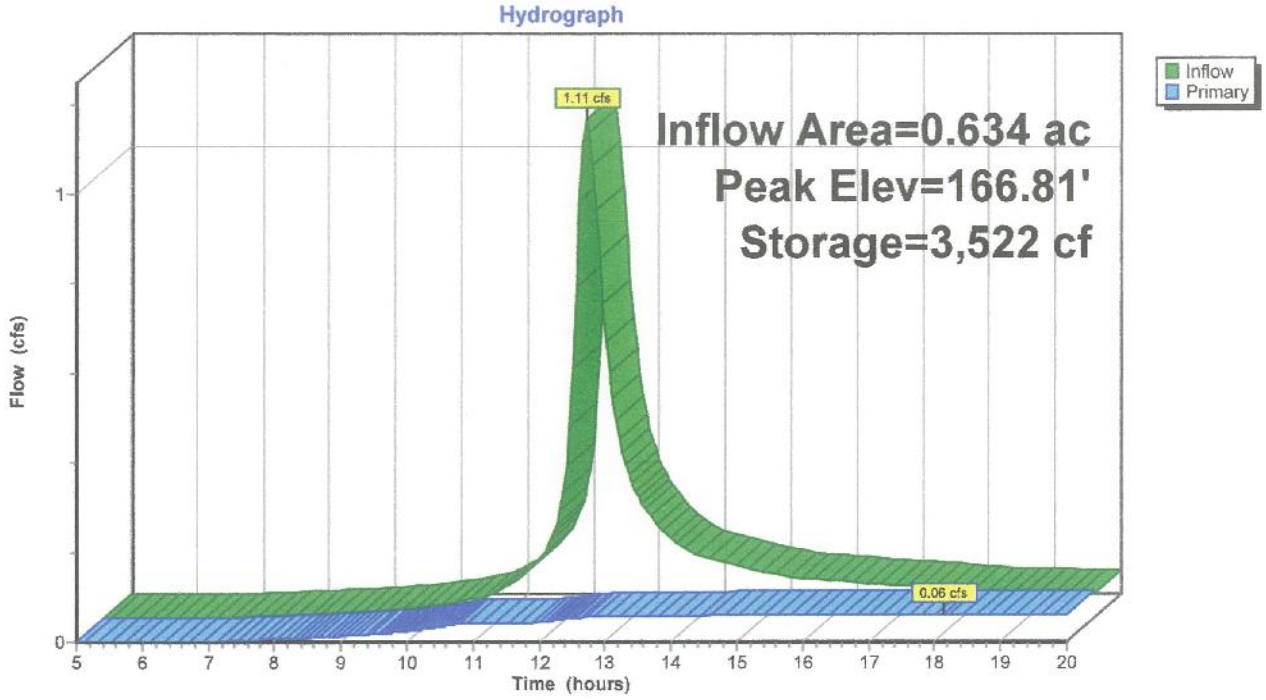
Volume	Invert	Avail.Storage	Storage Description
#1	164.00'	5,712 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
164.00	877	0	0
165.00	1,130	1,004	1,004
166.00	1,409	1,270	2,273
167.00	1,713	1,561	3,834
168.00	2,042	1,878	5,712

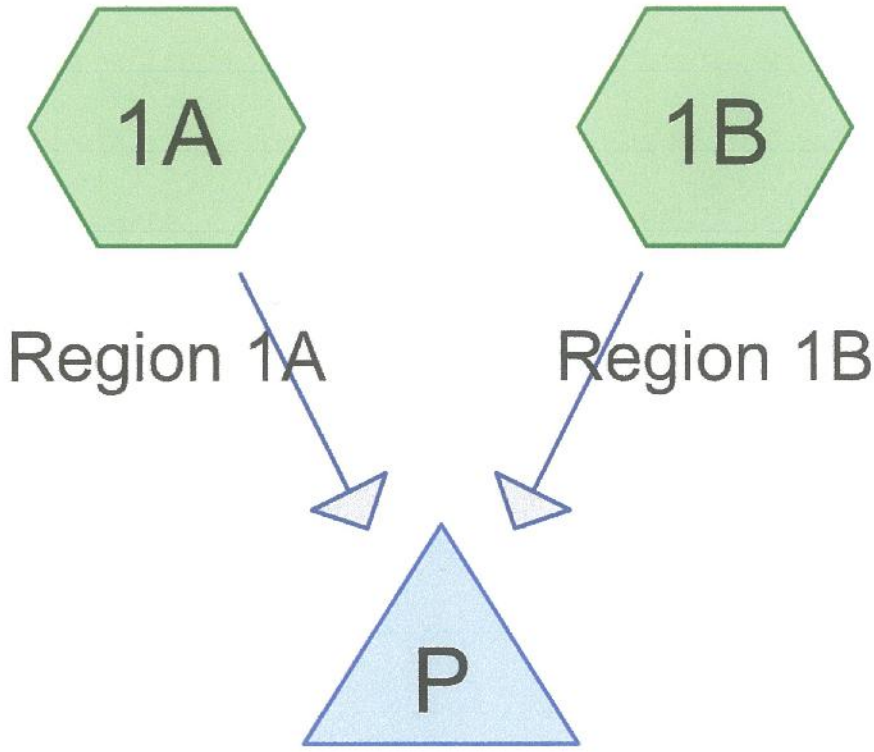
Device	Routing	Invert	Outlet Devices
#1	Primary	161.15'	**15.0" Round Culvert** L= 15.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 161.15' / 161.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Device 1	161.50'	**1.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	166.88'	**48.0" W x 12.0" H Vert. Orifice/Grate Emergency Spillway** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.06 cfs @ 18.15 hrs HW=166.81' (Free Discharge)
↑**1=Culvert** (Passes 0.06 cfs of 13.26 cfs potential flow)
↑**2=Orifice/Grate** (Orifice Controls 0.06 cfs @ 11.06 fps)
3=Orifice/Grate Emergency Spillway (Controls 0.00 cfs)

Pond P: Soil Filter pond



Section 13
Emergency Spillway Design



Soil Filter pond

Subcat Reach Pond Link

Routing Diagram for Emergency spillway
Prepared by SJR Engineering, Printed 8/11/2025
HydroCAD® 10.20-3h s/n 00591 © 2024 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	100-Year	NRCC 24-hr	D	Default	24.00	1	8.54	2

Summary for Subcatchment 1A: Region 1A

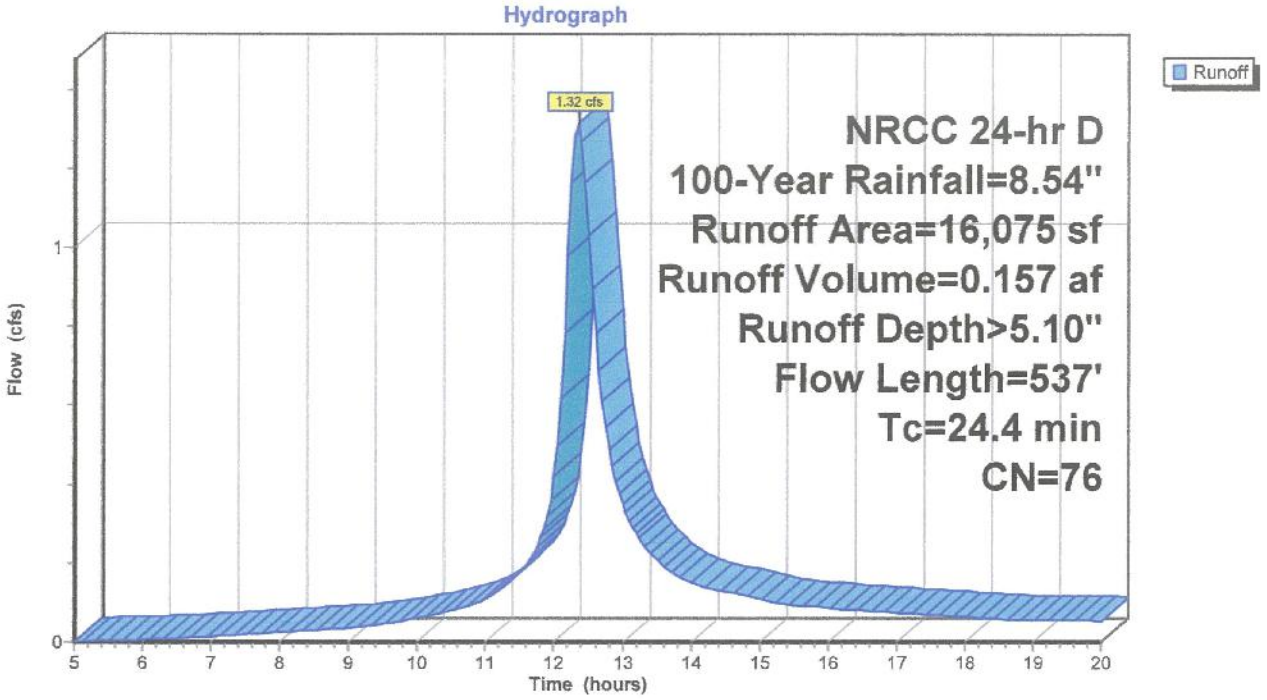
Runoff = 1.32 cfs @ 12.34 hrs, Volume= 0.157 af, Depth> 5.10"
Routed to Pond P : Soil Filter pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 100-Year Rainfall=8.54"

Area (sf)	CN	Description
9,565	98	Paved roads w/curbs & sewers, HSG A
650	74	>75% Grass cover, Good, HSG C
5,860	39	>75% Grass cover, Good, HSG A
16,075	76	Weighted Average
6,510		40.50% Pervious Area
9,565		59.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	60	0.0700	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.19"
1.1	150	0.0125	2.27		**Shallow Concentrated Flow, road gutter** Paved Kv= 20.3 fps
0.8	277	0.0100	5.70	7.00	**Pipe Channel, Pipe** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
16.7	50	0.0010	0.05		**Sheet Flow,** Range n= 0.130 P2= 3.19"
24.4	537	Total			

Subcatchment 1A: Region 1A



Summary for Subcatchment 1B: Region 1B

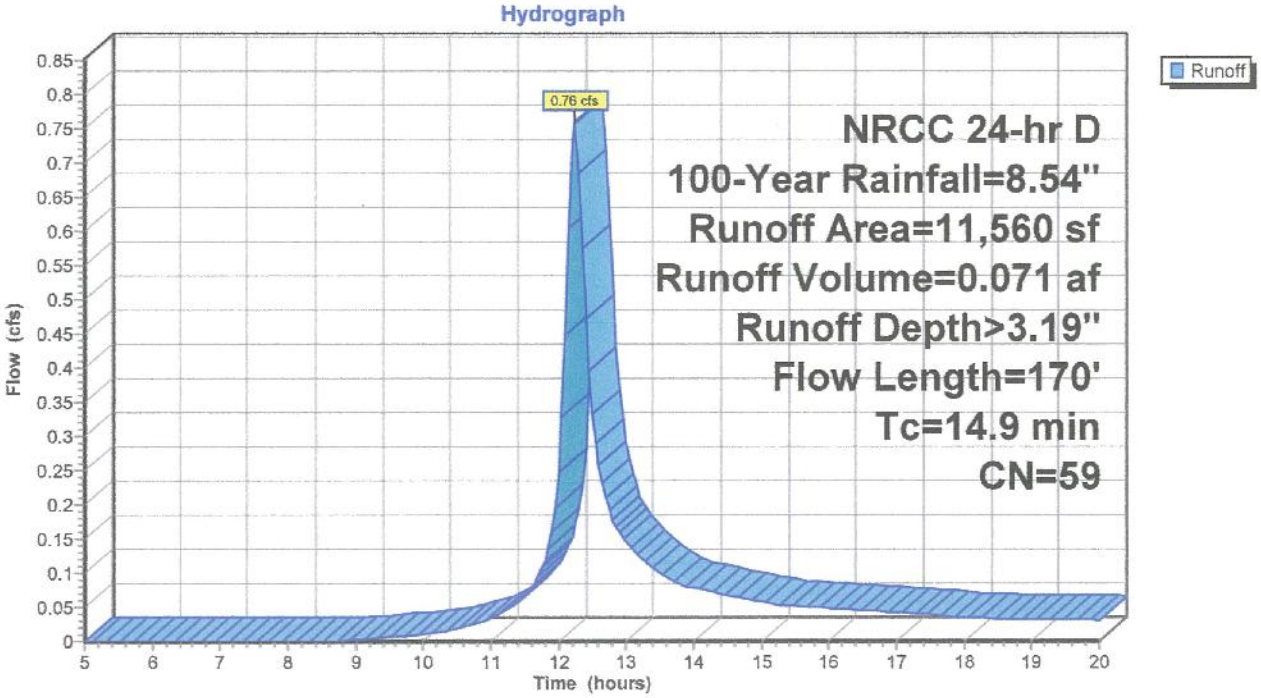
Runoff = 0.76 cfs @ 12.24 hrs, Volume= 0.071 af, Depth> 3.19"
Routed to Pond P : Soil Filter pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NRCC 24-hr D 100-Year Rainfall=8.54"

Area (sf)	CN	Description
4,850	39	>75% Grass cover, Good, HSG A
6,710	74	>75% Grass cover, Good, HSG C
11,560	59	Weighted Average
11,560		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	100	0.0600	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.19"
0.6	50	0.0700	1.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
8.0	20	0.0010	0.04		**Sheet Flow,** Range n= 0.130 P2= 3.19"
14.9	170	Total			

Subcatchment 1B: Region 1B



Summary for Pond P: Soil Filter pond

Inflow Area = 0.634 ac, 34.61% Impervious, Inflow Depth > 4.30" for 100-Year event
Inflow = 1.98 cfs @ 12.29 hrs, Volume= 0.227 af
Outflow = 1.41 cfs @ 12.50 hrs, Volume= 0.143 af, Atten= 28%, Lag= 12.3 min
Primary = 1.41 cfs @ 12.50 hrs, Volume= 0.143 af
Routed to nonexistent node DP

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 167.11' @ 12.50 hrs Surf.Area= 1,749 sf Storage= 4,023 cf

Plug-Flow detention time= 156.1 min calculated for 0.143 af (63% of inflow)
Center-of-Mass det. time= 71.1 min (872.3 - 801.2)

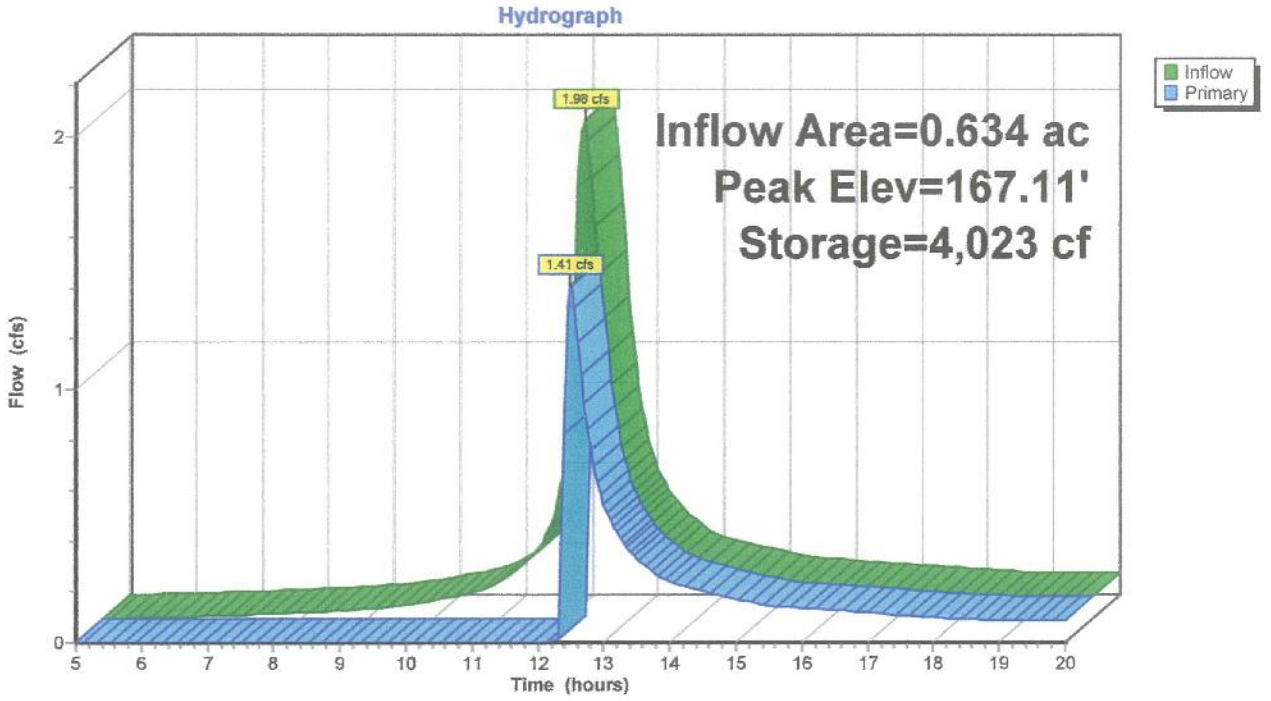
Volume	Invert	Avail.Storage	Storage Description
#1	164.00'	5,712 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
164.00	877	0	0
165.00	1,130	1,004	1,004
166.00	1,409	1,270	2,273
167.00	1,713	1,561	3,834
168.00	2,042	1,878	5,712

Device	Routing	Invert	Outlet Devices
#1	Primary	161.15'	**15.0" Round Culvert** L= 15.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 161.15' / 161.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Device 1	166.88'	**48.0" W x 12.0" H Vert. Orifice/Grate Emergency Spillway** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.41 cfs @ 12.50 hrs HW=167.11' (Free Discharge)
↑└**1=Culvert** (Passes 1.41 cfs of 13.65 cfs potential flow)
↑└**2=Orifice/Grate Emergency Spillway** (Orifice Controls 1.41 cfs @ 1.54 fps)

Pond P: Soil Filter pond



Section 14
Solid Waste

Section 15
Beginning with Habitat

Beginning With Habitat

August 12, 2025

PHYSICAL NATURAL RESOURCES

Aquifers

National Wetlands Inventory Wetlands

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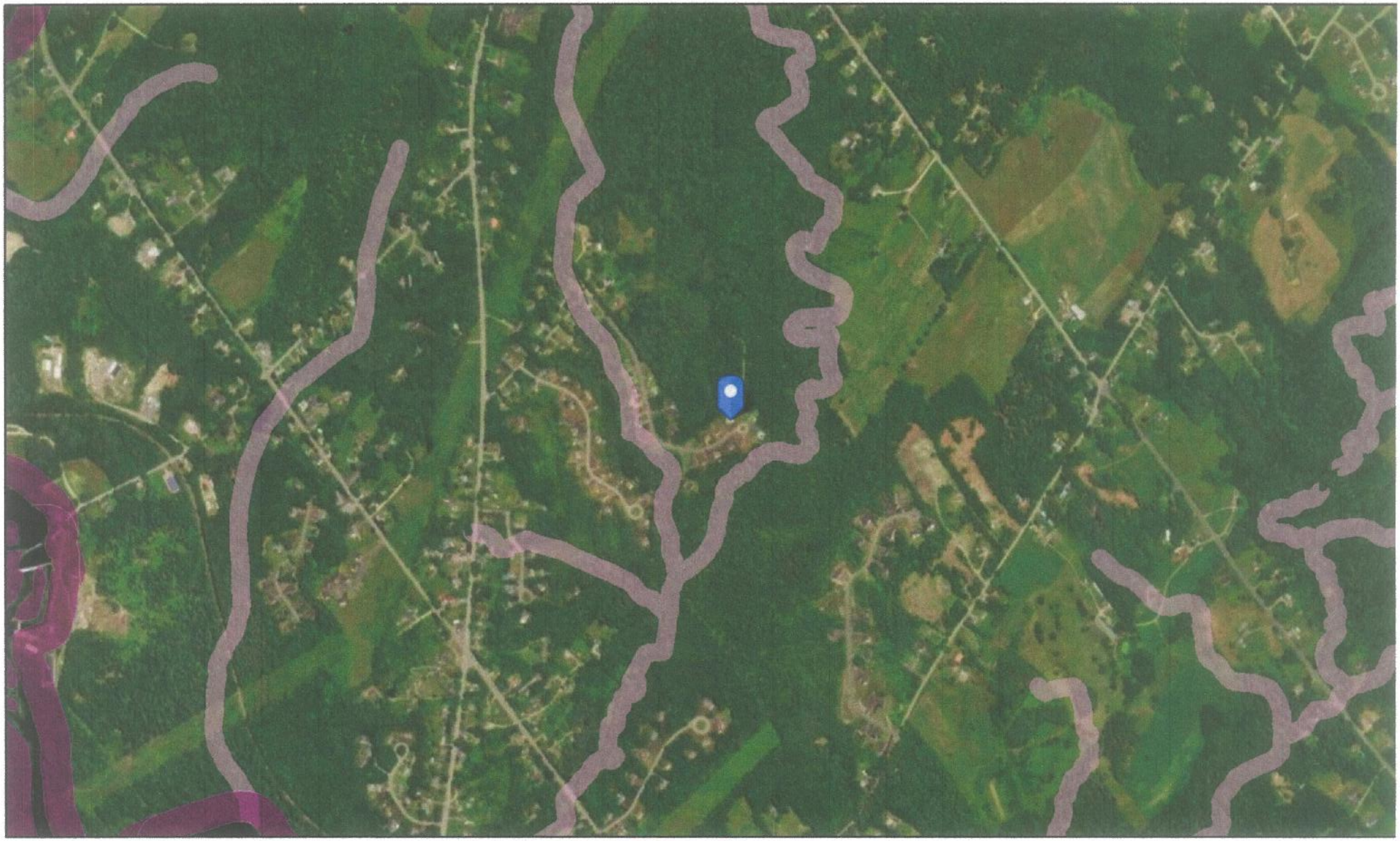
Beginning with Habitat Program for Planning Pu

Map Created With BWH

Beginning With Habitat



August 12, 2025

WILDLIFE HABITATS

- Shellfish Beds
- Stream Buffer (75 feet)
- Great Ponds, Rivers and Coastal Buffer (250 feet)
- Atlantic Salmon Habitat
- Shorebird Habitat
- Seabird Nesting Island
- Tidal Waterfowl / Wading Bird Habitat
- Inland Waterfowl / Wading Bird Habitat
- Significant Vernal Pools
- Deer Wintering Areas
- Essential Wildlife Habitats
- Endangered, Threatened, and Special Concern Species

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Beginning with Habitat Program for Planning Pu

Map Created With BWH

Section 16
Photos


42 Meredith Dr
NEW MEREDITH WAY
TO MEREDITH WOODS SUBDIVISION
© 2025 Google

Section 17
Traffic

August 12, 2025

Windham Planning Board

Re: Meredith Woods Subdivision
Traffic info

Dear Board Members,

Single family residential housing creates 10 trips per day per lot, with a peak hourly trip of 1 vehicle per hour per lot. We are proposing 5 lots. Therefore, we expect 50 trips per day leaving the subdivision. It would generate approximately 5 peak vehicles per hour.

The project is a single-family residential neighborhood that would generate almost entirely all passenger cars. No heavy trucks would be expected although the occasional trash truck, heating fuel truck, and UPS delivery normally associated with subdivisions will be possible. Please contact me if you have any questions.

Sincerely yours

Stephen Roberge, PE
SJR Engineering Inc.

SJR ENGINEERING, INC.
STEVE@SJRENG.COM. 16 THURSTON DRIVE, MONMOUTH, ME. TEL: (207) 242-6248

Section 18
Homeowner Association

BYLAWS OF THE MONTY WAY ASSOCIATION

ARTICLE I.
CREATION AND APPLICATION

Section 1.01 Creation. This corporation is organized under the Maine Nonprofit Corporation Act in connection with the submission of Property known as "Monty Way," or the "Monty Way Subdivision" located in the Town of Windham, Maine (the "Property") to the Declaration of Covenants, Conditions and Restrictions of Monty Way Association, Including Powers and Duties (the "Declaration"), dated_____, 2025 and recorded in the County Registry of Deeds in Book _____ Page _____, as amended. The name of the corporation is the Monty Way Association (the "Association").

The term "Property" as used herein shall have the meaning set forth in the Declaration and shall include the land, the building and all other improvements thereon (including the Lots, the Roads, the Open Space Conservation Area, and all easements, rights and appurtenances belong thereto) and all other property intended for use in connection therewith now or hereafter submitted to or governed by the Declaration.

Capitalized terms not otherwise defined in these Bylaws shall have the meanings as specified in the Declaration.

Section 1.02 Application. All present and future Lot Owners, mortgagees, lessees, licensees and occupants of the Lots, their employees, agents and customers, and any other persons who may enter upon the Property in any manner are subject to these Bylaws and to the Rules and Regulations, all as adopted, amended or altered from time to time by the Board of Directors of the Association (the "Board of Directors").

Section 1.03 Office. The principal office of the Association shall be located at the Property.

Section 1.04 Interpretation. In the event of any conflict or discrepancy between this Declaration, the Bylaws, the Rules and Regulations, and the Plan, the provisions of the Plan and the Declaration shall govern.

ARTICLE II.
PURPOSES AND POWERS OF THE ASSOCIATION

Section 2.1 Purposes. The purposes of the Association are to establish an association of Lot owners as a mutual benefit corporation pursuant to the Maine Non-

Profit Corporation Act for the government, operation and maintenance of the Property under the Declaration; and

Section 2.2 Powers. In addition to all the powers, authority and responsibilities granted to or imposed upon this Association by the laws of the State of Maine, specifically including those set forth or referred to in the Maine Non-Profit Corporation Act all of which the Association shall have to the extent permitted by law and by the Declaration, the Association shall have the specific powers to:

A. Adopt and amend Bylaws and Rules and Regulations;
B. Adopt and amend budgets for revenues, expenditures and reserves, and to collect Assessments from Lot owners;
C. Hire and terminate managers and other employees, agents, and independent contractors;
D. Institute, defend, or intervene in litigation, arbitration, or administrative proceedings in its own name on behalf of itself or two (2) or more Lot owners on matters affecting the Property, and the Association shall be deemed to be the attorney-in-fact of each Lot owner for such purposes;
E. Make contracts and incur liabilities;
F. Regulate the use, maintenance, repair, replacement and modification of common portions of the Property, including the Declaration following the Declarant's assignment of such rights to the Association;
G. Cause additional improvements to be made as a part of the common portions of the Property, subject to the restrictions set forth herein;
H. Perform the Stormwater Maintenance Responsibilities set forth in the Declaration, and until the Road is accepted by the Town, maintain, repair and provide snow and ice removal for the Road;
I. Acquire, hold, encumber and convey in its own name any right, title, or interest to real or personal property;
J. Grant easements, leases, concessions, and licenses for public utilities servicing or benefiting the Property;
K. Impose and receive payments, fees, or charges for the use, rental, or operation of facilities located on the common portions of the Property;
L. Impose charges and interest for late payment of assessments and, after notice and an opportunity to be heard, impose reasonable penalties for violations of the Declaration, Bylaws, and Rules and Regulations of the Association;
M. Impose reasonable charges for the preparation and recordation of amendments to the Declaration or statements of unpaid Assessments and assessments or resale certificates;
N. Provide for the indemnification of its officers and directors and maintain directors' and officers' liability insurance;
O. Pledge, assign and grant a security interest covering special Assessments made for the purpose of raising funds for repairs, renovations, improvements and associated costs and expenses with respect to the

Property, subject to the approval of a majority in interest vote of the Lot Owners;

P. Exercise any other powers conferred by Declaration or Bylaws;
Q. Exercise all other powers that may be exercised pursuant to the Maine Nonprofit Corporation Act.

The Board of Directors of the Association shall manage the Property and exercise all such powers on behalf of the Association, subject to the terms of these Bylaws, the Declaration and the Maine Non-Profit Corporation Act.

Section 2.3 Non-Profit Status. The Association is not organized for profit and no property or profit thereof shall inure to the benefit of any person except in furtherance of the nonprofit-making purposes of the Association or in the course of acquiring, constructing or providing management, maintenance and care of the common portions of the Property, or by virtue of a rebate of excess membership dues, fees, and Assessments.

ARTICLE III.
ASSOCIATION OF OWNERS.

Section 3.1 Membership. The members shall consist exclusively of all owners of Lots in the Property created in accordance with the Declaration. Membership is transferable only as provided in the Declaration or these Bylaws. The membership of a Lot owner shall terminate upon the conveyance, transfer or other disposition of his interest in the Lot, whereupon his membership and any interest in the assets of the Association shall automatically transfer to and be vested in the successor in ownership. Membership is otherwise non-transferable. A mortgage of a Lot or the grant of a security interest therein as security for an obligation shall not operate to transfer membership until a foreclosure of the mortgage or security agreement. The Association may but is not required to issue certificates of membership.

Section 3.2 Annual Meeting. Meetings of the members shall be held annually each successive year on the second Tuesday in May, or in the event that day is a legal holiday, then on the first day thereafter which is not a holiday, provided that the Board of Directors shall have the authority to alter the annual meeting date in its discretion from time to time if it determines that another meeting date is more convenient or appropriate. The annual meeting and any special meetings shall be held at the Property or such other place as may be designated in the Notice of Meeting.

Section 3.3 Special Meetings. Special meetings of the members may be held at any time upon the call of the Board of Directors, or upon the call of Twenty percent (20%) or more in interest of the Lot owners, which call shall state the purpose of the meeting. Upon receipt of such call, the Secretary shall promptly send out notices of the meeting to all members of the Association.

Section 3.4 Notice of Meetings. A written notice of each meeting of the Association, stating whether it is an annual meeting or special meeting, the authority for the call of the meeting, the place and time of the meeting, and the items on the agenda (including the general nature of the proposed declaration or bylaw amendment, any budget charges and any proposal to remove an officer or director) shall be sent by the President or Secretary or Assistant Secretary, if any, at least Ten (10) days, but not more than Sixty (60) days, before the date set for the meeting. Such notice shall be given to each member listed with the records of the Association as set forth below and to each Eligible Mortgage Holders if and as required by the Declaration:

A. By hand delivering it to him, or

B. By mailing it, postage prepaid, addressed to the member at the address of the Lot or any other address designated in writing by that member with the records of the Association.

The notice of any meeting shall state the time and place of the meeting, and the items on the agenda, including the general nature of any proposed Declaration or Bylaw amendments, any budget changes and any proposal to remove an officer or director. If notice is given pursuant to the provisions of this section, the failure of any member to receive actual notice of the meeting shall not invalidate the meeting.

Section 3.5 Waiver of Notice. The presence of all the members in person or by proxy, at any meeting shall conclusively establish the meeting's validity, unless any member shall object at the meeting to the noncompliance with this Article. Any meeting so held without objection shall be valid for all purposes, and at any annual meeting any general business may be transacted and any action may be taken.

Section 3.6 Order of Business. The order of business at all meetings of the members shall be generally as follows, if applicable:

A. Roll call.

B. Proof of notice of meeting or waiver of notice.

C. Reading of minutes of preceding meeting.

D. Reports of Officers.

E. Report of Board of Directors.

F. Report of committees.

G. Election of the Board of Directors.

H. Unfinished business.

I. New business.

J. Adjournment.

Section 3.7 Parliamentary Procedure. At all meetings of the members or of the Board of Directors, Robert's Rules of Order as then amended shall be followed, except in the event of conflict the terms of these Bylaws or the Declaration as the case may be shall prevail.

Section 3.8 Quorum. The presence at the beginning of any meeting of the Association, in person or by proxy of Lot owners whose aggregate voting interest constitutes more than fifty percent (50%) of the total interest therein shall constitute a quorum for the transaction of all business.

Section 3.9 Voting.

A. Voting rights, if any, of each Lot are set forth in the Declaration. Any person, partnership, limited liability company, corporation, trust, or other legal entity or a combination thereof, owning any Lot (other than an interest held as security for an obligation) duly recorded in his or its name, which ownership shall be determined from the records of said Registry of Deeds, shall be a member of the Association, and either, in person or by proxy, shall be entitled to vote for each Lot so owned at all meetings of the Association.

B. Multiple owners of a Lot shall be deemed one owner. If only one of the multiple owners of a Lot is present in person or by proxy at a meeting of the Association, he is entitled to cast all the votes allocated to that Lot. If more than one of the multiple owners is present, the votes allocated to that Lot may be cast only in accordance with the agreement of a majority in interest of the owners. There is presumed to be a majority agreement if any one of the multiple owners present casts the votes allocated to that Lot unless any of the other owners of the Lot promptly protests to the person presiding over the meeting.

C. Votes allocated to a Lot may be cast pursuant to a written and dated proxy duly executed by a Lot owner and filed with the Secretary. If a Lot is owned by more than one person, each owner of the Lot may vote or register protest to the casting of votes by the other owners of the Lot through a duly executed written proxy. A Lot owner may not revoke a proxy given pursuant to this section except by actual notice of revocation to the person presiding over a meeting of the Association. A proxy is not valid if it is not dated or purports to be revocable without notice as determined by the Secretary of the Association. A proxy shall automatically terminate eleven (11) months after its date, unless it specifies a shorter term.

D. An executor, administrator, personal representative, guardian, or trustee may vote in person or by proxy at any meeting of the Association with respect to any Lot owned or held by him in such a capacity, whether or not the same shall have been

transferred of record by a duly recorded conveyance. If the Lot has not been so transferred, he shall satisfy the secretary that he so holds the Lot.

E. The Developer may exercise the voting rights pertaining to any Lot to which it retains title. No vote pertaining to a Lot owned by the Association may be cast, and the voting interest of such a Lot shall not be deemed to be outstanding in determining the presence of a quorum or the percentage of approval needed to act.

F. Each Lot shall have the percentage vote in the Association as specified in the Declaration. Any specified percentage vote refers to the aggregate percentage of such votes.

G. At any meeting at which a quorum is present, the affirmative vote of a majority of the voting interest of those present shall determine any question except the election of Directors, unless a greater percentage vote is required by law, by the Declaration or by these Bylaws. In the election of Directors, those receiving the greatest number of votes, though less than a majority, shall be elected. To the extent required by the Act, for the purposes of amending the Declaration or these Bylaws, the percentage in interest shall be measured against the total voting interest regardless of whether or not such Lot owners are present.

H. Upon reasonable advance notice, Members may attend any meeting of the Association via a telephonic speakerphone at which they may hear and be heard by other members, but members wishing to attend in this manner shall be responsible for the costs of providing speakerphone services. The Association shall provide reasonable cooperation in arranging such services. The President's decision as to such matters shall be binding.

Section 3.10 Adjournment. Any meeting of the Association may be adjourned from time to time to such place and time as may be determined by majority vote of the members present, whether a quorum be present or not, without further notice of the time and place of adjournment beyond that given at the meeting. At any adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted by a quorum at the meeting as originally called.

Section 3.11 Unanimous Action by Members Without a Meeting. Any action required or permitted to be taken at a meeting of the members (to the extent not otherwise precluded by law) may be taken without a meeting if written consents, setting forth the action so taken, are signed by all the members entitled to vote on such action and are filed with the Secretary of the Association as part of the corporate records. Such written consents shall have the same effect as a unanimous vote of the members.

ARTICLE IV.

BOARD OF DIRECTORS.

Section 4.1 Number and Qualifications. The affairs of the Association shall be governed by a Board of Directors initially composed of three (3) directors initially appointed by the Developer. Upon the transfer of 75% of all Lots (the "Developer Control Period"), the members shall elect three (3) directors, 2 for a term of two years and the balance for a term of one year, after which all directors shall be elected for a term of two years; a majority of such directors shall be an occupant of a Lot, or the owner or the spouse of an owner of a Lot, or if a Lot owner is a corporation, limited liability company, partnership, trust or estate, then an officer, director, member, manager, partner, trustee, beneficiary or appointed personal representative thereof.

Section 4.2 Election and Term of Office. At the expiration of the initial term of office of each director, his successor shall be elected to serve a term of two (2) years; provided, however, that a director shall hold office until his successor has been elected.

Section 4.3 Powers and Duties. The Board of Directors shall generally act on behalf of the Association, shall have all powers and duties necessary or appropriate for the administration of the affairs of the Association, and shall have all powers referred to in the Declaration, the Bylaws or otherwise provided under the Maine Homeowners Act or the Maine Nonprofit Corporation Act, as either may be amended from time to time, except those matters which by law, by the Declaration or by these Bylaws specifically reserved to the members.

Section 4.4 Other Duties. In addition to other duties imposed by these Bylaws or by duly adopted resolutions of the members of the Association, the Board of Directors shall be responsible for the following:

A. Election of the officers of the Association;

B. Management and administration of the Homeowners, the Association's property and the common portions of the Property, including the maintenance, repair and replacement thereof;

C. Determination and collection of assessments for Common Expenses, from the owners and the regulation of its fiscal affairs;

D. Establishment of reserves for the maintenance, repair and replacement of common portions of the Property and for contingencies;

E. Appointment and dismissal of the personnel and agents for the maintenance and operation of the common portions of the Property, and to fix the terms of their engagement and their compensation and authority; and

F. Designation of executive and other committees.

Section 4.5 Manager or Management Agent, Employees, Generally. The Board of Directors may employ on behalf of the Association a management agent or manager at a compensation established by the Board to perform such duties and services as the Board shall authorize including, but not limited to, the duties listed in Sections 4.4 and 6.2 of these Bylaws. All management contracts entered into during the Developer Control Period shall permit termination without a penalty on thirty days notice at any time with or without cause after the expiration of such period.

Section 4.6 Appointment and Vacancies. Until the expiration of the Developer Control Period, the Developer shall appoint replacement directors in the event of vacancies in the Board of Directors. Thereafter, a vacancy caused by the expiration of a Director's term, the removal of a Director by a vote of the members, or by the expiration of the Developer Control Period shall be filled by vote of the vote of the remaining directors. Vacancies in the Board of Directors prior to the expiration of the term of a director shall be filled by vote of the vote of the remaining directors. A director elected to fill a vacancy shall be elected for the unexpired term of his predecessor in office.

Section 4.7 Removal of Directors. At any regular meeting or special meeting duly called, any one or more of the Directors may be removed with or without cause by two-thirds (2/3) vote of the members, with or without cause. Any director whose removal has been proposed shall be given an opportunity to be heard at the meeting, but the members' decision shall be final.

Section 4.8 Compensation. No compensation shall be paid to Directors for their services as Directors or in any other capacity, unless a resolution authorizing such remuneration shall have been adopted by the members before or after the services are undertaken.

Section 4.9 Annual Meeting. The annual meeting of the Board of Directors shall be held immediately following the annual meeting of the Association and at the same place; no further notice shall be necessary in order legally to constitute such meeting.

Section 4.10 Regular Meetings. Regular meetings of the Board of Directors (other than the annual meeting) may be held at such time and place as shall be determined, from time to time, by the Board. Notice of regular meetings of the Board of Directors shall be given to each Director, personally or by delivery to his Lot, or by telephone, at least Ten (10) days prior to the day named for such meeting.

Section 4.11 Special Meetings. Special meetings of the Board of Directors may be called by the President on ten (10) days' notice to each Director, given personally or by delivery to his Lot, or by telephone, which notice shall state the time, place and purpose of the meeting. Special meetings of the Board of Directors shall be called by

the President or Secretary in like manner and on like notice upon the written request of Two (2) or more Directors.

Section 4.12 Waiver of Notice. Before or after any meeting of the Board of Directors, any Director may, in writing, waive notice of such meeting and such waiver shall be deemed equivalent to the giving of such notice. Attendance by a Director at any meeting of the Board shall be a waiver of notice by him of the time and place thereof. If all the Directors are present at any meeting of the Board, no notice shall be required and any business may be transacted at such meeting.

Section 4.13 Board of Directors' Quorum. At all meetings of the Board of Directors, at the presence at the beginning of a meeting of at least three directors or of the majority of directors then in office, whichever is less, shall constitute a quorum for the transaction of business. The acts of the majority of the Directors present shall be the acts of the Board of Directors. If, at any meeting of the Board of Directors, a quorum is not present, the majority of those present may adjourn the meeting from time to time. At any such adjourned meeting, any business which might have been transacted at the meeting as originally called may be transacted without further notice.

Section 4.14 Unanimous Action. Unless otherwise expressly provided by law, any action which may be taken at a meeting of the Directors may be taken without a meeting if all of the Directors sign written consents, setting forth the action taken or to be taken, at any time before or after the intended effective date of such action. Such consents shall be filed with the minutes of Directors' meetings and shall have the same effect as a unanimous vote.

ARTICLE V.
OFFICERS.

Section 5.1 Designation. The principal officers of the Association shall be a President, a Secretary and a Treasurer, of whom only the President need be elected from among the Directors. The Directors may in their discretion appoint a Vice President, Assistant Treasurer, and an Assistant Secretary, and such other officers, none of whom need be Directors, as in their judgment may be appropriate.

Section 5.2 Election of Officers. The principal officers of the Association shall be elected annually by the Board of Directors at the annual meeting and shall hold office at the pleasure of the Board.

Section 5.3 Removal of Officers. Upon a majority vote of the Board of Directors present at any regular meeting of the Board of Directors or at any special meeting of the Board of Directors called for such purpose, any officer may be removed, either with or without cause, and his successor elected. Any officer whose removal has been

proposed shall be given an opportunity to be heard at the meeting, but the Board's decision shall be final.

Section 5.4 President. The President shall be the chief executive officer of the Association and shall be a Director. He shall preside at all meetings of the Association and of the Board of Directors.

Section 5.5 Treasurer. The Treasurer shall be responsible for keeping financial records and accounts of all receipts and disbursements in books belonging to the Association. The Treasurer shall also, in the absence of the President, exercise the powers and perform the duties of the President. He shall be responsible, subject to the direction of the Board of Directors, for the preparation and dissemination to the members of all financial reports, budgets and notices required, and for the preparation and signing, if necessary, of all financial reports or tax returns required to be filed by the Association.

Section 5.6 Secretary. The Secretary shall keep and certify the minutes of all meetings of the Board of Directors or of the Association, shall give all notices as provided by these Bylaws, and shall have other powers and duties as may be incidental to the offices of Secretary, given him by these Bylaws or assigned to him from time to time by the Directors. If the Secretary or any assistant secretary shall not be present at any meeting, the presiding officer shall appoint a secretary pro tempore who shall keep the minutes of such meeting and record them in the books provided for that purpose. The Secretary shall be responsible for the filing of all reports and documents required to be filed by the Association with any governmental agency.

Section 5.7 Auditor. The Board of Directors, may from time to time at any scheduled meeting appoint some person, firm or corporation engaged in the business of auditing to act as auditor of the Association and to perform such audits and fiscal duties as may be requested by the Association.

Section 5.8 Amendments to Declaration. The Secretary shall prepare amendments to the Declaration and the President and Secretary shall execute the certificate for recording on behalf of the Association.

ARTICLE VI.
FISCAL AFFAIRS AND ADMINISTRATION.

Section 6.1 Accounting. Books and accounts of the Association shall be kept under the direction of the Treasurer and in accordance with customary accounting principles and practices. Within ninety (90) days after the close of each fiscal year, the Association shall furnish its Members with a statement of the income and disbursements for such prior fiscal year and a balance sheet as of the close of that year.

Generally, the Association shall keep minutes of the proceedings of its Members, Board of Directors and committees having any of the authority of the Board of Directors and shall keep at its registered office or principal office in this State a record of the names and addresses of its Members entitled to vote.

In accordance with the Maine Nonprofit Corporation Act, all books and records of the Association may be inspected by any officer, Director or Member or by an officer's, Director's or Member's agent or attorney, for any proper purpose at any reasonable time, as long as the officer, Director or Member or the officer's, director's or Member's agent or attorney gives the Association written notice at least 5 business days before the date on which they wish to inspect and copy any books or records. The Association's financial records shall also be available for examination by Unit Owners, their mortgagees and their duly authorized agents and accountants at reasonable times on at least 5 days written notice. The only proper purpose for which a Member may inspect and copy books or records under this section is the purpose of enabling the Member to fulfill duties and responsibilities conferred upon Members by the Association's Articles of Incorporation or these Bylaws of the Association or by law. The Association may require the Officer, Director or Member or the officer's, director's or member's agent or attorney to pay the reasonable cost of the copies made and may impose reasonable restrictions on the use or distribution of the records by such a person.

Section 6.2 Budget and Assessments.

A. Until the later of two (2) years from the sale of the first Lot or until the owners of Lots subject to this Declaration have assumed self-government of the Association, the Declarant may elect to charge owners for their proportionate share of the Assessments and may pay the expenses of the Association directly. Once the Association has assumed liability for expenses, the Board shall cause a proposed annual budget to be prepared based on its estimate of annual income and expenses. Within thirty (30) days of the adoption of the proposed budget, the Board shall send a summary of such budget to each member. The Board shall call a meeting of the members to review the budget; unless at that meeting the budget is reject by Sixty-Seven percent (67%) in interest of all members, the budget shall be deemed to have been ratified. Unless the budget is rejected, the members shall pay the amounts specified in the proposed budget adopted by the Board.

B. The Association's budget shall include the amount required by the Association to meet its expenses for each fiscal year or such other fiscal period as it deems appropriate, including but not limited to the following items as further set forth in the Declaration:

i. Management and administration expenses;

ii. The cost of operation, repairs, maintenance, replacement, and improvements of the common portions of the Property and such parts of the Road, Open Space Lands and Common Easements which the Association is responsible for the maintenance repair and replacement of;

iii. The cost of such insurance, bonds, services and utilities as may be furnished by the Association, other than such items for which a service charge is assessed;

iv. The establishment and maintenance of adequate working capital and reserves including general operating reserves, reserves for contingencies, for losses not covered due to insurance deductibles for which the Association is responsible, and reserves for periodic maintenance, repair and replacement of the Property the Association is obligated to maintain, all to be held in a segregated fund in a Maine financial institution; and

v. Such other expenses of the Association as may be approved by the Board of Directors including operating deficiencies, if any, for prior periods.

C. Until an annual budget is adopted by the Board, the members shall continue to pay that monthly amount of Assessments which had been previously established; any delay or failure to estimate, to deliver or to adopt such budget shall not waive or release such obligation. The Association may send periodic statements to members showing the amount of assessments due, but each member shall pay his Assessments promptly when due regardless of whether such a statement is sent.

D. Each member shall pay his share of Assessments and assessments without setoff or deduction, which shall be an amount equal to the total Association budget, net of other income as defined herein, multiplied by his respective common expense liability as set forth in the Declaration. The expenses of the Association shall be allocated equally among all Lots subject to the Declaration. The Open Space Conservation Areas are not liable for the payment of Assessments. Each member shall become liable to the Association, and a lien shall arise against his Lot for his entire fractional share of the assessments at the commencement of the pertinent fiscal period. Each member may pay his share of the Assessments in monthly installments on or before the first day of each and every month during such period, provided, however, that if any such installment is not paid when due, then if not paid upon Twenty (20) days written notice of default, the entire remaining balance thereof shall immediately become due and payable in full.

The Declarant may contribute goods and services in kind for the benefit of the Association, which shall be credited to its obligation to pay Assessments.

E. If any member shall fail or refuse to pay to the Association when due his share of the assessments, user fees and penalties, thereafter the amount thereof shall bear interest at the rate of Eighteen percent (18%) per annum or such other rate as may be

set by vote of the Board prior to the date on which the payment came due. Such Assessments with such late charges as may be determined by the Board of Directors, interest and all costs of collection, including reasonable attorneys' fees, shall constitute a lien on the Lot of such member. Recording of the Declaration constitutes record notice and perfection of the lien for Assessments, including penalties, late charges, interest and costs of collection. The Association may record a notice from time to time stating the amount and nature of the lien signed by an officer or director of the Association or by an agent authorized by the Board of Directors but such recorded notice is not necessary to establish or perfect the lien.

F. If such payments are not received within thirty (30) days after they become due, the Board shall exercise and enforce any and all rights and remedies provided in the Declaration or these Bylaws or otherwise available at law or in equity for the collection of all unpaid amounts. In any action to foreclose the lien for Assessments, late charges, penalties, interest, and costs of collection including reasonable attorneys' fees against any owner of a Lot, the Association may act through its manager or Board of Directors in the same manner as any mortgagee of real property. The manager or Board of Directors acting on behalf of the Lot owners shall have the power to bid and acquire such Lot at a foreclosure sale and to lease, mortgage, convey, or otherwise deal with the Lot. Suit to recover a money judgment for unpaid Assessments and penalties due to the Association, with interest and all costs and reasonable attorneys' fees, may be maintained without foreclosing upon or waiving the lien securing the same.

The lien is extinguished unless action to enforce the lien is started within Six (6) years after the full amount of the Assessment becomes due.

Section 6.3 Revised and Special Assessments. If at any time the Board shall determine the amount of the Assessments to be inadequate, whether by reason of a revision in its estimate of expenses or income, the Board may adopt and deliver to the members at least thirty days prior to the date on which it becomes effective, a revised estimated annual budget for the balance of such fiscal year and thereafter monthly Assessments shall be determined and paid on the basis of such revision, subject to the rights of the Lot Owners to reject such amendment by a two thirds (2/3) in interest vote at a meeting of the members called within such 30 day period at the request of 20% in interest request of the Lot Owners.

The Board may, upon determining that circumstances exist which requires immediate assessment of the members, make special assessments, not to exceed an amount equal to one current monthly Assessment for each Lot unless approved by the members, which shall be due and payable when delivered to the members.

Section 6.4 Fiscal Year. The fiscal year of the Association shall be such as may from time to time be established by the Board of Directors.

Section 6.5 Capital Improvements. The approval of a majority in interest of all the members shall be required to make a capital improvement to the Property in an amount in excess of Thirty-five percent (35%) of the aggregate Assessments against all the members over the prior fiscal year, and in such event the cost thereof shall be assessed to all Lot owners as an Assessment.

Section 6.6 Use of Lots. All Lots shall be utilized in accordance with the provisions of the Bylaws, Declaration, and Rules and Regulations.

Section 6.7 Enforcement of Declaration and Bylaws. Every Lot owner shall pay to the Association promptly on demand all costs and expenses, including reasonable attorneys' fees and expenses incurred by or on behalf of the Association, in collecting any delinquent Assessments, damages or fees due from such Lot, foreclosing its lien for assessments, collecting any penalties imposed hereunder, or enforcing any provisions of the Declaration, these Bylaws, or the Rules and Regulations against such owner or any occupant of such Lot.

Section 6.8 Rules and Regulations. In order to assist the peaceful and orderly use and enjoyment of the buildings and Property of the Homeowners, the Board of Directors may from time to time adopt, modify, and revoke, in whole or in part, such further reasonable rules and regulations governing the Homeowners as it may deem necessary, including, but not limited to, methods and procedures for enforcing compliance with the Declaration and Bylaws. Such Rules and Regulations upon adoption, and every amendment, modification, and revocation thereof, shall be sent promptly to each Lot and shall be binding upon all members of the Association and all persons present on the Homeowners.

The members may reject or amend Rules and Regulations by majority vote of all Lot Owners at any time, and such decision shall be binding on the Board of Directors.

Section 6.9 Right of Entry. Upon such prior notice as is possible under the circumstances, the manager and any person authorized by the Board of Directors shall have the right to enter any Lot in case of any emergency originating in or threatening such Lot or adjoining common portions of the Property whether or not the owner or occupant is present at the time, and upon prior notice to enter any Lot at reasonable times for the purpose of performing authorized installations, alterations, or repairs to the common portions of the Property thereon or accessible therefrom.

Section 6.10 Title. Every Lot owner shall promptly record in the Registry of Deeds the deed, assignment, or other conveyance to him of his Lot or other evidence of his title thereto and file such evidence of his title with the Association, and the Secretary shall maintain such information in the records of the Association.

ARTICLE VII

SALE, LEASE, RENTAL OR OTHER TRANSFER OF A LOT

Section 7.1 Binding Effect. All subsequent sales, leases or other transfers of a Lot by a Lot owner shall be subject in all respects to the Declaration, Bylaws, and Rules and Regulations of the Homeowners.

Section 7.2 Reserved.

Section 7.3 Liability for Assessments, Etc. In the transfer of a Lot, the grantee of the Lot shall be jointly and severally liable with the grantor for all unpaid Assessments, penalties, fees, interest and costs of collection outstanding at the time of the grantor's transfer, without prejudice to the grantee's right to recover from the grantor the amounts paid by the grantee therefore. However, any such grantee or proposed purchaser under a purchase and sale contract upon written request and upon payment of such fee as may be set by the Directors may obtain a statement from the Board of Directors setting forth the amount of unpaid Assessments against the Lot, and the grantee shall not be liable for, nor shall the Lot conveyed be subject to a lien for any Assessments arising before the statement date in excess of the amount therein set forth.

ARTICLE VIII.
EXECUTION OF INSTRUMENTS.

Section 8.1 Instruments Generally. All checks, drafts, notes, vouchers, bonds, acceptances, contracts, deeds, lien notices, certificates, and all other instruments shall be signed or approved by the President or the Secretary or Treasurer, and in addition by any one or more officer(s), agent(s) or employee(s), all as the Board of Directors may designate, unless otherwise unanimously voted by the Board of Directors.

ARTICLE IX.
GENERAL ADMINISTRATION

Section 9.1 Easements, Etc. The Association is authorized and empowered to grant such easements, rights-of-way, leases and licenses for sewer lines and sewage disposal facilities, water lines, electrical cables, telephone cables, television cables and antennas, gas lines, storm drains, underground conduits, fire escapes and alarms, such other purposes related to the provision of public services, and utilities to the Homeowners and for recreational purposes as may be considered desirable, necessary or appropriate by the Board of Directors for the orderly maintenance, improvement and preservation and enjoyment of the Property or for the preservation of the health, safety, convenience and welfare of the owners of the individual Lots upon at least Thirty (30) days' notice to the members unless a special meeting of the members is called within such period and the members vote to reject such grant. No

such rights may be created through any Lot other than the Common Easement areas without the written consent of the owners thereof and that no such easement shall materially impair the use and enjoyment of the Homeowners.

Section 9.2 Utility Services/Limitation of Liability. The Association shall not be liable for the failure of water supply, sewage disposal systems, stormwater systems, roads, electricity, telephone, or other services to be obtained by the Association or paid for out of the common expense or service charge funds, or for injury or damages to persons or property caused by the elements or by the owner of any Lot or by any other person, or resulting from electricity, water, snow or ice which may leak, fall or flow from or settle on any portion of the Property or from any roof, wire, pipe, drain, conduit, stormwater facility, or any other appliance or equipment. The Association shall not be liable to the owner of any Lot for loss or damage, by theft, or otherwise, of property which may be stored upon or in any individual Lot or in any other portion of the Property. No set-off, diminution or abatement of Assessments shall be claimed or allowed for the expense, damage or discomfort arising from the making of repairs or improvements to the Property or to any Lot, or from any action taken by the Association to comply with any law, ordinance, or order of any other governmental authority.

ARTICLE X.
LIABILITY OF DIRECTORS AND OFFICERS.

Section 10.1 Exculpation. No director or officer of the Association shall be liable for acts or defaults of himself or any other officer or member, or for any loss sustained by the Association or any member thereof, unless the same has resulted from his own willful misconduct or gross negligence.

Section 10.2 Indemnification. The Association shall indemnify any person who was or is threatened to be made a party against any actual, threatened, or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact he is or was an officer, director, agent or employee of the Association against all expenses including reasonable counsel fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection therewith, excepting, however, such matters in which such person is finally adjudged by a court of competent jurisdiction to have acted with willful misconduct or gross negligence towards the Association or absent a final adjudication thereof, excepting such matters in which the Board of Directors (excluding any interested Director) determines any such person acted with willful misconduct or gross negligence. This right to indemnification shall be in addition to any other power of the Association to indemnify as permitted by law. The Association may also maintain insurance on behalf of any person who is or was a director, officer, agent or employee of the Association against any liability asserted against him and incurred by him in

such capacity or arising out of his status as such, whether or not the Association would otherwise have the power or duty to indemnify him.

Section 10.3 Claims. Claims against the Association, the Board of Directors or the officers, employees or agents thereof in their respective capacities as such, or the Lot Owners as a whole, shall be directed to the Board of Directors of the Association, which shall promptly give written notice thereof to the Lot Owners and the Eligible Mortgage Holders, and such complaints shall be defended by the Association. The Lot Owners shall have no right to participate in such defense other than through the Association.

ARTICLE XI.
BY-LAWS.

Section 11.1 Amendment. These Bylaws may be amended, modified, or revoked in any respect from time to time by vote of Sixty-Seven percent (67%) or more of the members of the Association at a meeting duly called for the purpose, PROVIDED, HOWEVER, that these Bylaws shall always contain those particulars which are required by the Town of Windham, as amended from time to time to the extent applicable by law to this Association; and PROVIDED, FURTHER, that no modification of or amendment to the Bylaws shall be valid, until a certificate of the amendment is executed to evidence the propriety of such amendment or modification by the Secretary and President of the Association. Such certificate shall be recorded in the Registry of Deeds.

So long as the Declarant owns any portion of the Property, any amendments of these Bylaws or the Rules and Regulations shall be effective only if approved in a written instrument or instruments executed by the Declarant, his/her heirs, successors or assigns.

Section 11.2 Conflict. In the event of any conflict between these Bylaws and the provisions of the Declaration, the latter shall govern and apply.

Section 19
Financial Data/ Construction Costs

MAINE
Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Wed Aug 27 2025 14:45:48. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
MEREDITH WAY LLC	202511126DC	LIMITED LIABILITY COMPANY	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
02/21/2025	N/A	MAINE

Other Names **(A=Assumed ; F=Former)**

NONE

Principal Home Office Address

Physical **Mailing**

Clerk/Registered Agent

Physical	Mailing
LAURIE BACHELDER 190 US ROUTE 1 FALMOUTH, ME 04105	LAURIE BACHELDER 190 US ROUTE 1 FALMOUTH, ME 04105

New Search

Click on a link to obtain additional information.

List of Filings	View list of filings	
Obtain additional information:		
Certificate of Existence (Good Standing) (more info)	Short Form without amendments ($30.00)	Long Form with amendments ($30.00)
Certificate of Legal Existence (more info)	Short Form without amendments	Long Form with amendments

($30.00) ($30.00)

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If you encounter problems, visit the troubleshooting page.

If you encounter technical difficulties while using these services, please contact the Webmaster. If you are unable to find the information you need through the resources provided on this web site, please contact the Division of Corporations, UCC & Commissions Reporting and Information Section at 207-624-7752 or e-mail.

© Department of the Secretary of State

Camden
NATIONAL BANK

7-15-2025

RE: Meredith Woods Subdivision

To Whom It May Concern:

This letter is to confirm that Camden National Bank (the "Bank") has had a deposit relationship with Meredith Way LLC (the "Company"). The Company has presented a preliminary proposal for the development of a 5-unit residential sub-division in Windham, Maine.

Assuming the Company can (1) demonstrate the financial capacity to contribute the required level of capital into the Project, (2) demonstrate the operational ability to successfully manage the development of the Project, and (3) demonstrate the feasibility of full sell-out of the Project within a timely manner, the Company will likely be able to obtain financing. Once these details are addressed, the Bank would consider entering into negotiations with the Company to provide a term sheet of the proposed loan.

Please note that a complete application for financing has not been submitted to the Bank for the Project. This letter does not constitute an offer, agreement or commitment to lend. However, the Bank intends to support the Company with this Project after satisfactory consideration has been given to a complete application package. Full underwriting and necessary due diligence will need to take place in order to provide a financing decision.

If you have any questions, please do not hesitate to contact us 207-337-1818.

Sincerely,

Christopher Abbott

Christopher D. Abbott

Vice President | Commercial Banking Officer

640 Main Street Saco, ME 04072

ESTIMATE

FLB TRUCKING & EXCAVATING LLC
25 Balsam Way
Gray, ME 04039-7568

flbtruckingex@gmail.com
+1 (207) 310-3115

Bill to
Laurie Bachelder
366 Route 1
Falmouth, ME 04105

Ship to
Laurie Bachelder
366 Route 1
Falmouth, ME 04105

Monty way, Windham. Me Proposal

Estimate details
Estimate no.: 1097
Estimate date: 07/26/2025

#	Date	Product or service	Description	Qty	Rate	Amount
1.		**Roadway Construction**	Install all proper erosion control nessasary for project. Grub intire length of road way using good fill to fill lows and compact and cut highs where nessasary. Haul and place 4inch gravel 15 inches thick and compact. Build ditches and any other drainage nessasary. This does not include ledge removal or blasting of any kind.	1		$0.00
2.		**electrical Trench**	install proper conduit for the entire run of road with proper pull and transformer pads installed.	1	$0.00	$0.00
3.		**New water line**	Install new water line the length of roadway with a fire hydrant. includes all materials and labor .	1	$0.00	$0.00
4.		**finish Gravel on roadway**	Haul and place finish gravel on roadway. grade for paving.	1	$0.00	$0.00
5.		**Paving**	Have the binder coat of pavement laid	1	$0.00	$0.00
6.		**Houselots**	all site work for house lots include septic, dig and backfill foundation with proper materials, water line,Drive way, and loam. This price does not include	4	$41,000.00	$164,000.00

		any ledge removal or blasting. LOT NUMBER 5 WILL BE $48,500,00 DO TO LONG DRIVEWAY. SO TOTAL FOR HOUSE LOTS WILL BE $ 212,500.00. THIS DOES NOT INCLUDE ANY CONCRETE WORK.			
7.	**Finish Paving and once over intire roadway**	Do any final touches to entire project that is nessasary. Have finish coat of pavement laid.	1	$0.00	$0.00
8.	**Total roadway cost**	This is an Estimate off the plan I received via email. This price is subject to change,This price does not include any ledge blasting or removal. This does not include clearing of the trees.	900	$468.00	$421,200.00

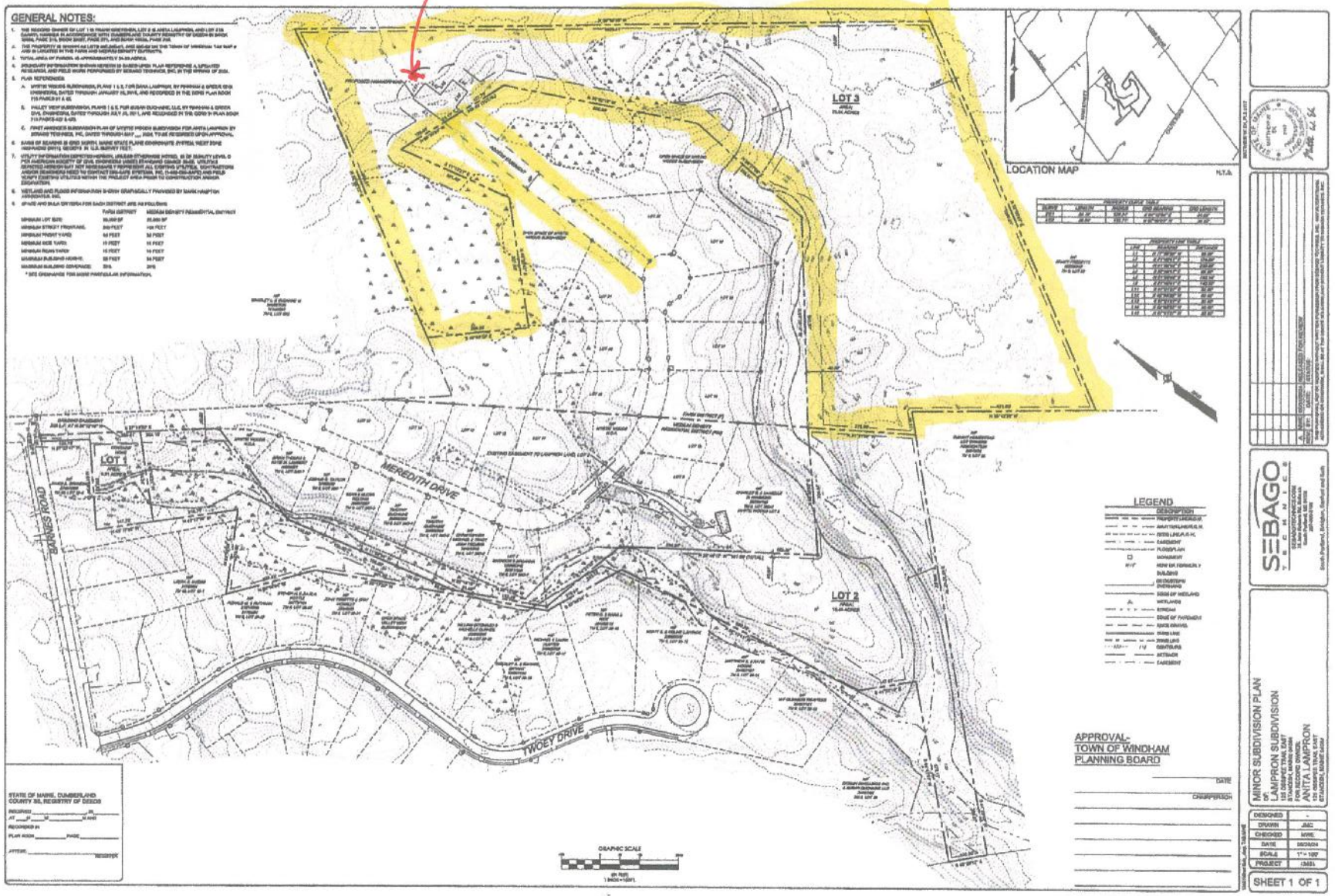
ROAD COST WITH UTILITIES

Total **$585,200.00**

Accepted date **Accepted by**

Section 20
Previous subdivisions

NEW MEREDITH WOODS SUBDIVISION



Section 21
Proposed Site Construction Plans (11" by 17")