Preliminary Major Subdivision Application

To the Town of Windham

250 Windham Center Road Subdivision

250 Windham Center Road
Windham, Maine

Applicant:
Casco Bay Holdings LLC
PO Box 275
Cumberland, ME 04021

Prepared By:
DM Roma Consulting Engineers
PO Box 1116
Windham, ME 04062

DM ROMA
CONSULTING ENGINEERS

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MAJOR SUBDIVISION PRELIMINARY APPLICATION TO TOWN OF WINDHAM

250 WINDHAM CENTER ROAD SUBDIVISION

SECTION 1

APPLICATION FORM & SUBMISSION CHECKLIST

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:** $ 3,800.00		
	REVIEW ESCROW: Up to 10 Lots = $2,500; 11 – 15 Lots = $3,000; 16 – 30 Lots = $4,000; 30 + Lots = $5,000	☒ $ 2,500.00	**DATE:** 9-2-25 *Office Use:*	*Office Stamp:*	

PROPERTY DESCRIPTION	Parcel ID	Map(s) # 12	Lot(s) # 52-A	Zoning District(s)	WC	Total Land Area SF:	142,370 SF	
	# Lots/dwelling units:	6	Total Distr. >1Ac. ☒ Y ☐ N			Est. Road Length(ft):	400 FT +/-	
	Physical Address	250 Windham Center Rd		Watershed:	Black Brook to Presumpscot River			
PROPERTY OWNER'S INFORMATION	Name			Name of Business	Casco Bay Holdings, LLC			
	Phone	(207) 831 - 5101		Mailing Address:	PO Box 275			
	Fax or Cell				Cumberland, ME 04021			
	Email	ron@cbhm.net						
APPLICANT'S INFORMATION (*IF DIFFERENT FROM OWNER*)	Name	Same as Owner		Name of Business:				
	Phone			Mailing Address				
	Fax or Cell							
	Email							
APPLICANT'S AGENT INFORMATION	Name	Dustin Roma		Name of Business	DM Roma Consulting Engineers			
	Phone	(207) 591 - 5055		Mailing Address	PO Box 1116			
	Fax or Cell	(207) 310 - 0506			Windham, ME 04062			
	Email	dustin@dmroma.com						

PROJECT INFORMATION

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

Lot contains a single family home with detached barn structures.

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

The single family home will be divided from the development parcel prior to submission of the Final Subdivision Plan application. Six residential dwelling units in 3 duplex buildings will be constructed on the development parcel on a 400-foot long private driveway. All dwellings are intended to be rented apartments and will be served by public water and private on-site wastewater disposal.

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

The site contains wetlands and a man-made pond.

MAJOR SUBDIVISION - PRELIMINARY PLAN - REVIEW APPLICATION REQUIREMENTS

Section 910 of the Land Use Ordinance

The submission shall contain, five (5) copies of the following information, including full plan sets. Along with one (1) electronic version of the entire submission unless a waiver of a submission requirement is granted.

The Major Plan document/map:

A) Plan size: 24" X 36"
B) Plan Scale: No greater 1":100'
C) Title block: Applicant's name and address

- Name of the preparer of plans with professional information
- Parcel's tax map identification (map and lot) and street address, if available

- Complete application submission deadline: three (3) weeks before the desired Staff Review Committee meeting.
  - Five copies of the application and plans
  - Application Payment and Review Escrow
- A pre-submission meeting with the Town staff is required.
- Contact information:
  Windham Planning Department (207) 894-5960, ext. 2
  Steve Puleo, Town Planner sjpuleo@windhammaine.us
  Amanda Lessard, Planning Director allessard@windhammaine.us

APPLICANT/PLANNER'S CHECKLIST FOR MAJOR SUBDIVISION REVIEW

SUBMITTALS THAT THE TOWN PLANNER DEEMS SUFFICIENTLY LACKING IN CONTENT WILL NOT BE SCHEDULED FOR PLANNING BOARD REVIEW.

The following checklist includes items generally required for development by the Town of Windham's LAND USE ORDINANCE, Sections 907.B., 910.C., & 911. Due to projects specifics, are required to provide a complete and accurate set of plans, reports, and supporting documentation (as listed in the checklist below).

IT IS THE RESPONSIBILITY OF THE APPLICANT TO PRESENT A CLEAR UNDERSTANDING OF THE PROJECT.

Staff recommends the applicant provide a proposed construction schedule, a draft Homeowner's Association (HOA) documentation, public open space to be provided, and written offers of cession to the Town, and/or road maintenance agreement with at the Preliminary Plan application submission.

Major Subdivision Preliminary Plan Submission Requirements:			**Major Subdivision Preliminary Plan Submission Requirements (Continued):**	**Applicant**	**Staff**
A. Mandatory Written Information submitted in a bound format:	**Applicant**	**Staff**	6. Vicinity plan showing the area within 250 feet, to include:	☒	☐
1. A fully executed application form, signed by a person with right, title, or interest in the property or Authorized Agent.	☒	☐	i. approximate location of all property lines and acreage of parcels.	☒	☐
2. Evidence of payment of the application and escrow fees.	☒	☐	ii. locations, widths, and names of existing, filed, or proposed streets, easements, or building footprints.	☒	☐
3. Proposed name of the Subdivision.	☒	☐	iii. location and designations of any public spaces.	☒	☐
4. Verification of right, title, or interest in the property, and any abutting property, by deed, purchase and sales agreement, option to purchase, or some other proof of interest.	☒	☐	iv. outline of the proposed subdivision, together with its street system and an indication of future probably street system, if the proposed subdivision encompasses only part of the applicant's entire property.	☒	☐
5. Copy(ies) of the most recently recorded deed for the parcel, along with a copy(ies) of all existing deed restrictions, easements, rights-of-way, or some other proof of interest.	☒	☐	7. Standard boundary survey of the parcel, including all contiguous land in common ownership within the last 5 years.	☒	☐
6. Copy(ies) of any existing and/or proposed covenants, deed restrictions intended to cover all or part of the lots or dwellings in the subdivision.	☒	☐	8. Existing and proposed street names, pedestrian ways, lot easements, and areas to be reserved or dedicated to public use.	☒	☐
7. Copy(ies) of any existing or proposed easements on the property	☒	☐	9. Contour lines at 2-foot intervals, or intervals required by the Board, showing elevations to the required datum.	☒	☐
8. Name, registration number, and seal of Maine Licensed Professional Land Surveyor who conducted the survey.	☒	☐	10. Typical cross-sections of the proposed grading for roadways, sidewalks, etc., including width, type of pavement, elevations, and grades.	☒	☐
9. Name, registration number, and seal of the licensed professional who prepared the plan (if applicable).	☒	☐			
10. An indication of the type of sewage disposal to be used in the subdivision.			11. Wetland areas shall be delineated on the survey. If none, please note.	☒	☐
i. If connecting to the public sewer, provide a letter from Portland Water District stating the District can collect and treat the wastewater	☐	☐	12. The number of acres within the proposed subdivision, location of property lines, existing buildings, vegetative cover type, specimen trees, if present, and other essential existing physical features.	☒	☐

Mandatory Written Information submitted in a bound format (continued):	Applicant	Staff			
			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.	☒	☐
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.	☒	☐	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.	☒	☐
11. Indicate the type of water supply system(s) to be used in the subdivision.	☒	☐	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.	☒	☐
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.	☒	☐	16. Location, names, and present width of existing streets, highways, easements, building lines, parks, and other open spaces on or adjacent to the subdivision.	☒	☐
13. Names and addresses of the record owner, applicant, and adjoining property owners.	☒	☐	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.	☒	☐
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.	☐	☐	18. All parcels of land proposed to be dedicated to public use and the conditions of such dedication.	☒	☐
15. The name and contact information for the road association whose private way or road is used to access the subdivision.	☐	☐	19. Location of any open space to be preserved or common areas to be created, and general description of proposed ownership, improvement, and management	☒	☐
16. Financial Capacity. Estimated costs of development, and an itemization of major costs.			20. Approximate location of treeline after development.	☒	☐
i. Estimated costs of development, and an itemization of major costs.	☒	☐	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.	☒	☐
ii. Financing - provide one of the following:	☒	☐	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.	☒	☐
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	☐	☐	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.	☒	☐
c. Bank statement showing the availability of funds if personally financing development	☐	☐	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.	☒	☐
d. Cash equity commitment.	☐	☐			
e. Financial plan for remaining financing.	☐	☐	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.	☐	☐
f. Letter from financial institution indicating an intention to finance.	☐	☐	**C. Submission information for which a waiver may be granted.**	**Applicant**	**Staff**
iii. If a corporation, Certificate of Good Standing from the Secretary of State	☒	☐	1. High-intensity soil survey by a Certified Soil Scientist	☐	☐
2. Technical Capacity:			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.*

Dustin Roma	9-2-2025	Dustin Roma - Authorized Agent
APPLICANT OR AGENT'S SIGNATURE	DATE	PLEASE TYPE OR PRINT THE NAME

SECTION 2

AGENT AUTHORIZATION

June 23, 2025

Re: Agent Authorization

Casco Bay Holdings, LLC intends to develop the property located at 250 Windham Center Road in Windham, Maine. Casco Bay Holdings, LLC has retained the services of DM Roma Consulting Engineers to act as its authorized agent to apply for land use permits associated with the development of this property.

Sincerely,

Ron Smith
Casco Bay Holdings, LLC

SECTION 3

WAIVER REQUESTS

Section 3 – Waiver Requests

A waiver was granted for the requirement to submit a High Intensity Soil Survey at the Sketch Plan stage of the project. A waiver request is attached for the requirement to submit a Hydrogeological Study.

TOWN OF WINDHAM
MINOR\MAJORSUBDIVISION APPLICATION

Performance and Design Standards Waiver Request Form

(Section 908 – Minor\Major Subdivision Review, Waivers)

For each waiver request from the Performance and Design Standards detailed in Section 911 of the Town of Windham Land Use Ordinance, please submit separate completed copy of this waiver request form for all waivers requested

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Subdivision or

Project Name: 250 Windham Center Road Subdivision

Tax Map: 12

Lot(s): 52-A

Waivers are requested from the following Performance and Design Standards (Add Forms as necessary):

Ordinance Section	Standard	Mark which waiver this form is for
120-910(C)(3)(C)	Hydrogeological Assessment	☒
		☐
		☐
		☐
		☐

a. Describe how a waiver from the standard indicated above will improve the ability of the project to take the property's pre-development natural features into consideration. Natural features include, but are not limited to, topography, location of water bodies, location of unique or valuable natural resources, relation to abutting properties or land uses. Attach a separate sheet if necessary.

The proposed leach field that will be constructed to provide on-site wastewater disposal for the new dwelling units is located on the downhill side of the property, and groundwater flows are expected to flow in an easterly direction. The new wastewater disposal field has been designed to meet all requirements for a first-time system without any variances. The property located to the east is owned and managed by the Presumpscot Regional Land Trust and is protected by covenants that do not permit development of the parcel except for recreational and conservation purposes. The closest developed property to the east is located over 500 feet away, and Windham Center Road has an existing water main that provides public water to the nearby homes. All new dwellings will have public water service from the Portland Water District. Based on this information, there are no groundwater resources that are expected to be negatively impacted by the the proposed development that would require a hydrogeological analysis to be performed.

(continued next page)

Ordinance Section: 120-910 (C) (3) (C)

b. Will the waiver have an impact on any of the following criteria?

	Yes	No
Water or air pollution	☐	☒
Light pollution or glare	☐	☒
Water supply	☐	☒
Soil erosion	☐	☒
Traffic congestion or safety	☐	☒
Pedestrian safety or access	☐	☒
Supply of parking	☐	☒
Sewage disposal capacity	☐	☒
Solid waste disposal capacity	☐	☒
Scenic or natural beauty, aesthetics, historic sites, or rare or irreplaceable natural areas	☐	☒
Flooding or drainage issues on abutting properties	☐	☒
The Town's ability to provide the subdivision with public safety services (if subdivision)	☐	☒

If granting the waiver will result in an impact on any of the criteria above, please provide more detail below.

SECTION 4

CERTIFICATE OF CORPORATE GOOD STANDING

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: Tue Sep 02 2025 07:22:19. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
CASCO BAY HOLDINGS, LLC	20155329DC	LIMITED LIABILITY COMPANY	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
06/30/2015	N/A	MAINE

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

NONE

Principal Home Office Address

Physical	Mailing
75 ELMAPLE DRIVE WESTBROOK, ME 04092	75 ELMAPLE DRIVE WESTBROOK, ME 04092

Clerk/Registered Agent

Physical	Mailing
ALAN E WOLF 294 MAIN ST. CUMBERLAND CTR., ME 04021	ALAN E WOLF P O BOX 275 CUMBERLAND CTR, ME 04021-0275

New Search

Click on a link to obtain additional information.

List of Filings View list of filings

Obtain additional information:

SECTION 5

PROJECT NARRATIVE

Section 5 – Project Narrative

Zoning:	Windham Center (WC)
Acreage:	3.26 Acres
Tax Map/Lot:	Map 12 Lot 52-A
Existing Use:	Single Family Residential
Proposed Use:	Two-Family Residential, Multifamily Development

The proposed project includes the construction of six residential dwelling units in three duplex buildings and approximately 400 feet of new private driveway construction that will be built to the Major Private Road standards. All residential units will be served by public water, underground electrical service and on-site subsurface wastewater disposal systems. Each dwelling is intended to rented as an apartment unit.

Prior to submission of the Final Subdivision Plan application, the existing home will be split off from the proposed development parcel. An access and utility easement will be reserved over the development parcel for the benefit of the single-family home on the separated lot. An exhibit showing the proposed lot and easement is contained in Section 8 of this application.

The project requires a Stormwater Permit-By-Rule from the Maine Department of Environmental Protection and we will be filing a self-verification notification to the US Army Corps of Engineers for the filling of 2,360 square feet of wetlands that are classified as wet meadow.

SECTION 6

NAMES AND ADDRESSES OF ABUTTING PROPERTY OWNERS

Section 6 – Names and Addresses of Abutting Property Owners

The following is a list of direct abutters to the development parcel

Map/Lot	Owner Name	Mailing Address
12/52	Presumpscot Regional Land Trust, Inc.	PO Box 33 Gorham, ME 04038
45/20	Joyce Lauzier	598 Gray Road Windham, ME 04062
45/22	Corsetti's Market, Inc.	443 Gray Road Windham, ME 04062
45/22-1	Giovan Corsetti	8 Corsettis Way Windham, ME 04062
45/23	Corsetti's Market, Inc.	443 Gray Road Windham, ME 04062

SECTION 7

RIGHT, TITLE OR INTEREST DOCUMENTS

DLN: 2733780

QUITCLAIM DEED WITHOUT COVENANT
(Release Deed)

SAWIN CAPITAL, LLC, Maine limited liability company, with a principal place of business in Westbrook, County of Cumberland and State of Maine ("Grantor"), for consideration paid, RELEASES to **CASCO BAY HOLDINGS, LLC** whose mailing address is P.O. Box 275, Cumberland, Maine 04021 ("Grantee"), certain lot or parcel of land situated in the Town of Windham, County of Cumberland and State of Maine being more particularly described as appears on Exhibit A, attached hereto and incorporated herein by reference.

The Grantor herein was the highest bidder at a foreclosure sale held pursuant to the power of sale provision contained in the Mortgage Deed, Security Agreement & Financing Statement recorded in the Cumberland County Registry of Deed at Book 40932, Page 213.

Being the same premises described in a deed from Sawin Capital, LLC to Sawin Capital, LLC dated April 29, 2025, and recorded in the Cumberland County Registry of Deeds herewith.

IN WITNESS WHEREOF, Sawin Capital, LLC have caused this instrument to be executed by Alan E. Wolf, hereunto duly authorized, this 29th day of April, 2025.

WITNESS:

SAWIN CAPITAL, LLC

_____

By: _____
Its: Authorized Agent
By: Alan E. Wolf

STATE OF MAINE
CUMBERLAND, ss.

April 29, 2025

Personally appeared before me the above-named Alan E. Wolf, its Authorized Agent and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said company.

DARCY L. NEEDHAM
Notary Public - Maine
My Commission Expires
January 26, 2030

_____
Maine ~~Attorney at Law~~/ Notary Public
Printed Name: _____
My Commission expires: _____

DOC :14775 BK:41413 PG:55
RECEIVED - RECORDED, CUMBERLAND COUNTY REGISTER OF DEEDS
04/30/2025, 10:22:05A
Register of Deeds Jessica M. Spaulding E-RECORDED

Exhibit A

A certain lot or parcel of land, with the buildings and improvements thereon, located on the northeast side of the Windham Center Road, in the Town of Windham, County of Cumberland and State of Maine, bounded on the northwest side by land now or formerly of Alan E. Young, Richard E. School, et al, and Joyce W. Lauzier, on the northeast and southeast by land now or formerly of Jennie S. Rogers, and on the southwest by said Road, and described as follows:

Beginning at a monument as described in a deed from William C. and Philip W. Hawkes, as recorded in Cumberland County Registry of Deeds in Book 1372, Page 499; thence N 36° 56' 40" E a distance of one hundred thirty and 80/100 (130.80) feet to a monument, as described in the aforementioned deed; thence N 43° 53' 37" E a distance of fifty-nine and 97/100 (59.97) feet to a monument, as described in the aforementioned deed; thence N 61° 31' 14" E a distance of three hundred eighty-two and 34/100 (382.34) feet to a point near a concrete monument tipped; thence N 23° 20' 07" E a distance of three hundred twenty-five and 14/100 (325.14) feet to an iron; thence S 66° 39' 53" E a distance of two hundred thirty-two and 71/100 (232.71) feet to an iron; thence S 31° 09' W a distance of two hundred forty and 19/100 (240.19) feet to an iron rod; thence S 62° 40' 56" W a distance of one hundred ninety-six and 44/100 (196.44) feet to an iron; thence S 42° 19' 36" W a distance of four hundred eighty-nine and 79/100 (489.79) feet to an iron; thence N 54° 37' 54" W along said Road, a distance of two hundred eight and 01/100 (208.01) feet to the point of beginning.

The above parcel contains 3.7277 acres and the bearings are based on Grid North (using Central Meridian 70° 10' West Longitude) by Solar Observations.

Together with and subject to the rights, rights-of-way, easements, interests, privileges and appurtenances as may appear of record.

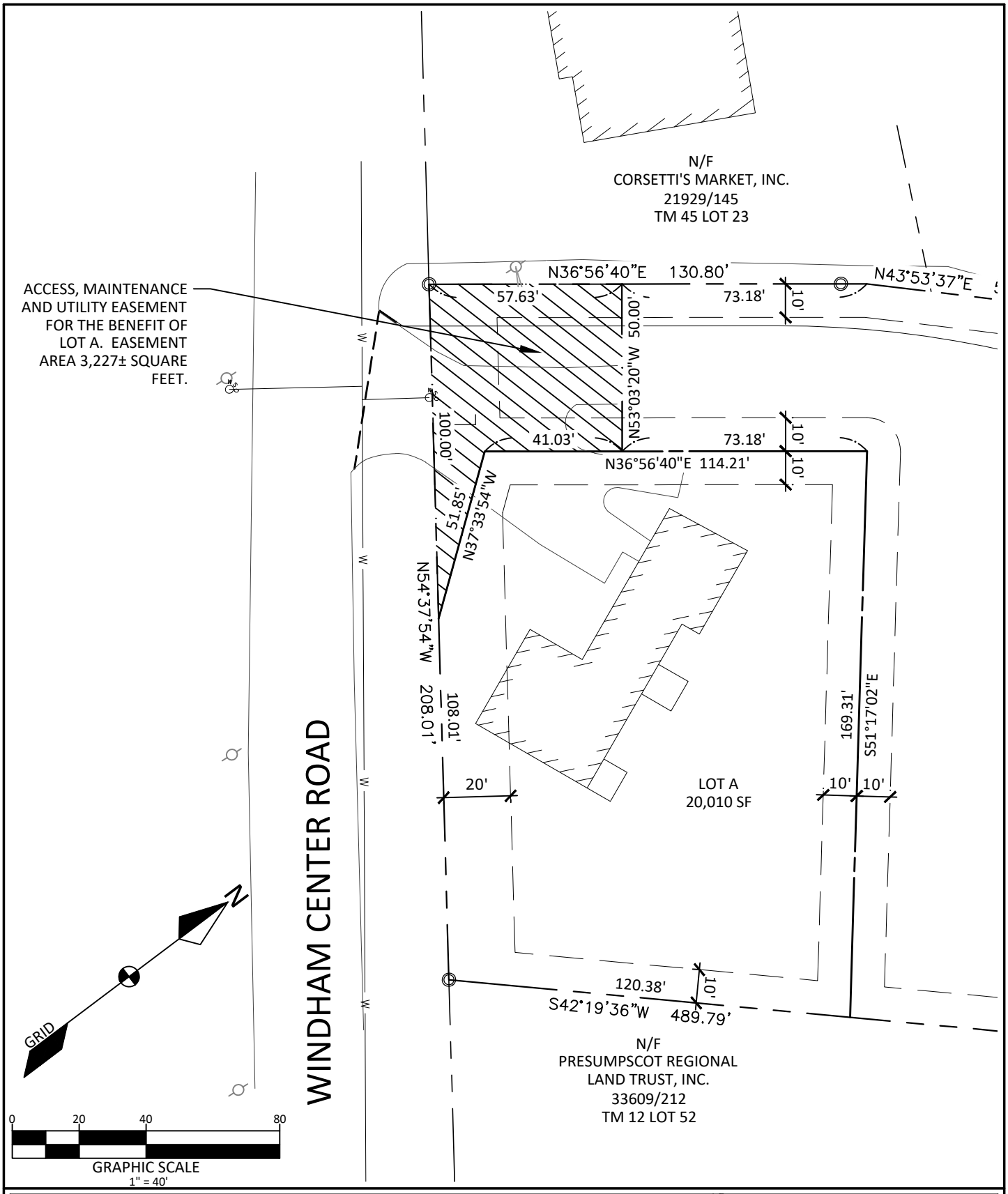
SECTION 8

EXISTING OR PROPOSED EASEMENTS OR COVENANTS

Section 8 – Existing or Proposed Easements or Covenants

Prior to submission of the Final Subdivision Plan application, the existing home will be split off from the proposed development parcel. An access and utility easement will be reserved over the development parcel for the benefit of the single-family home on the separated lot.

The residential dwelling units are intended to be apartments.



LOT EXHIBIT

250 WINDHAM CENTER ROAD
WINDHAM, MAINE

FOR RECORD OWNER:
CASCO BAY HOLDINGS, LLC
PO BOX 275
CUMBERLAND, ME 04021

SCALE: 1"=40'
DATE: 08-26-2025
JOB NUMBER: 24035

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 591-5055

SECTION 9

TECHNICAL CAPACITY OF THE APPLICANT

Section 9 – Technical Capacity of the Applicant

Casco Bay Holdings LLC is the developer of the project. Ron Smith is the managing member of Casco Bay Holdings LLC, and he has developed numerous subdivisions as the previous owner of Custom Built Homes of Maine, Inc. including single-family homes, multi-family developments, condominiums and apartments in southern and western Maine that included road construction, utility installation, lot development and building construction.

DM Roma Consulting Engineers has been retained to perform Civil Engineering design and Land Permitting through the Town and State. The Licensed Professional Engineers at DM Roma have been designing land development projects for over 20 years and have extensive experience with Stormwater Management Design, Roadway and Utility engineering, Site grading, Erosion Control design, Engineering of on-site wastewater disposal systems, and regulatory permitting through local municipalities, the Maine Department of Environmental Protection, the Maine Department of Transportation, US Army Corps of Engineers and other affiliated agencies.

Survey, Inc. has been retained to perform Land Surveying services for the project. Bill Shippen is a Licensed Professional Land Surveyor with extensive experience in all aspects of land surveying and subdivision planning.

Mainely Soils has been retained to perform wetlands delineation, subsurface soil evaluations and to assist in the preparation of the subsurface wastewater disposal system design. Alex Finamore is experienced in septic system design, wetland delineation, soils analysis and environmental permitting.

SECTION 10

CAPACITY OF EXISTING UTILITIES TO SERVE THE PROJECT

Section 10 – Capacity of Existing Utilities to Serve the Project

Potable Water – The existing 12-inch water main located in Windham Center Road was installed in 1995. We will tap the main with a new common water service to serve the project. The Portland Water District is in the process of reviewing our project plans, and has provided the infrastructure map that is attached to this section showing the location of existing water main.

Fire Protection Water – An existing hydrant is located approximately 275 feet away from the proposed driveway entrance to the north on Gray Road. We are not proposing to install sprinkler systems in the homes.

Electrical Service – Existing overhead power is available on Windham Center Road to serve the proposed development. Primary electrical service will be extended through the project underground and will connect to pad-mounted transformers. Secondary electrical service will be installed underground from the transformers to the dwellings.

Wastewater Disposal – There is no public sewer available to the property, so on-site wastewater disposal systems will be installed. We have included the design of two wastewater disposal fields in Section 19.

Natural Gas – We anticipate each unit will require on-site bottled gas.

Storm Drainage – The project site generally drains away from Windham Center Road and we are not proposing to make a connection into the public drainage collection system within the public right-of-way. We are proposing modifications to the road shoulder along Windham Center Road to improve drainage and to provide a walkable road shoulder outside of the paved travel way.

250 Windham Center Rd

Windham

Portland Water District
From Sebago Lake to Casco Bay
225 Douglass Street
PO Box 3553
Portland, Maine 04104

Scale 0 37.5 75 150 225 Feet — 1 IN = 150 FT

Legend

- Air Valve
- Blow Off
- By Pass
- Distribution
- Transmission
- Connection
- Attribute Change
- Hydrant Control
- Reducer
- Hydrant
- Meter Pits
- Combined Service
- Domestic Service
- Fire Service
- Shallow Water Main
- Deep Water Main
- Proposed Water Main
- Private Hydrants
- Gravity
- Force
- Manhole
- CSO

Disclaimer: This map is suitable for preliminary study and analysis and is based on PWD record information. PWD is not liable for any damages whatsoever resulting from inaccurate data or from errors made in the location and marking of its infrastructure.

Drawn By: HAF

Infrastructure Map

Scale: As Noted

Date: August 11, 2025

SECTION 11

SOLID WASTE DISPOSAL

Section 11 – Solid Waste Disposal

Tree clearing and stumping will be required. Tree stumps will be hauled off site by the site contractor and disposed in accordance with all applicable regulations, or ground on-site to create erosion control mix. Brush will be burned or chipped.

Existing barn structures will be demolished and removed from the property. Waste generated from the demolition will be placed in temporary on-site dumpsters to be hauled away by a licensed waste hauling company.

During construction of the buildings, temporary on-site dumpsters will be placed on the property and emptied by a licensed waste hauling company.

We intend to utilize the Town's curbside trash collection program for the disposal of household waste generated by the dwelling occupants.

We do not anticipate that the project will create any hazardous solid waste that will require special treatment.

SECTION 12

SITE LIGHTING

Section 12 – Site Lighting

Each dwelling will include the installation of exterior lighting that is mounted to the building to provide illumination of the driveways so that on-street lighting will not be required. Cobra head lights exist on Windham Center Road on the utility poles to the north and south of the proposed driveway entrance.

SECTION 13

SITE LANDSCAPING

Section 13 – Site Landscaping

The individual buildings will be landscaped with ornamental grasses, shrubs and perennials between the front entry porches adjacent to the foundations. Street trees are proposed to be installed on the east sides of the street as indicated on the Site and Landscaping Plan. Landscape screening exists along the northern property line which will be supplemented as needed to provide buffer screening of the adjacent commercial use.

SECTION 14

VEHICLE TRAFFIC

Section 14 – Vehicle Traffic

The Institute of Transportation Engineers(ITE) Trip Generation handbook (11th edition) estimates that single-family attached housing (Land Use Code #215) is expected to generate the following vehicle trips:

Weekday	= 7.20 trips per dwelling unit
AM Peak Hour	= 0.55 trips per dwelling unit
PM Peak Hour	= 0.61 trips per dwelling unit

Accordingly, the proposed 6 dwelling units can be expected to generate a total of 43 trips during a typical weekday, 3 trips in the morning peak hour and 4 trips in the evening peak hour.

The ITE Handbook also provides the following directional distribution rates for a single-family attached dwelling unit:

AM Peak Hour	= 25% enter site and 75% exit site
PM Peak Hour	= 62% enter site and 38% exit site

Based upon the above distribution patterns, 1 trip during the morning peak hour and 2 trips during the evening peak hour will enter the site. Accordingly, 2 trips during the morning peak hour and 2 trips during the evening peak hour will exit the site.

The posted speed limit on Windham Center Road is 25 mph, which requires 200 ft of sight distance. To achieve the required vehicle sight distance looking left at the project driveway entrance, excavation will occur along the roadside to remove the embankment. Sight distance looking right is adequate and extends through the signalized intersection with Gray Road.

SECTION 15

IMPACT TO IMPORTANT OR UNIQUE NATURAL AREAS

Section 15 – Impact to Important or Unique Natural Areas

We have consulted with the Maine Natural Areas Program to confirm that there are no rare or threatened botanical species documented in the project area, and we have consulted with the Maine Department of Inland Fisheries and Wildlife to determine that the project will not have a negative impact on essential wildlife habitat. Enclosed are letters from both agencies.

JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
353 WATER STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041

JUDITH CAMUSO
COMMISSIONER

August 8, 2025

Dustin Roma
DM Roma Consulting Engineers
P.O. Box 1116
Windham, ME 04062

RE: Information Request - 250 Windham Center Road, Subdivision, Windham Project ID 9326-10804

Dear Dustin:

Per your request received on **July 2, 2025**, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information sources for known locations of Endangered, Threatened, and Special Concern (Rare) species; designated Essential and Significant Wildlife Habitats; inland fisheries and aquatic habitats; and other protected natural resource concerns within the vicinity of the ***250 Windham Center Road, Subdivision, Windham*** project, pursuant to MDIFW's authority. It is understood that the project proposes the development of a 400-foot-long paved road and the construction of 3 duplexes as shown in the planset and no significant tree clearing will be required. It is understood a wetland delineation was completed in June and no streams were found. Given this scope, we have tailored our review accordingly. Please note our comments should be considered preliminary.

Our Department has not mapped any Essential Habitats or inland fisheries resources that would be affected by this project.

ENDANGERED, THREATENED, AND SPECIAL CONCERN SPECIES

Bat Species

Of the eight species of bats that occur in Maine, four species are afforded protection under Maines Endangered Species Act (MESA, 12 M.R.S 12801 et. seq.): little brown bat (State Endangered), northern long-eared bat (State Endangered), eastern small-footed bat (State Threatened), and tri-colored bat (State Threatened). The four remaining bat species are designated as Species of Special Concern: big brown bat, red bat, hoary bat, and silver-haired bat. While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is likely that several of these species occur within the project area during spring/fall migration, the summer breeding season, and/or for overwintering. However, our Agency does not anticipate significant impacts to any of the bat species as a result of this project.

SIGNIFICANT WILDLIFE HABITAT

Significant Vernal Pools

At this time MDIFW Significant Wildlife Habitat (SWH) maps indicate no known presence of

Significant Vernal Pools (SVPs) in the project search area. However, a comprehensive statewide inventory for Significant Vernal Pools has not been completed. SVPs are not included on MDIFW maps until project areas have been surveyed using approved methods and the survey results confirmed. Therefore, their absence from resource maps is not necessarily indicative of an absence on the ground. If not already completed, we recommend that surveys for vernal pools be conducted within the project boundary by qualified wetland scientists prior to final project design to determine whether there are Significant Vernal Pools present in the area. These surveys should extend up to 250 feet beyond the anticipated project footprint because of potential performance standard requirements for off-site Significant Vernal Pools, assuming such pools are located on land owned or controlled by the applicant. Once surveys are completed, survey forms should be submitted to our Agency for review well before the submission of any necessary permits. Our Department will need to review and verify any vernal pool data prior to final determination of significance.

This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance, we recommend additional consultation with the municipality, and other state resource and regulatory agencies including the Maine Natural Areas Program and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance. For information on federally listed species, contact the U.S. Fish and Wildlife Service's Maine Field Office (207-469-7300, mainefieldoffice@fws.gov).

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,

Laura Hatmaker
Natural Resource Biologist

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

July 15, 2025

JP Connolly
DM Roma
PO Box 1116
Windham, ME 04062

Via email: jp@dmroma.com

Re: Rare and exemplary botanical features in proximity to: #24035, Residential Development, 250 Windham Center Road, Windham, Maine

Dear JP Connolly:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received July 8, 2025 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Windham, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

The landform, topography, and land use at the project site indicate that the site does not currently have suitable habitat for Small Whorled Pogonia. MNAP does not recommend a survey for this species at this location and finds that the project is Not Likely to Adversely Affect this species.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
90 BLOSSOM LANE, DEERING BUILDING

PHONE: (207) 287-8044
WWW.MAINE.GOV/DACF/MNAP

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine Natural Areas Program has instituted a fee structure of $75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for $150.00 for two hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Lisa St. Hilaire

Lisa St. Hilaire | Information Manager | Maine Natural Areas Program
207-287-8044 | lisa.st.hilaire@maine.gov

Rare and Exemplary Botanical Features within 4 miles of
Project: #24035, 250 Windham Center Road Residential Subdivision, Windham, ME

Common Name	State	State	Global	Date Last	Occurrence	Habitat
Broad Beech Fern						
	SC	S2	G5	1872-08	15	Hardwood to mixed forest (forest, upland)
Columbian Watermeal						
	SC	S2	G5	2016-09-12	11	Open water (non-forested, wetland)
Ebony Spleenwort						
	SC	S2	G5	1910-06-06	10	Rocky summits and outcrops (non-forested, upland),Hardwood to mixed forest (forest, upland)
Engelmann's Spikerush						
	PE	SH	G4G5	1916-08-31	2	Open wetland, not coastal nor rivershore (non-forested, wetland)
Fern-leaved False Foxglove						
	SC	S3	G5	1902-09-02	13	Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
Great Blue Lobelia						
	PE	SX	G5	1905-09	3	Forested wetland,Non-tidal rivershore (non-forested, seasonally wet)
Horned Pondweed						
	SC	S2	G5	1913-09-13	9	Tidal wetland (non-forested, wetland)

Marsh Milkwort					
PE	SH	G5T4	1903-08-18	1	Dry barrens (partly forested, upland),Open wetland, not coastal nor rivershore (non-forested, wetland)
Missouri Rockcress					
T	S1	G5	1905-06-11	5	Rocky summits and outcrops (non-forested, upland),Hardwood to mixed forest (forest, upland)
Ra lesnake Hawkweed					
E	S1	G5T4Q	1909-07	1	Dry barrens (partly forested, upland)
Scarlet Oak					
E	S1	G5	1916-08	2	Hardwood to mixed forest (forest, upland)
Small Whorled Pogonia					
E	S2	G2G3	2018-06-15	18	Hardwood to mixed forest (forest, upland)
Spicebush					
SC	S3	G5	2006-06-11	11	Forested wetland
Spo ed Pondweed					
T	S1	G5	2016-06-22	3	Open water (non-forested, wetland)
Vasey's Pondweed					
SC	S2	G4	1901-08-04	7	Open water (non-forested, wetland)

Water-plantain Spearwort						
	PE	SH	G4	1903-07-29	2	Open water (non-forested, wetland)

Date Exported: 7/11/2025

Conservation Status Ranks

State and Global Ranks: This ranking system facilitates a quick assessment of a species' or habitat type's rarity and is the primary tool used to develop conservation, protection, and restoration priorities for individual species and natural habitat types. Each species or habitat is assigned both a state (S) and global (G) rank on a scale of critically imperiled (1) to secure (5). Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; something that is state imperiled may be globally secure.

The information supporting these ranks is developed and maintained by the Maine Natural Areas Program (state ranks) and NatureServe (global ranks).

Rank	Definition
S1 **G1**	**Critically Imperiled** – At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
S2 **G2**	**Imperiled** – At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
S3 **G3**	**Vulnerable** – At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
S4 **G4**	**Apparently Secure** – At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
S5 **G5**	**Secure** – At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
SX **GX**	**Presumed Extinct** – Not located despite intensive searches and virtually no likelihood of rediscovery.
SH **GH**	**Possibly Extinct** – Known from only historical occurrences but still some hope of rediscovery.
S#S# **G#G#**	**Range Rank** – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
SU **GU**	**Unrankable** – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
GNR **SNR**	**Unranked** – Global or subnational conservation status not yet assessed.
SNA **GNA**	**Not Applicable** – A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., non-native species or ecosystems.
Qualifier	**Definition**
S#? **G#?**	**Inexact Numeric Rank** – Denotes inexact numeric rank.
Q	**Questionable taxonomy that may reduce conservation priority** – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable. The "Q" modifier is only used at a global level.
T#	**Infraspecific Taxon (trinomial)** – The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank.

State Status: Endangered and Threatened are legal status designations authorized by statute. Please refer to MRSA Title 12, §544 and §544-B.

Status	Definition
E	**Endangered** – Any native plant species in danger of extinction throughout all or a significant portion of its range within the State or Federally listed as Endangered.
T	**Threatened** – Any native plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the State or Federally listed as Threatened.
SC	**Special Concern** – A native plant species that is rare in the State, but not rare enough to be considered Threatened or Endangered.
PE	**Potentially Extirpated** – A native plant species that has not been documented in the State in over 20 years, or loss of the last known occurrence.

Element Occurrence (EO) Ranks: Quality assessments that designate viability of a population or integrity of habitat. These ranks are based on size, condition, and landscape context. Range ranks (e.g., AB, BC) and uncertainty ranks (e.g., B?) are allowed. The Maine Natural Areas Program tracks all occurrences of rare plants and natural communities/ecosystems (S1-S3) as well as exemplary common natural community types (S4-S5 with EO ranks A/B).

Rank	Definition
A	**Excellent** – Excellent estimated viability/ecological integrity.
B	**Good** – Good estimated viability/ecological integrity.
C	**Fair** – Fair estimated viability/ecological integrity.
D	**Poor** – Poor estimated viability/ecological integrity.
E	**Extant** – Verified extant, but viability/ecological integrity not assessed.
H	**Historical** – Lack of field information within past 20 years verifying continued existence of the occurrence, but not enough to document extirpation.
X	**Extirpated** – Documented loss of population/destruction of habitat.
U	**Unrankable** – Occurrence unable to be ranked due to lack of sufficient information (e.g., possible mistaken identification).
NR	**Not Ranked** – An occurrence rank has not been assigned.

Visit the Maine Natural Areas Program website for more information
http://www.maine.gov/dacf/mnap

maine DEPARTMENT OF Agriculture Conservation & Forestry
NATURAL AREAS

SECTION 16

STORMWATER MANAGEMENT

DM ROMA
CONSULTING ENGINEERS

STORMWATER MANAGEMENT REPORT

250 WINDHAM CENTER ROAD RESIDENTIAL CONDOMINIUMS
WINDHAM, MAINE

A. Narrative

Casco Bay Holdings, LLC, the applicant, is proposing to develop a 3.26±-acre parcel located at 250 Windham Center Road in Windham, Maine. The property consists of the 3.26±-acre property identified as Lot 52-A on Tax Map 12.

The applicant is proposing a residential development with three duplex residential buildings for a total of six (6) dwelling units. The development will also include the construction of an access driveway designed to meet the Town's Major Private Road Standard with a total length of approximately 435 linear feet. The units will be served by public water, shared subsurface wastewater disposal fields and underground electric, telephone and cable.

B. Existing Conditions

The project site consists of a single-family home, and detached barn and garage (three existing structures) with an existing paved driveway with access from Falmouth Road. In addition to the existing buildings and existing paved driveway, the site consists of a significant lawn area, and undeveloped meadow and natural woodland. The site does contain two areas delineated as wetlands, with one area associated with an existing pond located at the easterly portion of the site.

The project site consists of varying slopes; the land in the northwesterly portion of the site associated with the existing home, barn, and garage is moderately sloped (3%-8%); areas along the southwesterly portion f the site extending east to the wetlands consists of steeper slopes (8%-20%) and slopes as steep as 3H:1V along the northerly portion of the lot; the northeasterly portion of the site consists of relatively flat slopes (0%-5%) bordered by steeper slopes ranging from 8% to 33% .

Stormwater generally flows overland to the south, and ultimately is intercepted and conveyed by the Black Brook, located on the abutting property to the south ('N/F Presumpscot Regional Land Trust, Inc.") which is a tributary of the Presumpscot River. The project evaluated stormwater associated with discharge from the project site at three locations. The westerly portion of the property drains to Falmouth Road. To the east of the sub-basin watershed associated with Falmouth Road, the site drains either to the south and onto the abutting property, or to the east and into the existing pond which then discharges on to the abutting property to the south. Ultimately all three study points evaluated are captured and conveyed by the Black Brook, which is a tributary of the Presumpscot River.

The onsite soils, as identified on the Medium Intensity Soil Maps for Cumberland County, Maine published by the Natural Resources Conservation Service, consist of Lamoine silt loam, Paxton fine sandy loam, Hartland very fine sandy loam, and Scantic silt loam. The soils within the proposed development are in the hydrologic soils group "B", "C", "C/D" and "D". The soils map has been included as Attachment 1 of this report, and the soils boundaries are identified on the Watershed Maps.

C. Alterations to Land Cover

The existing project site consists of 30,315 square feet of impervious area. The proposed plan intends to reduce the pavement associated with the existing single-family home, and demolish and remove the existing barn and garage. As a result, the existing impervious area tributary to Falmouth Road 26,194 square feet will be reduced by 406 square feet to a total of 25,788 square feet. Based on this reduction this watershed, no new impervious areas are created and therefore no stormwater treatment for the area tributary to Falmouth Road is proposed.

Evaluating the remaining watersheds, based on the proposed building layout, access drive, and driveways the project will generate approximately 18,073 square feet (0.41± acres) of new impervious surfaces. The project will also generate approximately 4,932± square feet (0.11± acres) of lawn, landscaping, and best management practices, resulting in a total project developed area of 23,006± square feet (0.53± acres). The project includes an additional 14,457 square feet of disturbance that will be allowed to revert to natural meadow.

Since the project will result in the construction of less than one (1) acre of impervious surface but will disturb more than one acre, the project will be required to obtain a Stormwater Permit By Rule from the MDEP. As part of the requirements of the Stormwater Permit, the project will need to meet the Basic Standards of the MDEP Chapter 500 Stormwater Management regulations. The development is also subject to review by the Town of Windham Planning Board. The current land use ordinance requires that new developments meet the Basic, General and Flooding Standards of the MDEP Chapter 500 Stormwater Management regulations.

D. Methodology and Modeling Assumptions

The proposed stormwater management system has been designed utilizing Best Management Practices to maintain existing drainage patterns while providing stormwater quality improvement measures. The goal of the storm drainage system design is to remove potential stormwater pollutants from runoff generated by the development while providing attenuation of the peak rates of runoff leaving the site. The method utilized to predict the surface water runoff rates in this analysis is a computer program entitled HydroCAD, which is based on the same methods that were originally developed by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service, and utilized in the TR-20 modeling program. Peak rates of runoff are forecasted based upon land use, hydrologic soil conditions, vegetative cover, contributing watershed area, time of concentration, rainfall data, storage volumes of detention basins and the hydraulic capacity of structures. The computer model predicts the amount of runoff as a function of time, with the ability to include the attenuation effect due to dams, lakes, large wetlands, floodplains, and constructed stormwater management basins. The input data for rainfalls with statistical recurrence frequencies of 2-, 10- and 25 years was obtained from Appendix H of the MDEP, Chapter 500 Stormwater Management, last revised in 2015. The National Weather Service developed four synthetic storm types to simulate rainfall patterns around the country. For analysis in Cumberland County, Maine, the type III rainfall pattern with a 24-hour duration is appropriate.

E. Basic Standards

The project is required by the MDEP to provide permanent and temporary Erosion Control Best Management Practices. These methods are outlined in detail in the plan set.

F. General Standard

The proposed project is required to meet the General Standard outlined in the MDEP Chapter 500 to provide water quality treatment for portions of the site development. Based on the calculation provided in Section 4C(2)(a) related to the amount of the property being developed and its corresponding treatment standards in Table 1 in Chapter 500, the project will require the treatment of more than 90% of the site's impervious area and more than 75% of the total developed area. This calculation is included as Attachment 2 of this report.

The General Standard will be met by incorporating the construction of one (1) underdrained filter basin as part of the project's stormwater infrastructure. In addition, roofline drip edges will be installed around each of the proposed buildings to provide the required treatment.

As a result of the proposed stormwater infrastructure, treatment is provided for over 100% of the project's impervious surface and over 94% of the site's developed area. Calculations are enclosed as Attachment 2 in this report.

Included as Attachment 3 of this report are the sizing calculations for the proposed underdrained filter basins. These calculations include:

- Storage Volume and Basin Floor surface area meeting *Chapter 7.1 Grassed Underdrained Soil Filter BMP* sizing criteria included in Volume III. BMP Technical Design Manual prepared by the MDEP.
- Spillway sizing calculations demonstrating one foot of freeboard to the top of berm during the 25-year storm event assuming failure of the other discharge devices.
- Hydrograph tables demonstrating the outlet controls to release the stormwater from the basin between 24 and 48 hours.
- Sizing calculations for the level spreaders located at the outfall of the discharge pipe from the basins meeting the sizing standards identified in *Section G(4) Level Spreaders* in Maine Erosion and Sediment Control Best Management Practices Manual for Designers and Engineers prepared by the MDEP.

The locations and construction detail of the proposed roofline dripedges have been included one the construction details sheets and the sizing calculations to meet *Chapter 7.5 Roof Dripline Filters* sizing criteria included in Volume III. BMP Technical Design Manual prepared by the MDEP have been included as Attachment 4 of this report.

G. Flooding Standard

The project is required by the Town of Windham to meet the MDEP Chapter 500 Flooding Standard indicating the project must detain, retain, or result in the infiltration of stormwater from the 24-hour storms of the 2-year, 10-year and 25-year frequencies such that the peak flows of stormwater generated by the project site do not exceed the peak flows of stormwater prior to undertaking the project. To demonstrate compliance with the Flooding Standard, three (3) study points were analyzed.

The study points utilized in the stormwater analysis are located where runoff generated by the site is collected and discharged across the property limits. Study Point SP-1 evaluates the westerly portion of the project site that drains to Falmouth Road. Study Point SP-2 evaluates the northeasterly portion of the project site that discharges into an existing pond located on the property that outlets at the southeasterly

property corner before discharging on to the abutting property to the southeast, which then drains overland Study Point SP-3 evaluates the southerly portion of the site that discharges on to the All study points ultimately discharge to the Black Brook.

The results of the stormwater model incorporating the stormwater best management practices are summarized below in Table 1:

Table 1 – Peak Rates of Stormwater Runoff

Study Point	2-Year (cfs)		10-Year (cfs)		25-Year (cfs)	
	Pre	Post	Pre	Post	Pre	Post
SP-1	2.07	2.05	3.41	3.36	4.47	4.41
SP-2	0.59	0.14	1.62	0.79	2.57	2.53
SP-3	1.09	1.08	2.35	2.34	3.45	3.45

As illustrated in the table above, the proposed project's design, including the integration of the proposed BMPs, maintains or reduces the peak rates of runoff at all Study Points in all the modeled storm events.

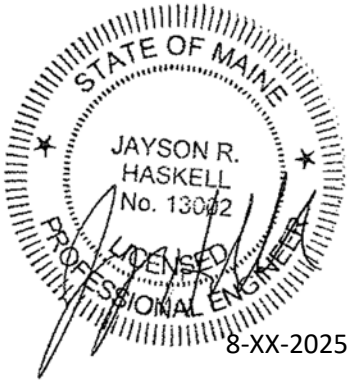
The watershed maps showing pre-development and post-development drainage patterns are included in the plan set and the computations performed with the HydroCAD software program are included as Attachment 5 of this report.

H. Maintenance of common facilities or property

The applicant will be responsible for the maintenance of the stormwater facilities until a condominium association is created. The responsibility will then be conveyed to the association. An Inspection, Maintenance and Housekeeping Plan for the project has been created and has been included as Attachment 6 of this report.

Prepared by:

DM ROMA CONSULTING ENGINEERS



Jayson R. Haskell P.E.
Southern Maine Regional Manager

8-XX-2025

ATTACHMENT 1

MEDIUM INTENSITY SOIL MAP

Map Scale: 1:2,250 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

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 Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BuB	Lamoine silt loam, 3 to 8 percent slopes	C/D	1.3	14.8%
HfC2	Hartland very fine sandy loam, 8 to 15 percent slopes, eroded	B	1.7	20.6%
PbB	Paxton fine sandy loam, 3 to 8 percent slopes	C	3.2	38.1%
Sn	Scantic silt loam, 0 to 3 percent slopes	D	2.2	26.4%
Totals for Area of Interest			**8.5**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

ATTACHMENT 2

GENERAL STANDARDS CALCULATIONS

Stormwater Treatment Requirements

Pecentage of Developed Area to Land Available for Development

Total Land Area=	142,370	sf
Deductions		
Area Slopes Steeper than 25%	-	sf
Area Protected Natural Resources	41,530	sf
Total Available Land for Development	**100,840**	**sf**
Total Developed Area	**23,006**	**sf**

% of Developed Area to Land Available for Development=	**23%**

From Table 1 Stormwater Treatment Based on Percentage of Parcel Developed of Chapter 500 Stormwater Management Rules for <60% of site developed

Percentage of Total Impervious Area Requiring Treatment=	**90%**
Percentage of Total Developed Area Requiring Treatment=	**75%**

OVERALL PROJECT IMPERVIOUS AREA CALCULATIONS:

	existing impervious	impervious as prop.	net new impervious	req. treatment
WS-1**	26194.36	25788.14	-406.22	-365.60
WS-2**	101.62	13505.46	13403.84	12063.46
WS-3**	4019.05	7368.64	3349.59	3014.64
TOTALS	30315.02	46662.24	16347.22	14712.49

DM ROMA
CONSULTING ENGINEERS

250 Windham Center Road Residential Condominium
Calculated by: JPC
Printed 8/26/2025
Job #24035

Stormwater Treatment Table

	Total Watershed Area (SF)	New Paved/Gravel Area (SF)	New Building Area (SF)	New Landscaped Area (SF)	Existing/Offsite Impervious Area (SF)*	Existing/Offsite Landscaping Area (SF)*	Existing Undeveloped Area (SF)	Treatment Provided	New Impervious Area Treated (SF)	New Landscaped Area Treated (SF)	Treatment Device
WS-1**	37,765	3,661	0	1,935	22,127	10,041	0	no	0	0	none
WATERSHED WS-1 IN BOTH PRE- & POST- DEVELOPED CONDITION IS ENTIRELY DEVELOPED; PROPOSED DEVELOPMENT RESULTS IN 224.4 SF IMPERVIOUS AREA REDUCTION											
PORTION OF SITE WITH NEW DEVELOPMENT:											
WS-2**	35,462	11,953	0	3,769	1,552	14,241	3,947	yes	11,953	3,769	FB-1
WS-21**	4,725	0	0	592	0	3,117	1,016	no	0	0	none
WS-3**	49,174	0	6,120	571	1,249	6,085	35,149	dripedge	6,120	0	dripedge only
Total	**127,126**	**11,953**	**6,120**	**4,932**					**18,073**	**3,769**	

* The project is not taking credit for the Existing / Offsite impervious and landscaped areas, but are included in the BMP sizing calculations for each treatment device.

** All proposed buildings shall be installed with a roofline drip edge to provide treatment for the rooftop impervious surface. The buildings' impervious area is included in the watershed and overall treatment calculations below, but not included in the BMP sizing calculations for each treatment device.

Impervious Area =	18,073	sf
Existing Impervious to be removed	1,726	
Net new impervious area	16,347	
New Impervious Area Requiring Treatment (90%)	14,712	sf
Provided Impervious Treatment=	18,073	sf
	110.56%	Impervious Area Treated
Developed Area =	23,006	sf
Developed Area Requiring Treatment (75%)=	17,254	sf
Developed Area Treated=	21,843	sf
	94.95%	Developed Area Treated

ATTACHMENT 3

UNDERDRAINED FILTER BASIN SIZING CALCULATIONS

Underdrained Filter Basin Sizing Calculations

Filter Basin 1

Tributary Impervious Area=	13,505	sf	(WS-2 Impervious Area)
Tributary Landscaped Area=	18,010	sf	(WS-2 Landscaped Area)

Water Quality Volume (WQV) Calculation

WQV (Required) = 1"xImpervious Area + 0.4"xLandscaped Area

WQV (Required) = 1,726 cf

Stage Storage Volume

Elevation	Area (sf)	Storage (cf)
248	1,051	0
249.5	2,599	2,359

Outlet Elevation =	249.50	
Storage Volume Provided=	2,359	cf > Required

Filter Bottom Calculation

Filter Area (Required) = 5%xImpervious Area + 2%xLandscaped Area

Filter Area Required = 1,035 sf

Filter Area Provided = 1,051 sf > Required

Level Spreader Sizing Calculations

Length of Level Spreader = Stormwater discharge flow during the 10-year storm event x 1/4" per foot

10-year discharge flow =	0.03	cfs
Required Length of Level Spreader =	**0.12**	**ft**
Provided Length of Level Spreader =	**0.15**	**ft > Required**

FILTER BASIN FB-1 - SPILLWAY RUN

24035-Post

Type III 24-hr 25-Year Rainfall=5.80"

Prepared by DM ROMA CONSULTING ENGINEERS

Printed 8/25/2025

Summary for Pond FB-1:

Inflow Area = 35,458 sf, 36.75% Impervious, Inflow Depth = 3.50" for 25-Year event
Inflow = 3.27 cfs @ 12.09 hrs, Volume= 10,347 cf
Outflow = 2.72 cfs @ 12.17 hrs, Volume= 7,301 cf, Atten= 17%, Lag= 4.5 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Secondary = 2.72 cfs @ 12.17 hrs, Volume= 7,301 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 250.22' @ 12.17 hrs Surf.Area= 2,176 sf Storage= 3,508 cf

PEAK WS ELEV. = 250.22
TOP OF BERM = 251.5
FREEBOARD =
251.5-250.22 = 1.28'

Plug-Flow detention time= 155.3 min calculated for 7,296 cf (71% of inflow)
Center-of-Mass det. time= 61.5 min (879.6 - 818.1)

Volume	Invert	Avail.Storage	Storage Description
#1	248.00'	6,956 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
248.00	1,051	154.4	0	0	1,051
250.00	2,050	192.1	3,046	3,046	2,147
251.00	2,655	210.9	2,346	5,392	2,782
251.50	3,626	233.3	1,564	6,956	3,582

Device	Routing	Invert	Outlet Devices
#1	Primary	244.00'	**1.0" Vert. 1" DRILL HOLE IN 4" END CAP X 0.00** C= 0.600
#2	Device 1	245.73'	**4.0" Round Culvert X 0.00**
			L= 23.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 245.73' / 244.00' S= 0.0752 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf
#3	Device 2	245.83'	**4.0" Vert. 4" Underdrain** C= 0.600
#4	Device 3	248.00'	**2.460 in/hr Exfiltration over Surface area**
			Conductivity to Groundwater Elevation = 240.50'
#5	Device 2	249.50'	**12 inch ADS Dome Grate**
			Head (feet) 0.00 0.14 0.25 0.40 0.55 0.80
			Disch. (cfs) 0.000 0.500 1.230 1.450 1.750 2.200
#6	Secondary	250.00'	**10.0' long x 16.0' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=248.00' TW=0.00' (Dynamic Tailwater)
- **1=1" DRILL HOLE IN 4" END CAP** (Controls 0.00 cfs)
- **2=Culvert** (Controls 0.00 cfs)
- **3=4" Underdrain** (Passes 0.00 cfs of 0.59 cfs potential flow)
- **4=Exfiltration** (Passes 0.00 cfs of 0.06 cfs potential flow)
- **5=12 inch ADS Dome Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=2.53 cfs @ 12.17 hrs HW=250.21' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Weir Controls 2.53 cfs @ 1.22 fps)

FILTER BASIN FB-1 - DRAWDOWN

24035-Post

Type III 24-hr FB-1 WQ Event Rainfall=2.90"

Prepared by DM ROMA CONSULTING ENGINEERS

Printed 8/25/2025

Hydrograph for Pond FB-1:

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	248.00	0.00	0.00	**0.00**
2.50	0.00	0	248.00	0.00	0.00	0.00
5.00	0.00	0	248.00	0.00	0.00	0.00
7.50	0.00	0	248.00	0.00	0.00	0.00
10.00	**0.00**	0	248.00	0.00	0.00	0.00
12.50	**0.28**	1,353	249.05	0.03	0.03	0.00
15.00	0.06	1,970	249.43	0.03	0.03	0.00
17.50	0.03	**2,089**	**249.50**	**0.03**	**0.03**	0.00
20.00	0.02	**2,047**	**249.47**	**0.03**	**0.03**	0.00
22.50	0.02	1,956	249.42	0.03	0.03	0.00
25.00	0.00	1,780	249.32	0.03	0.03	0.00
27.50	0.00	1,515	249.16	0.03	0.03	0.00
30.00	0.00	1,255	248.99	0.03	0.03	0.00
32.50	0.00	1,000	248.81	0.03	0.03	0.00
35.00	0.00	749	248.63	0.03	0.03	0.00
37.50	0.00	503	248.44	0.03	0.03	0.00
40.00	0.00	262	248.24	0.03	0.03	0.00
42.50	0.00	28	248.03	0.03	0.03	0.00
45.00	0.00	0	248.00	0.00	0.00	0.00
47.50	0.00	0	248.00	0.00	0.00	0.00
50.00	0.00	0	248.00	0.00	0.00	0.00
52.50	0.00	0	248.00	0.00	0.00	0.00
55.00	0.00	0	248.00	0.00	0.00	0.00
57.50	0.00	0	248.00	0.00	0.00	0.00
60.00	0.00	0	248.00	0.00	0.00	0.00
62.50	0.00	0	248.00	0.00	0.00	0.00
65.00	0.00	0	248.00	0.00	0.00	0.00
67.50	0.00	0	248.00	0.00	0.00	0.00
70.00	0.00	0	248.00	0.00	0.00	0.00

POND AT CPV AT 17.5 HRS
EMPTY AT 45 HRS
DRAWDOWN TIME = 45-17.5 = 27.5 HRS

ATTACHMENT 4

ROOFLINE DRIPEDGE SIZING CALCULATIONS

Drip Edge Sizing Calculations

WQV (Required) = 1.0"xImpervious Area + 0.4"xLandscaped Area

Void Ratio of Reservoir Layer 40%

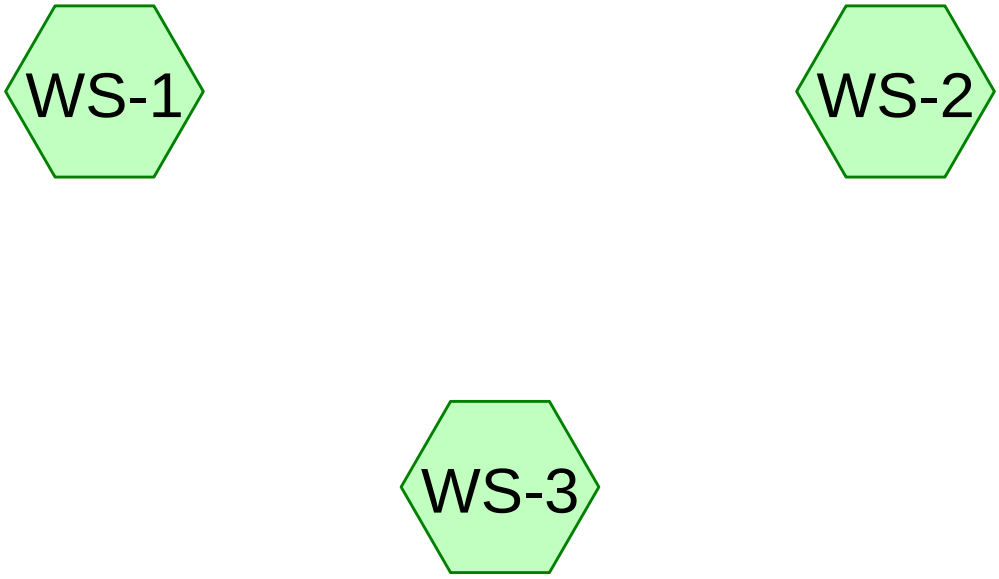
Void Ratio of Filter Layer 30%

BUILDING DRIP EDGE LOCATION

Roof Watershed	Tributary Roof Area (sf)	WQV (Required)	Dripedge Surface Area (sf)	Reservoir Layer Depth (ft)	Filter Layer Depth (ft)	WQV (Provided)
DUPLEX AREA 1 (front)	540	45.00	47.25	2.00	0.50	45
DUPLEX AREA 2 (rear)	420	35.00	40.00	2.00	0.50	38

ATTACHMENT 5

STORMWATER MODEL OUTPUT



Subcat Reach Pond Link

Routing Diagram for 24035-PRE
Prepared by DM ROMA CONSULTING ENGINEERS, Printed 8/25/2025

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment WS-1: Runoff Area=38,287 sf 68.41% Impervious Runoff Depth=2.08"
Flow Length=387' Tc=6.0 min CN=90 Runoff=2.07 cfs 6,624 cf

Subcatchment WS-2: Runoff Area=46,823 sf 2.30% Impervious Runoff Depth=0.68"
Flow Length=275' Tc=11.0 min CN=68 Runoff=0.59 cfs 2,649 cf

Subcatchment WS-3: Runoff Area=42,015 sf 7.24% Impervious Runoff Depth=1.03"
Flow Length=259' Tc=6.0 min CN=75 Runoff=1.09 cfs 3,595 cf

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment WS-1: Runoff Area=38,287 sf 68.41% Impervious Runoff Depth=3.49"
Flow Length=387' Tc=6.0 min CN=90 Runoff=3.41 cfs 11,140 cf

Subcatchment WS-2: Runoff Area=46,823 sf 2.30% Impervious Runoff Depth=1.60"
Flow Length=275' Tc=11.0 min CN=68 Runoff=1.62 cfs 6,245 cf

Subcatchment WS-3: Runoff Area=42,015 sf 7.24% Impervious Runoff Depth=2.13"
Flow Length=259' Tc=6.0 min CN=75 Runoff=2.35 cfs 7,454 cf

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment WS-1: Runoff Area=38,287 sf 68.41% Impervious Runoff Depth=4.65"
Flow Length=387' Tc=6.0 min CN=90 Runoff=4.47 cfs 14,840 cf

Subcatchment WS-2: Runoff Area=46,823 sf 2.30% Impervious Runoff Depth=2.47"
Flow Length=275' Tc=11.0 min CN=68 Runoff=2.57 cfs 9,631 cf

Subcatchment WS-3: Runoff Area=42,015 sf 7.24% Impervious Runoff Depth=3.11"
Flow Length=259' Tc=6.0 min CN=75 Runoff=3.45 cfs 10,897 cf

Summary for Subcatchment WS-1:

Runoff = 4.47 cfs @ 12.09 hrs, Volume= 14,840 cf, Depth= 4.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	5,603	98	Existing roofs
*	20,591	98	Pavement
	0	96	Gravel surface
	12,093	74	>75% Grass cover, Good, HSG C
	38,287	90	Weighted Average
	12,093		31.59% Pervious Area
	26,194		68.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	71	0.0196	1.25		**Sheet Flow, Seg A to B** Smooth surfaces n= 0.011 P2= 3.10"
0.7	106	0.0244	2.51		**Shallow Concentrated Flow, Seg B to C** Unpaved Kv= 16.1 fps
0.5	210	0.0502	7.53	10.80	**Trap/Vee/Rect Channel Flow, Seg C to D** Bot.W=0.00' D=0.32' Z= 20.0 & 8.0 '/' Top.W=8.96' n= 0.013 Asphalt, smooth
2.1	387	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment WS-2:

Runoff = 2.57 cfs @ 12.16 hrs, Volume= 9,631 cf, Depth= 2.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	304	98	Existing roofs
*	775	98	Pavement
	0	96	Gravel surface
	14,721	61	>75% Grass cover, Good, HSG B
	14,445	74	>75% Grass cover, Good, HSG C
	3,852	80	>75% Grass cover, Good, HSG D
	8,754	58	Woods/grass comb., Good, HSG B
	2,920	72	Woods/grass comb., Good, HSG C
	1,052	79	Woods/grass comb., Good, HSG D
	46,823	68	Weighted Average
	45,744		97.70% Pervious Area
	1,079		2.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	19	0.0675	0.13		**Sheet Flow, Seg A to B** Grass: Dense n= 0.240 P2= 3.10"
7.9	71	0.1298	0.15		**Sheet Flow, Seg B to C** Woods: Light underbrush n= 0.400 P2= 3.10"
0.7	185	0.0729	4.35		**Shallow Concentrated Flow, Seg C to D** Unpaved Kv= 16.1 fps
11.0	275	Total			

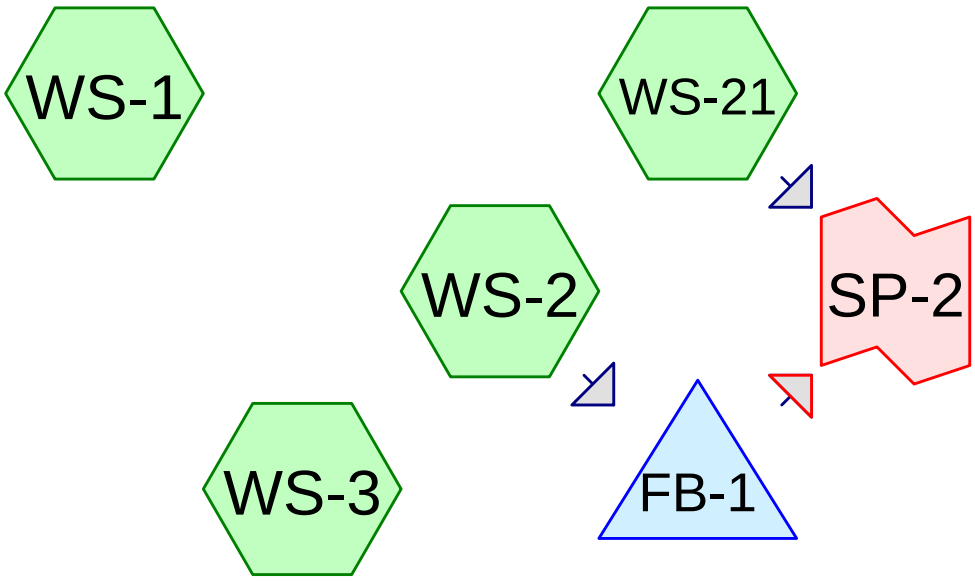
Summary for Subcatchment WS-3:

Runoff = 3.45 cfs @ 12.09 hrs, Volume= 10,897 cf, Depth= 3.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	2,457	98	Existing roofs
*	584	98	Pavement
	0	96	Gravel surface
	701	61	>75% Grass cover, Good, HSG B
	37,179	74	>75% Grass cover, Good, HSG C
	0	80	>75% Grass cover, Good, HSG D
	0	58	Woods/grass comb., Good, HSG B
	1,094	72	Woods/grass comb., Good, HSG C
	0	79	Woods/grass comb., Good, HSG D
	42,015	75	Weighted Average
	38,974		92.76% Pervious Area
	3,041		7.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	24	0.0213	1.04		**Sheet Flow, Seg A to B** Smooth surfaces n= 0.011 P2= 3.10"
1.1	115	0.0323	1.69		**Sheet Flow, Seg A to B** Smooth surfaces n= 0.011 P2= 3.10"
0.3	120	0.1505	6.25		**Shallow Concentrated Flow, Seg C to D** Unpaved Kv= 16.1 fps
1.8	259	Total, Increased to minimum Tc = 6.0 min			



Subcat Reach Pond Link

Routing Diagram for 24035-Post
Prepared by DM ROMA CONSULTING ENGINEERS, Printed 8/25/2025

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment WS-1: Runoff Area=37,765 sf 67.64% Impervious Runoff Depth=2.08"
Flow Length=387' Tc=6.0 min CN=90 Runoff=2.05 cfs 6,534 cf

Subcatchment WS-2: Runoff Area=35,458 sf 36.75% Impervious Runoff Depth=1.26"
Flow Length=342' Tc=6.0 min CN=79 Runoff=1.16 cfs 3,729 cf

Subcatchment WS-21: Runoff Area=4,725 sf 0.00% Impervious Runoff Depth=1.03"
Flow Length=118' Tc=10.0 min CN=75 Runoff=0.11 cfs 404 cf

Subcatchment WS-3: Runoff Area=49,174 sf 14.99% Impervious Runoff Depth=1.03"
Flow Length=185' Tc=11.1 min CN=75 Runoff=1.08 cfs 4,208 cf

Pond FB-1: Peak Elev=249.69' Storage=2,443 cf Inflow=1.16 cfs 3,729 cf
Primary=0.03 cfs 3,731 cf Secondary=0.00 cfs 0 cf Outflow=0.03 cfs 3,731 cf

Link SP-2: Inflow=0.14 cfs 4,135 cf
Primary=0.14 cfs 4,135 cf

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment WS-1: Runoff Area=37,765 sf 67.64% Impervious Runoff Depth=3.49"
Flow Length=387' Tc=6.0 min CN=90 Runoff=3.36 cfs 10,988 cf

Subcatchment WS-2: Runoff Area=35,458 sf 36.75% Impervious Runoff Depth=2.46"
Flow Length=342' Tc=6.0 min CN=79 Runoff=2.30 cfs 7,271 cf

Subcatchment WS-21: Runoff Area=4,725 sf 0.00% Impervious Runoff Depth=2.13"
Flow Length=118' Tc=10.0 min CN=75 Runoff=0.23 cfs 838 cf

Subcatchment WS-3: Runoff Area=49,174 sf 14.99% Impervious Runoff Depth=2.13"
Flow Length=185' Tc=11.1 min CN=75 Runoff=2.34 cfs 8,725 cf

Pond FB-1: Peak Elev=250.08' Storage=3,221 cf Inflow=2.30 cfs 7,271 cf
Primary=0.03 cfs 4,689 cf Secondary=0.66 cfs 2,582 cf Outflow=0.69 cfs 7,272 cf

Link SP-2: Inflow=0.79 cfs 8,110 cf
Primary=0.79 cfs 8,110 cf

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment WS-1: Runoff Area=37,765 sf 67.64% Impervious Runoff Depth=4.65"
Flow Length=387' Tc=6.0 min CN=90 Runoff=4.41 cfs 14,638 cf

Subcatchment WS-2: Runoff Area=35,458 sf 36.75% Impervious Runoff Depth=3.50"
Flow Length=342' Tc=6.0 min CN=79 Runoff=3.27 cfs 10,347 cf

Subcatchment WS-21: Runoff Area=4,725 sf 0.00% Impervious Runoff Depth=3.11"
Flow Length=118' Tc=10.0 min CN=75 Runoff=0.34 cfs 1,225 cf

Subcatchment WS-3: Runoff Area=49,174 sf 14.99% Impervious Runoff Depth=3.11"
Flow Length=185' Tc=11.1 min CN=75 Runoff=3.45 cfs 12,754 cf

Pond FB-1: Peak Elev=250.19' Storage=3,442 cf Inflow=3.27 cfs 10,347 cf
Primary=0.03 cfs 4,795 cf Secondary=2.19 cfs 5,552 cf Outflow=2.22 cfs 10,347 cf

Link SP-2: Inflow=2.53 cfs 11,573 cf
Primary=2.53 cfs 11,573 cf

Summary for Subcatchment WS-1:

Runoff = 4.41 cfs @ 12.09 hrs, Volume= 14,638 cf, Depth= 4.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	3,752	98	Existing roofs
*	21,793	98	Pavement
	243	96	Gravel surface
	11,977	74	>75% Grass cover, Good, HSG C
	37,765	90	Weighted Average
	12,220		32.36% Pervious Area
	25,545		67.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	71	0.0196	1.25		**Sheet Flow, Seg A to B** Smooth surfaces n= 0.011 P2= 3.10"
0.7	106	0.0244	2.51		**Shallow Concentrated Flow, Seg B to C** Unpaved Kv= 16.1 fps
0.5	210	0.0502	7.53	10.80	**Trap/Vee/Rect Channel Flow, Seg C to D** Bot.W=0.00' D=0.32' Z= 20.0 & 8.0 '/' Top.W=8.96' n= 0.013 Asphalt, smooth
2.1	387	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment WS-2:

Runoff = 3.27 cfs @ 12.09 hrs, Volume= 10,347 cf, Depth= 3.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	0	98	Roofs
*	13,032	98	Pavement
*	474	96	Gravel
	7,342	61	>75% Grass cover, Good, HSG B
	10,334	74	>75% Grass cover, Good, HSG C
	330	80	>75% Grass cover, Good, HSG D
	2,851	58	Woods/grass comb., Good, HSG B
	1,095	72	Woods/grass comb., Good, HSG C
	0	72	Woods/grass comb., Good, HSG C
	35,458	79	Weighted Average
	22,426		63.25% Pervious Area
	13,032		36.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	24	0.0213	1.04		**Sheet Flow, Seg A to B** Smooth surfaces n= 0.011 P2= 3.10"
3.5	26	0.0480	0.12		**Sheet Flow, Seg B to C** Grass: Dense n= 0.240 P2= 3.10"
0.5	261	0.0422	9.04	22.72	**Trap/Vee/Rect Channel Flow, Seg C to D** Bot.W=0.00' D=0.50' Z= 20.0 & 0.1 '/' Top.W=10.05' n= 0.013 Asphalt, smooth
0.1	31	0.2976	8.78		**Shallow Concentrated Flow, Seg D to E** Unpaved Kv= 16.1 fps
4.5	342	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment WS-21:

Runoff = 0.34 cfs @ 12.15 hrs, Volume= 1,225 cf, Depth= 3.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	0	98	Roofs
*	0	98	Pavement
*	0	96	Gravel
	639	61	>75% Grass cover, Good, HSG B
	0	74	>75% Grass cover, Good, HSG C
	3,076	80	>75% Grass cover, Good, HSG D
	399	58	Woods/grass comb., Good, HSG B
	0	72	Woods/grass comb., Good, HSG C
	611	79	Woods/grass comb., Good, HSG D
	4,725	75	Weighted Average
	4,725		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.5	19	0.1684	0.13		**Sheet Flow, Seg A to B** Woods: Light underbrush n= 0.400 P2= 3.10"
7.5	99	0.1012	0.22		**Sheet Flow, Seg B to C** Grass: Dense n= 0.240 P2= 3.10"
10.0	118	Total			

Summary for Subcatchment WS-3:

Runoff = 3.45 cfs @ 12.16 hrs, Volume= 12,754 cf, Depth= 3.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	7,369	98	Roofs
*	0	98	Pavement
	8,349	61	>75% Grass cover, Good, HSG B
	32,570	74	>75% Grass cover, Good, HSG C
	886	80	>75% Grass cover, Good, HSG D
	49,174	75	Weighted Average
	41,805		85.01% Pervious Area
	7,369		14.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	87	0.0313	0.13		**Sheet Flow, Seg A to B** Grass: Dense n= 0.240 P2= 3.10"
0.3	98	0.1523	6.28		**Shallow Concentrated Flow, Seg B to C** Unpaved Kv= 16.1 fps
11.1	185	Total			

Summary for Pond FB-1:

Inflow Area = 35,458 sf, 36.75% Impervious, Inflow Depth = 3.50" for 25-Year event
Inflow = 3.27 cfs @ 12.09 hrs, Volume= 10,347 cf
Outflow = 2.22 cfs @ 12.20 hrs, Volume= 10,347 cf, Atten= 32%, Lag= 6.6 min
Primary = 0.03 cfs @ 12.20 hrs, Volume= 4,795 cf
Secondary = 2.19 cfs @ 12.20 hrs, Volume= 5,552 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 250.19' @ 12.20 hrs Surf.Area= 2,158 sf Storage= 3,442 cf

Plug-Flow detention time= 473.4 min calculated for 10,340 cf (100% of inflow)
Center-of-Mass det. time= 474.3 min (1,292.4 - 818.1)

Volume	Invert	Avail.Storage	Storage Description
#1	248.00'	6,956 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
248.00	1,051	154.4	0	0	1,051
250.00	2,050	192.1	3,046	3,046	2,147
251.00	2,655	210.9	2,346	5,392	2,782
251.50	3,626	233.3	1,564	6,956	3,582

Device	Routing	Invert	Outlet Devices
#1	Primary	244.00'	**0.7" Vert. 3/4" DRILL HOLE IN 4" END CAP** C= 0.600
#2	Device 1	245.73'	**4.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 245.73' / 244.00' S= 0.0752 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf
#3	Device 2	245.83'	**4.0" Vert. 4" Underdrain** C= 0.600
#4	Device 3	248.00'	**2.460 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 240.50'

#5	Device 2	249.50'	**12 inch ADS Dome Grate** Head (feet) 0.00 0.14 0.25 0.40 0.55 0.80 Disch. (cfs) 0.000 0.500 1.230 1.450 1.750 2.200
#6	Secondary	250.00'	**10.0' long x 16.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.03 cfs @ 12.20 hrs HW=250.19' TW=0.00' (Dynamic Tailwater)
- **1=3/4" DRILL HOLE IN 4" END CAP** (Orifice Controls 0.03 cfs @ 11.95 fps)
- **2=Culvert** (Passes 0.03 cfs of 0.79 cfs potential flow)
  - **3=4" Underdrain** (Passes < 0.86 cfs potential flow)
    - **4=Exfiltration** (Passes < 0.15 cfs potential flow)
  - **5=12 inch ADS Dome Grate** (Passes < 2.00 cfs potential flow)

Secondary OutFlow Max=2.18 cfs @ 12.20 hrs HW=250.19' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Weir Controls 2.18 cfs @ 1.16 fps)

Summary for Link SP-2:

Inflow Area = 40,183 sf, 32.43% Impervious, Inflow Depth = 3.46" for 25-Year event
Inflow = 2.53 cfs @ 12.20 hrs, Volume= 11,573 cf
Primary = 2.53 cfs @ 12.20 hrs, Volume= 11,573 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

ATTACHMENT 6

INSPECTION, MAINTENANCE AND HOUSEKEEPING PLAN

DM ROMA
CONSULTING ENGINEERS

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

(Prepared by Jayson Haskell, PE #13002)

250 WINDHAM CENTER ROAD RESIDENTIAL CONDOMINIUMS
WINDHAM, MAINE

Responsible Party

Owner: Casco Bay Holdings, LLC
P.O. Box 275
Cumberland, ME 04021

The owner/applicant is responsible for the maintenance of all stormwater management structures and related site components and the keeping of a maintenance log book with service records until such time that a condominium association is created. Once the association is established, maintenance will be the responsibility of the association. A permit transfer will be required to be issued to the Maine Department of Environmental Protection (MDEP) upon conveyance of the maintenance responsibility to the condominium association.

Records of all inspections and maintenance work performed must be kept on file with the owner and retained for a minimum of five years. The maintenance log will be made available to the Town and MDEP upon request. At a minimum, the maintenance of stormwater management systems will be performed on the prescribed schedule.

The procedures outlined in this plan are provided as a general overview of the anticipated practices to be utilized on this site. In some instances, additional measures may be required due to unexpected conditions. *The Maine Erosion and Sedimentation Control BMP* and *Stormwater Management for Maine: Best Management Practices* Manuals published by the MDEP should be referenced for additional information.

During Construction

1. **Inspection and Corrective Action:** It is the contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. Inspection shall occur on all disturbed and impervious areas, erosion control measures, material storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected, including winter work, at least once a week as well as 24 hours before and after a storm event generating more than 0.5 inch of rainfall over a 24-hour period and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections.

2. **Maintenance:** Erosion controls shall be maintained in effective operating condition until areas are permanently stabilized. If best management practices (BMPs) need to be repaired, the repair work should be initiated upon discovery of the problem but no later than the end of the next workday. If BMPs need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within seven calendar days and prior to any rainfall event.

3. **Construction vehicles and equipment:** Construction vehicles and equipment shall not be driven or stored within any proposed stormwater treatment pond or buffer. To ensure the buffer's natural condition and filtration capacity is maintained, prohibiting vehicles and equipment from these areas will limit the risk of inhibiting the function of the buffer due to compaction or vegetation impact.

4. **Documentation:** A report summarizing the inspections and any corrective action taken must be maintained on site. The log must include the name(s) and qualifications of the person making the inspections; the date(s) of the inspections; and the major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicle access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to Town staff, and a copy must be provided upon request. The owner shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

Housekeeping

1. **Spill prevention:** Controls must be used to prevent pollutants from construction and waste materials on site to enter stormwater, which includes storage practices to minimize exposure of the materials to stormwater. The site contractor or operator must develop, and implement as necessary, appropriate spill prevention, containment, and response planning measures.

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. Any project proposing infiltration of stormwater must provide adequate pre-treatment of stormwater prior to discharge of stormwater to the infiltration area, or provide for

treatment within the infiltration area, in order to prevent the accumulation of fines, reduction in infiltration rate, and consequent flooding and destabilization.

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, but other water additives may be considered as needed. A stabilized construction entrance (SCE) should be included to minimize tracking of mud and sediment. If off-site tracking occurs, public roads should be swept immediately and no less than once a week and prior to significant storm events. Operations during dry months, that experience fugitive dust problems, should wet down unpaved access roads once a week or more frequently as needed with a water additive to suppress fugitive sediment and dust.

4. **Debris and other materials:** Minimize the exposure of construction debris, building and landscaping materials, trash, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials to precipitation and stormwater runoff. These materials must be prevented from becoming a pollutant source.

5. **Excavation de-watering:** Excavation 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 removed from the ponded area, either through gravity or pumping, 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. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the Department.

6. **Authorized Non-stormwater discharges:** It is the contractor's responsibility to identify and prevent contamination by non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are:
   (a) Discharges from firefighting activity;
   (b) Fire hydrant flushings;
   (c) Vehicle washwater if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited);
   (d) Dust control runoff in accordance with permit conditions and Appendix (C)(3);
   (e) Routine external building washdown, not including surface paint removal, that does not involve detergents;
   (f) Pavement washwater (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used;
   (g) Uncontaminated air conditioning or compressor condensate;

(h) Uncontaminated groundwater or spring water;
(i) Foundation or footer drain-water where flows are not contaminated;
(j) Uncontaminated excavation dewatering (see requirements in Appendix C(5));
(k) Potable water sources including waterline flushings; and
(l) Landscape irrigation.

7. **Unauthorized non-stormwater discharges:** Approval from the Town does not authorize a discharge that is mixed with a source of non-stormwater, other than those discharges in compliance with Section 6 above. Specifically, the Town's approval does not authorize discharges of the following:
   (a) Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials;
   (b) Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance;
   (c) Soaps, solvents, or detergents used in vehicle and equipment washing; and
   (d) Toxic or hazardous substances from a spill or other release.

Post construction

1. **Inspection and Corrective Action:** All measures must be maintained by the owner in effective operating condition. A Qualified Post-Construction Stormwater Inspector hired by the owner shall at least annually inspect the stormwater management facilities. This person should have knowledge of erosion and stormwater control, including the standards and conditions of the site's approvals. The following areas, facilities, and measures must be inspected, and identified deficiencies must be corrected. Areas, facilities, and measures other than those listed below may also require inspection on a specific site.

   A. **Vegetated Areas:** Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

   B. **Vegetated Swales:** Inspect swales in the spring, late fall, and after heavy rains to remove any obstructions to flow, remove accumulated sediments and debris, control vegetative growth that could obstruct flow, and repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Grass to be mowed to a minimum height of six inches. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or side slopes.

C. **Culverts:** Inspect culverts in the spring, late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the riprap inlet, at the riprap outlet, and within the conduit; and to repair any erosion damage at the culvert's inlet and outlet.

D. **Outlet Control Structures:** Inspect and, if required, clean out catch basins at least once a year, preferably in early spring. Clean out must include the removal and legal disposal of any accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins. If the basin outlet is designed to trap floatable materials, then remove the floating debris and any floating oils (using oil-absorptive pads).

E. **Underdrained Filter Basin:** The filter basins are not intended to function as snow storage areas. Inspector to verify that winter plowing operations are not dumping or pushing snow into the basins. The basins shall also not be used for vehicle or heavy equipment storage. Basins should be inspected after several major storm events (0.5 inches rainfall over 24 hours) to determine drawdown time during the first year. The basins to be inspected every six months thereafter with at least one inspection after a major storm event.

   The basins should drain dry within 24 to 48 hours following a one-inch storm. If ponding exceeds 48 hours, the top of the filter bed must be rototilled to reestablish the soil's filtration capacity. If water ponds on the surface of the bed for more than 72 hours, the top several inches of the filter shall be replaced with fresh material. Inspect for debris and sediment build up in the forebays and basins and remove as needed. Mowing of the basins can only occur semi-annually to a height of no less than 6 inches utilizing a hand-held string trimmer or push-mower. Any bare areas or erosion rills shall be repaired with new filter media or sandy loam then seeded and mulched. The basins should also be inspected annually for destabilization of side slopes, embankment settling and other signs of structural failure.

F. **Level Spreader:** Level spreader should be inspected semi-annually and following major storm events for the first year and every six months thereafter to remove any obstructions to flow. Stormwater runoff should discharge from the level spreader as sheet flow, and any observed channelization of flows or erosion should be corrected immediately. Any woody vegetation growing through riprap must be removed. Replace riprap on areas where any underlying soil or sediment buildup is showing through the stone or where stones have been dislodged.

G. **Emergency Spillway:** Spillways should be inspected semi-annually and following major storm events for the first year and every six months thereafter to remove any obstructions to flow. Any woody vegetation growing through riprap lining must be removed. Replace riprap on areas where any underlying filter fabric is showing through the stone or where stones have been dislodged.

H. Roofline Drip edges: The drip edges should be inspected semi-annually and following major storm events for the first year and every six months thereafter. The reservoir crushed stone should drain within 24 to 48 hours following a major storm event. If ponding exceeds 48 hours, the stone reservoir course shall be removed and the filter bed be rototilled to reestablish the soil's filtration capacity. If water ponds in the reservoir course for more than 72 hours, the top several inches of the filter shall be replaced with fresh material. Inspect for debris and sediment build up at surface and remove as needed. The drip edges are part of the stormwater management plan and cannot be paved over or altered in anyway.

I. Regular Maintenance: Clear accumulations of winter sand along roadway once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along pavement shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader.

J. Documentation: Keep a log (report) summarizing inspections, maintenance, and any corrective actions taken. The log must include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal. The log must be made accessible to Town staff upon request. The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization. Attached is a sample log.

Re-certification

As a requirement of the MDEP, a certification of the following items must be submitted within three months of the expiration of each five-year interval from the date of issuance of the permit.

(a) Identification and repair of erosion problems. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
(b) Inspection and repair of stormwater control system. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.

(c) Maintenance. The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the Department, and the maintenance log is being maintained.

Duration of Maintenance

Perform maintenance as described.

MAINTENANCE LOG

250 WINDHAM CENTER ROAD RESIDENTIAL CONDOMINUMS
WINDHAM, MAINE
(GENERAL INSPECTION FORM PAGE 1 OF 1)

The following stormwater management and erosion control items shall be inspected and maintained as prescribed in the Maintenance Plan with recommended frequencies as identified below. The owner is responsible for keeping this maintenance log on file for a minimum of five years and shall provide a copy to the Town and MDEP upon request. Inspections are to be performed by a qualified third-party inspector and all corrective actions shall be performed by personnel familiar with stormwater management systems and erosion controls.

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Vegetated Areas	Inspect slopes and embankments early in Spring.			
Vegetated Swales	Inspect after major rainfall event			
	Inspect for erosion or slumping & repair			
	Mowed at least annually.			
Culverts	Inspect semiannually and after major rainfall.			
	Repair erosion at inlet or outlet of pipe.			
	Repair displaced riprap within inlet and outlet aprons.			
	Clean accumulated sediment in culverts when >20% full.			
Roofline Dripedges	Check after each rainfall event to ensure that the stone reservoir drains within 24-48 hours.			
	Replace top several inches of filter if reservoir does not drain within 72 hours.			
	Inspect and remove sediment or debris build up on the surface of the stone			
	Inspect semi-annually for erosion or sediment accumulation and repair as necessary.			
Regular Maintenance	Clear accumulation of winter sand in paved areas annually.			

MAINTENANCE LOG

250 WINDHAM CENTER ROAD RESIDENTIAL CONDOMINUMS
WINDHAM, MAINE
(UNDERDRAINED FILTER BASIN FB-1)

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Underdrained Filter Basin	Check after each rainfall event to ensure that pond drains within 24-48 hours.			
	Replace top several inches of filter if pond does not drain within 72 hours.			
	Mow grass no more than twice a year to no less than 6 inches in height.			
	Inspect semi-annually for erosion or sediment accumulation and repair as necessary.			
	Inspector to verify basin not utilized for snow storage			
	Inspector to verify basin not utilized for vehicle or heavy equipment storage.			
Outlet Control Structure	Inspect to ensure that structure is properly draining.			
	Remove accumulated sediment semiannually.			
	Inspect grates/inlets and remove debris as needed.			
Emergency Spillway	Inspect and remove obstructions as necessary.			
	Remove woody vegetation.			
	Replace riprap as necessary.			

SECTION 17

SOILS INFORMATION

Section 17 – Soils Information

A Medium Intensity Soil Survey is contained in the Stormwater Report that is attached in Section 16 of this application. Soils Test Pit information for the Wastewater Disposal Systems are contained in the HHE-200 design forms that are attached in Section 19 of this application.

SECTION 18

WATER SUPPLY FOR DOMESTIC AND FIRE PROTECTION USE

Section 18 – Water Supply for Domestic and Fire Protection Use

The project plans are currently under review by the Portland Water District for approval. Once an Ability to Serve Approval Letter has been issued by the PWD, we will provide a copy of the letter to the Town.

SECTION 19

PROVISIONS FOR WASTEWATER DISPOSAL

Section 19 – Provisions for Wastewater Disposal

The project has a total wastewater design flow of 1,620 gallons per day based on six dwelling units each having three bedrooms. The wastewater disposal has been divided into two wastewater disposal fields. The HHE-200 designs are included in this section.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 Fax: (207) 287-3165

PROPERTY LOCATION

City, Town, or Plantation	Windham
Street or Road	250 Windham Center Road - Bed A
Subdivision, Lot #	

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Casco Bay Holdings, LLC — Owner ☒ Applicant

Mailing Address of Owner/Applicant	PO Box 275
	Cumberland, ME 04021
Daytime Tel. #	

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant — Date

>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

Town_____ Permit#_____

Date Permit Issued / / Fee:$_____ Double Fee Charged [ ]

_____ L.P.I. # _____
Local Plumbing Inspector

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System ***shall not*** be installed until a Permit is attached HERE by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # _____ Lot # _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature — (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☒1. First Time System
2. Replacement System
Type replaced: _____
Year installed: _____
3. Expanded System
a. Minor Expansion
b. Major Expansion
4. Experimental System
5. Seasonal Conversion

THIS APPLICATION REQUIRES

☒1. No Rule Variance
2. First Time System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
3. Replacement System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
4. Minimum Lot Size Variance
5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☒1. Complete Non-engineered System
2. Primitive System (graywater & alt. toilet)
3. Alternative Toilet, specify:_____
4. Non-engineered Treatment Tank (only)
5. Holding Tank, _____ gallons
6. Non-engineered Disposal Field (only)
7. Separated Laundry System
8. Complete Engineered System (2000 gpd or more)
9. Engineered Treatment Tank (only)
10. Engineered Disposal Field (only)
11. Pre-treatment, specify: _____
12. Miscellaneous Components

SIZE OF PROPERTY

142,370 ☒SQ. FT. ACRES

SHORELAND ZONING

Yes ☒No

DISPOSAL SYSTEM TO SERVE

1. Single Family Dwelling Unit, No. of Bedrooms: ____
☒2. Multiple Family Dwelling, No. of Units: 3X3 BDRM UNITS
3. Other: _____ (specify)

Current Use Seasonal Year Round ☒Undeveloped

TYPE OF WATER SUPPLY

1. Drilled Well 2. Dug Well 3. Private
☒4. Public 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☒1. Concrete
☒a. Regular
b. Low Profile
2. Plastic
3. Other: _____
CAPACITY: 1X1500 + GAL. 1x1000 gal

DISPOSAL FIELD TYPE & SIZE

1. Stone Bed 2. Stone Trench
☒3. Proprietary Device
a. cluster array ☒c. Linear
b. regular load d. H-20 load
4. Other: _____
SIZE: 3360 ☒ sq. ft. lin. ft.

GARBAGE DISPOSAL UNIT

☒1. No 2. Yes 3. Maybe
If Yes or Maybe, specify one below:
a. multi-compartment tank
b. ___ tanks in series
c. increase in tank capacity
d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☒1. Table 501.1 (dwelling unit(s))
2. Table 501.2 (other facilities)
SHOW CALCULATIONS for other facilites
3BDRM @ 270 GPD X 3 UNITS = 810 GPD
3. Section 503.0 (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / C
at Observation Hole # TP-1
Depth 24 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

1. Small---2.0 sq. ft. / gpd
2. Medium---2.6 sq. ft. / gpd
3. Medium---Large 3.3 sq. f.t / gpd
☒4. Large---4.1 sq. ft. / gpd
5. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

1. Not Required
☒2. May Be Required
3. Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 47 m 21.87 s
Lon. -70 d 24 m 24.26 s

SITE EVALUATOR STATEMENT

I certify that on 8/13/2025 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	391	8/20/2025

Site Evaluator Name Printed	Telephone Number	E-mail Address
Alexander A. Finamore	(207) 650-4313	alfinamore@yahoo.com

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

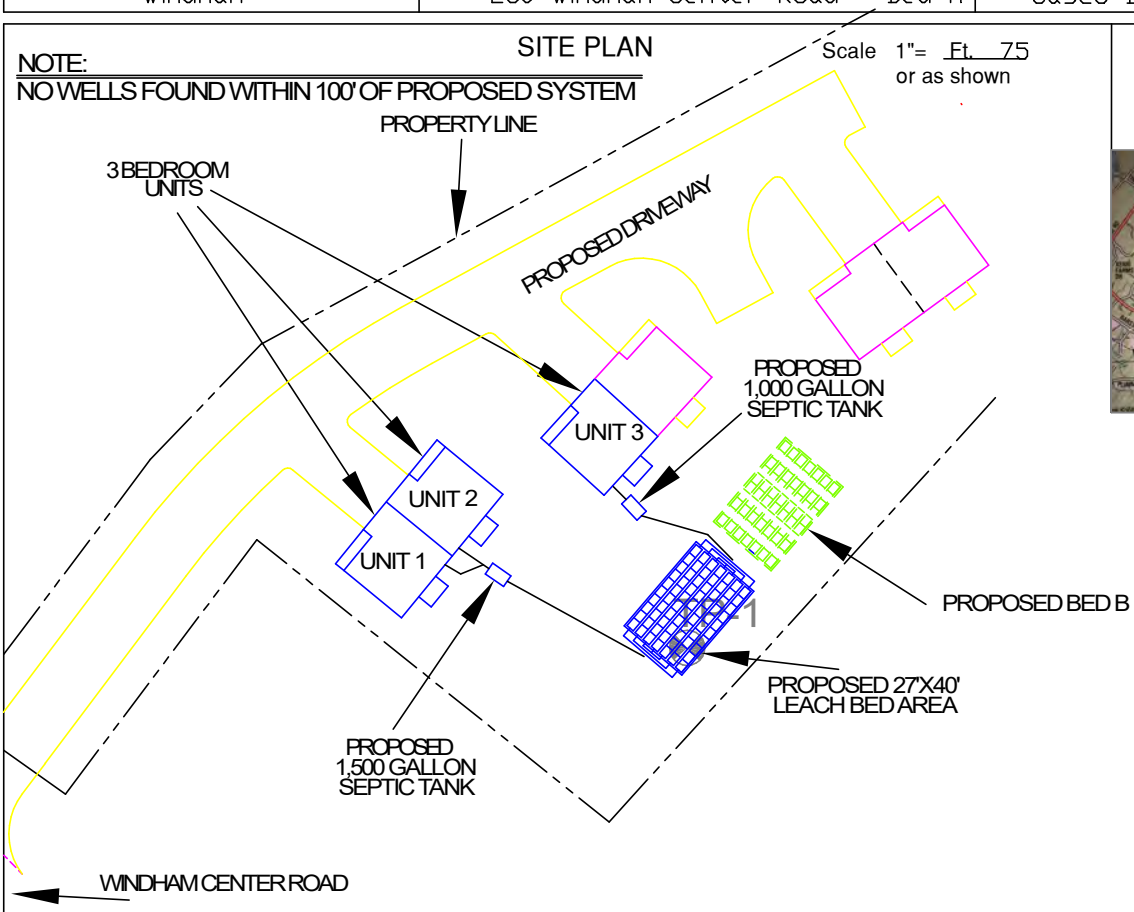
Maine Department of Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 FAX (207) 287-3165

Town, City ,Plantation	Street, Road, Subdivision	Owner or Applicant Name
Windham	250 Windham Center Road - Bed A	Casco Bay Holdings, LLC

SITE PLAN

Scale 1"= Ft. 75 or as shown

NOTE:
NO WELLS FOUND WITHIN 100' OF PROPOSED SYSTEM



SITE LOCATION PLAN
(Map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-1 ☒ Test pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0	LOAM	FRIABLE	DARK BROWN	NONE OBSERVED
10	SANDY LOAM		BROWN	
20				
30	SILT LOAM	SOMEWHAT FIRM	OLIVE GRAY	COMMON, MEDIUM, & DISTINCT
40	LIMIT OF EXCAVATION = 30"			
50				

Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	5 %	24 "	☒ Ground Water ☐ 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				
10				
20				
30				
40				
50				

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	☐ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Site Evaluator Signature | 391 SE # | 8/20/2025 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 FAX (207) 287-3165

Town, City ,Plantation	Street, Road, Subdivision	Owner or Applicant Name
Windham	250 Windham Center Road - Bed A	Casco Bay Holdings, LLC

TP = TEST PIT

SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale 1"= FT. 30

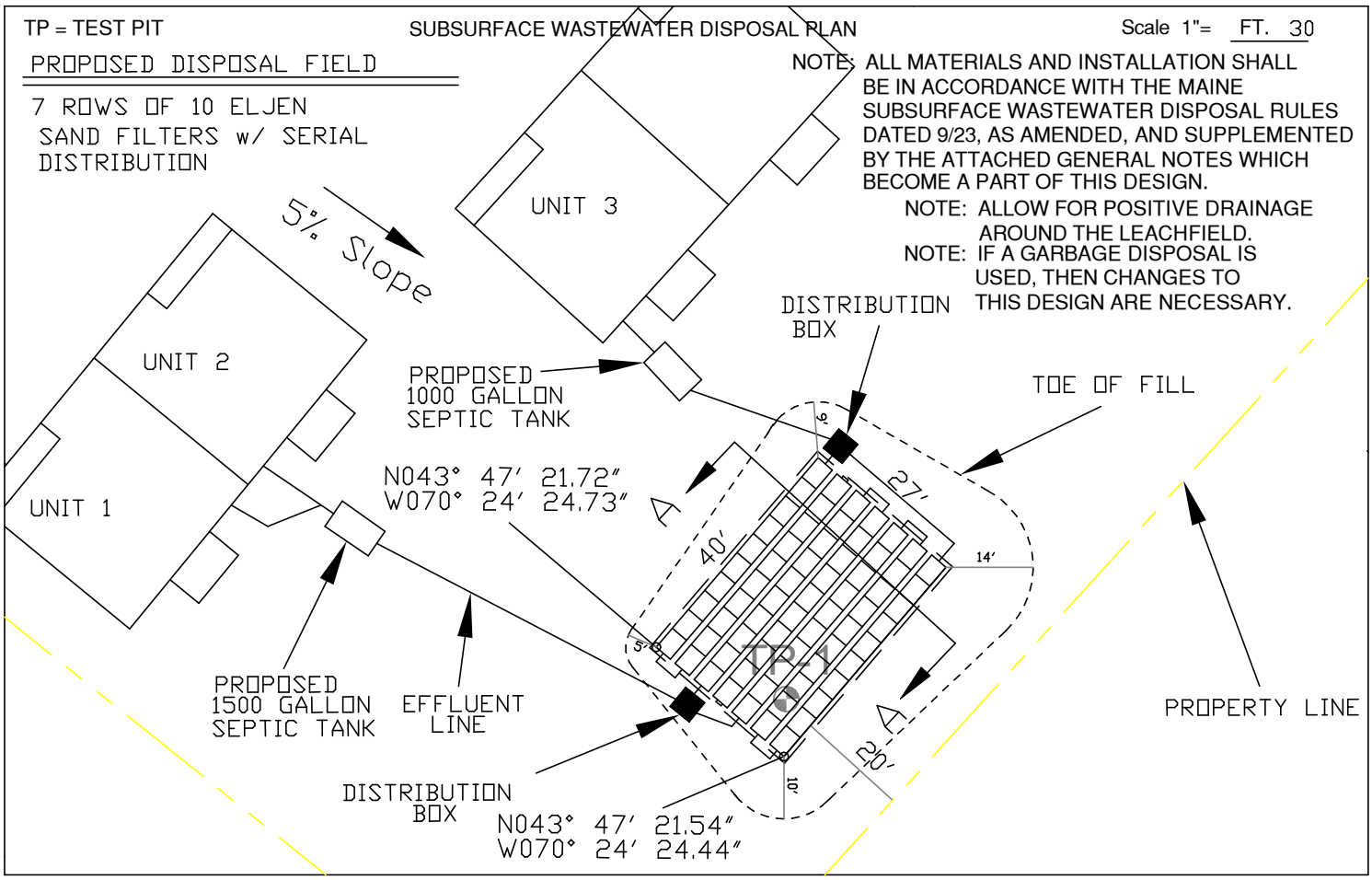
PROPOSED DISPOSAL FIELD

7 ROWS OF 10 ELJEN SAND FILTERS w/ SERIAL DISTRIBUTION

NOTE: ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATED 9/23, AS AMENDED, AND SUPPLEMENTED BY THE ATTACHED GENERAL NOTES WHICH BECOME A PART OF THIS DESIGN.

NOTE: ALLOW FOR POSITIVE DRAINAGE AROUND THE LEACHFIELD.

NOTE: IF A GARBAGE DISPOSAL IS USED, THEN CHANGES TO THIS DESIGN ARE NECESSARY.



BACKFILL REQUIREMENTS

Depth of Fill (Upslope)	varies 13-25″
Depth of Fill (Downslope)	varies 17-33″

CONSTRUCTION ELEVATIONS

SEE TABLE	Finished Grade Elevation
SEE TABLE	Top of Distribution Pipe
SEE TABLE	Bottom of Disposal Area (Bottom of Sand)

ELEVATION REFERENCE POINT

Location & Description: Onsite Datum

Reference Elevation = NAVD88

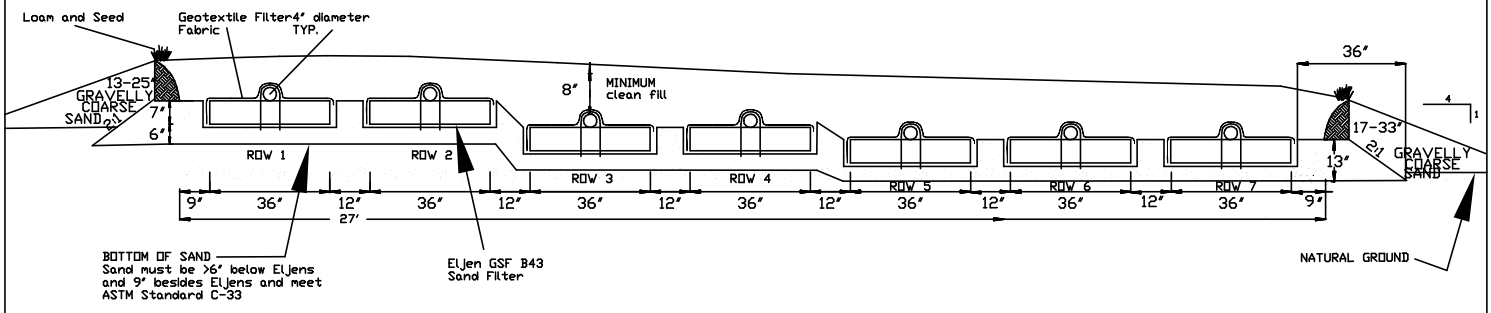
Row #	Finish Grade	Top of Pipe	Bottom of Eljen	Bottom of Sand
1&2	257.08′	256.41′	255.50′	255.00′
3&4	255.58′	254.91′	254.00′	253.50′
5,6&7	254.08	253.41′	252.50′	252.00′

DISPOSAL FIELD CROSS SECTION

CROSS SECTION A-A'

12" SEPARATION USED IN DESIGN

SCALE:
VERTICAL: 1" = 3′
HORIZONTAL: 1" = 5′



NOTE: REMOVE VEGETATION AND SCARIFY ORIGINAL SOIL UNDER ENTIRE FILL AREA

NOTE: THOROGHLY MIX CLEAN, COARSE, SHARP SAND INTO TOP 4 INCHES OF ORIGINAL SOIL TO CREATE A TRANSITION ZONE

Site Evaluator Signature	SE #	Date
	391	8/20/2025

General Notes
(attachment to form HHE-200)
<1,000 gpd Septic System

The nature of the site evaluation profession is one of interpretation of soil and site conditions. We, in the field, attempt to both provide a satisfactory service to the client, and comply by the rules by which we are bound – The Maine Subsurface Wastewater Disposal Rules. If at any time you, the client, are not satisfied with the services provided or the results found, it is your right to hire another site evaluator for a second opinion.

Property information is supplied by the owner, applicant or representative. Such information presented herein shall be verified as correct by the owner or applicant prior to signing this application.

All work shall be in accordance with the Maine Subsurface Wastewater Disposal Rules dated 9/23, as amended.

All work should be performed under dry conditions only (for disposal area).

No vehicular or equipment traffic to be allowed on disposal area. Disposal field shall be constructed from outside the corner stakes located in the field. The downslope area is also to be protected in the same manner.

Backfill, if required, is to be gravelly coarse sand to coarse sand texture and to be free of foreign debris. If backfill is coarser than original soil, then mix top 4" of backfill and original soil with rototiller.

No neighboring wells are apparent (unless so indicated) within 100' of disposal area. Owner or applicant shall verify this prior to signing the application.

The disposal field stone shall be clean, uniform in size and free of fines, dust, ashes, or clay. It shall be no smaller than ¾ inch and no larger than 2 ½ inches in size (per Section 805.2.3 of the Maine subsurface Wastewater Disposal Rules).

Minimum separation distances required (unless reduced by variance or special circumstance).

a) Wells with water usage of 2000 or more gpd or public water supply wells:
   Disposal Fields: 300'
   Septic Tanks and Holding Tanks: 100'
b) Any well to disposal area: 100'
c) Any well to septic tank: 50'
d) Septic tank or disposal area to lake, river, stream or brook: 100' for major watercourse, 50' for minor watercourse
e) House to treatment tank: 8'
f) House to disposal area: 20'

- For all other separation distances, use separations for less than 1,000 gpd per Maine Subsurface Wastewater Disposal Rules Table 7B.

Location of septic system near a wetland may require a separate permit. As such, the owner, prior to construction of the septic system, shall hire a professional to evaluate proximity of adjacent wetlands and prepare necessary permit applications.

0. Garbage disposals are not recommended and, if installed, are done so at the owner's risk. The additional waste load requires increased maintenance frequency, higher potential for failure, and larger septic tanks.
1. Pump stations, when required, shall be installed watertight to prevent infiltration of ground and/or surface water.
2. Force mains and pressure lines shall be flushed of any foreign material and pumps shall be checked for proper on/off cycle before being put into service.
3. Force mains, pump stations, and/or gravity piping subject to freezing shall be installed below frost line or adequately insulated.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 Fax: (207) 287-3165

PROPERTY LOCATION

City, Town, or Plantation	Windham
Street or Road	250 Windham Center Road - Bed B
Subdivision, Lot #	

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Casco Bay Holdings, LLC — Owner ☒ Applicant

Mailing Address of Owner/Applicant	PO Box 275
	Cumberland, ME 04021
Daytime Tel. #	

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

Town_____ Permit#_____

Date Permit Issued / / Fee:$_____ Double Fee Charged [ ]

L.P.I. # _____

Local Plumbing Inspector

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System ***shall not*** be installed until a Permit is attached HERE by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # _____ Lot # _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

Local Plumbing Inspector Signature _____ (2nd) date approved _____

PERMIT INFORMATION

TYPE OF APPLICATION

☒1. First Time System
2. Replacement System
Type replaced: _____
Year installed: _____
3. Expanded System
a. Minor Expansion
b. Major Expansion
4. Experimental System
5. Seasonal Conversion

THIS APPLICATION REQUIRES

☒1. No Rule Variance
2. First Time System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
3. Replacement System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
4. Minimum Lot Size Variance
5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☒1. Complete Non-engineered System
2. Primitive System (graywater & alt. toilet)
3. Alternative Toilet, specify:_____
4. Non-engineered Treatment Tank (only)
5. Holding Tank, _____ gallons
6. Non-engineered Disposal Field (only)
7. Separated Laundry System
8. Complete Engineered System (2000 gpd or more)
9. Engineered Treatment Tank (only)
10. Engineered Disposal Field (only)
11. Pre-treatment, specify: _____
12. Miscellaneous Components

SIZE OF PROPERTY

142,370 ☒SQ. FT. ACRES

SHORELAND ZONING

Yes ☒No

DISPOSAL SYSTEM TO SERVE

1. Single Family Dwelling Unit, No. of Bedrooms: ____
☒2. Multiple Family Dwelling, No. of Units: 3X3 BDRM UNITS
3. Other: _____ (specify)

Current Use Seasonal Year Round ☒Undeveloped

TYPE OF WATER SUPPLY

1. Drilled Well 2. Dug Well 3. Private
☒4. Public 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☒1. Concrete
☒a. Regular
b. Low Profile
2. Plastic
3. Other: _____
CAPACITY: 1X1500 + GAL. 1x1000 gal

DISPOSAL FIELD TYPE & SIZE

1. Stone Bed 2. Stone Trench
☒3. Proprietary Device
a. cluster array ☒c. Linear
b. regular load d. H-20 load
4. Other: _____
SIZE: 3360 ☒ sq. ft. lin. ft.

GARBAGE DISPOSAL UNIT

☒1. No 2. Yes 3. Maybe
If Yes or Maybe, specify one below:
a. multi-compartment tank
b. ___ tanks in series
c. increase in tank capacity
d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☒1. Table 501.1 (dwelling unit(s))
2. Table 501.2 (other facilities)
SHOW CALCULATIONS for other facilites
3BDRM @ 270 GPD X 3 UNITS = 810 GPD
3. Section 503.0 (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / C
at Observation Hole # TP-2
Depth 26 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

1. Small---2.0 sq. ft. / gpd
2. Medium---2.6 sq. ft. / gpd
3. Medium---Large 3.3 sq. f.t / gpd
☒4. Large---4.1 sq. ft. / gpd
5. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

1. Not Required
☒2. May Be Required
3. Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 47 m 22.17 s
Lon. -70 d 24 m 23.88 s

SITE EVALUATOR STATEMENT

I certify that on 8/13/2025 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	391	8/19/2025

Site Evaluator Name Printed	Telephone Number	E-mail Address
Alexander A. Finamore	(207) 650-4313	alfinamore@yahoo.com

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

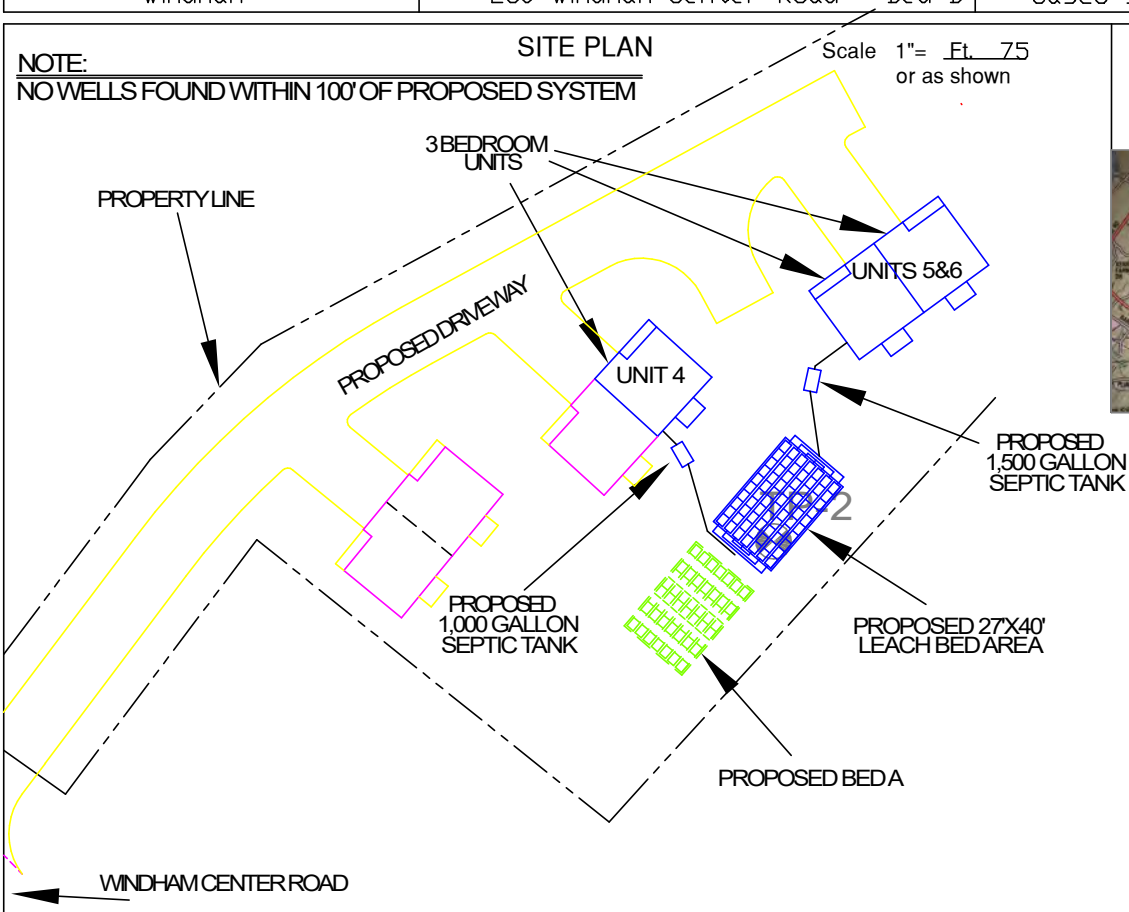
Maine Department of Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 FAX (207) 287-3165

Town, City ,Plantation	Street, Road, Subdivision	Owner or Applicant Name
Windham	250 Windham Center Road - Bed B	Casco Bay Holdings, LLC

SITE PLAN

Scale 1"= Ft. 75 or as shown

NOTE:
NO WELLS FOUND WITHIN 100' OF PROPOSED SYSTEM

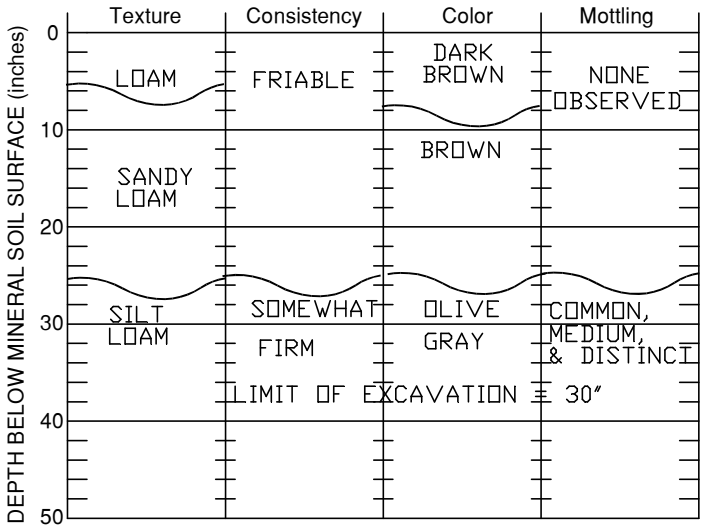


SITE LOCATION PLAN
(Map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-2 ☒ Test pit ☐ Boring

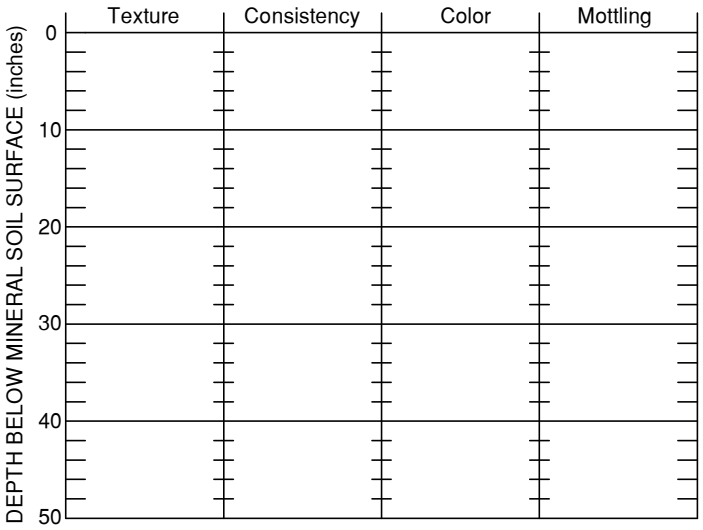
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	5 %	26 "	☒ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole _____ ☒ Test pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	☐ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Site Evaluator Signature | SE # 391 | Date 8/19/2025

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
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Town, City ,Plantation	Street, Road, Subdivision	Owner or Applicant Name
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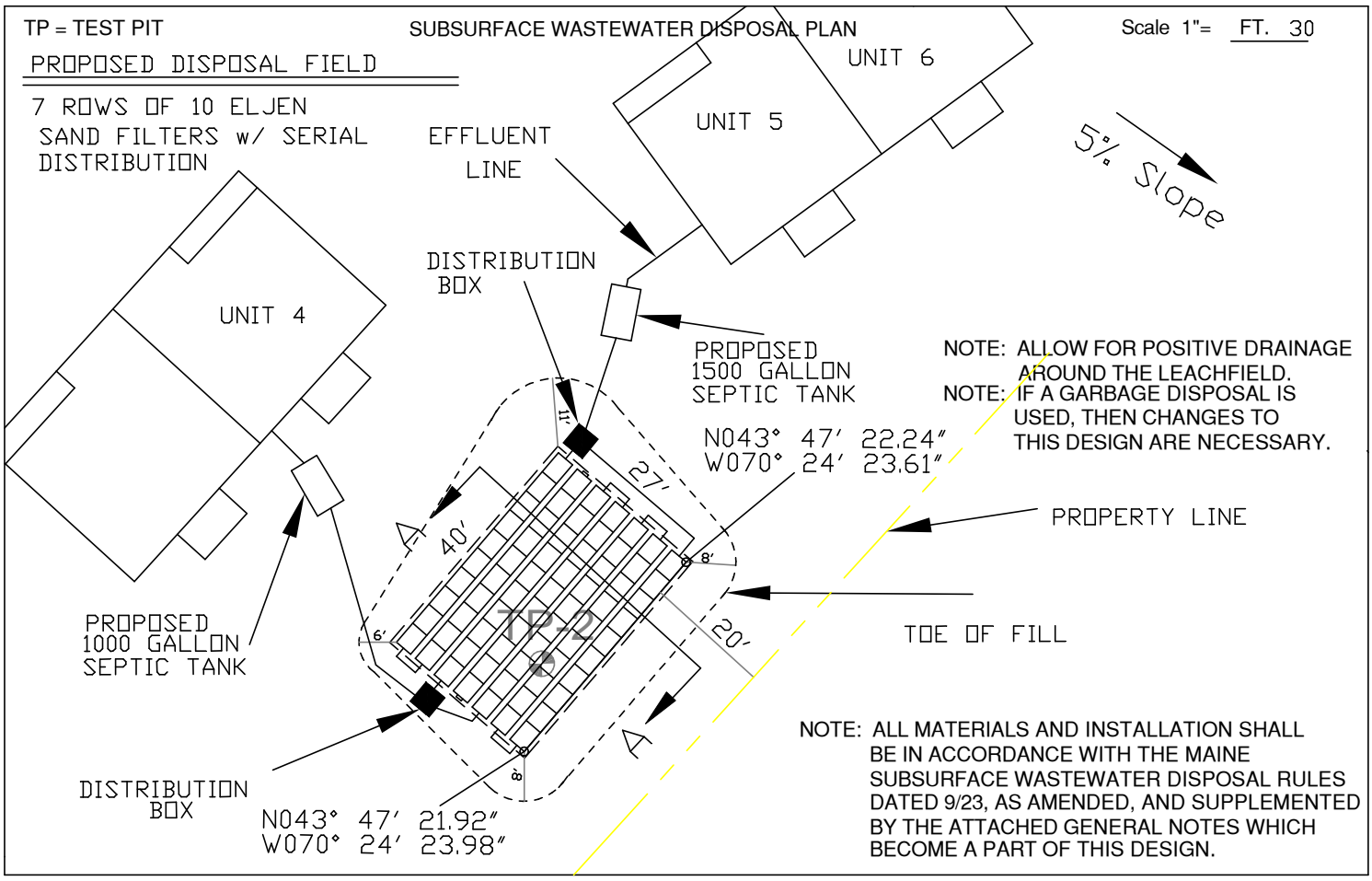
TP = TEST PIT

SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale 1"= FT. 30

PROPOSED DISPOSAL FIELD

7 ROWS OF 10 ELJEN SAND FILTERS w/ SERIAL DISTRIBUTION



NOTE: ALLOW FOR POSITIVE DRAINAGE AROUND THE LEACHFIELD.

NOTE: IF A GARBAGE DISPOSAL IS USED, THEN CHANGES TO THIS DESIGN ARE NECESSARY.

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BACKFILL REQUIREMENTS

Depth of Fill (Upslope): varies 17″–31″

Depth of Fill (Downslope): varies 15–17″

CONSTRUCTION ELEVATIONS

SEE TABLE Finished Grade Elevation

SEE TABLE Top of Distribution Pipe

SEE TABLE Bottom of Disposal Area (Bottom of Sand)

ELEVATION REFERENCE POINT

Location & Description: Onsite Datum

Reference Elevation = NAVD88

Row #	Finish Grade	Top of Pipe	Bottom of Eljen	Bottom of Sand
1&2	255.41′	254.74′	253.83′	253.33′
3&4	253.96′	253.29′	252.38′	251.88′
5,6&7	252.51′	251.85′	250.93′	250.43′

DISPOSAL FIELD CROSS SECTION

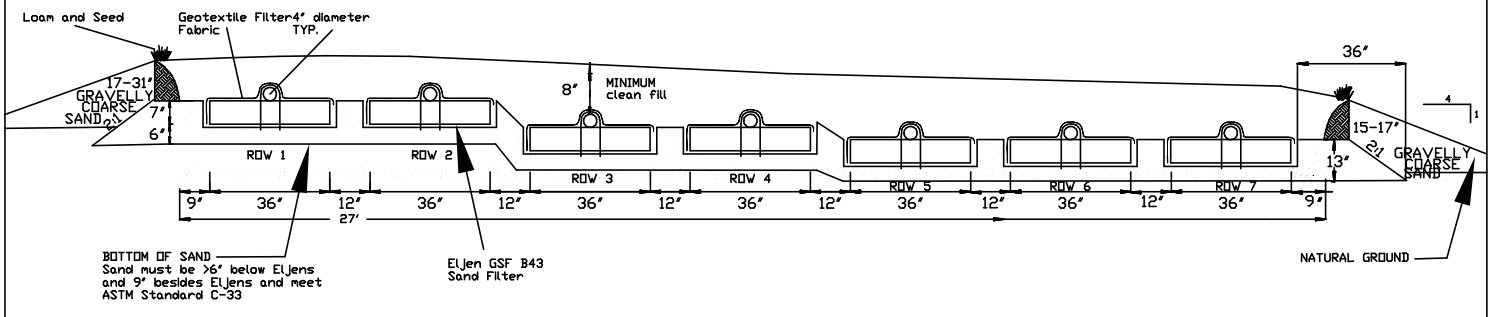
CROSS SECTION A-A'

12" SEPARATION USED IN DESIGN

SCALE:

VERTICAL: 1" = 3′

HORIZONTAL: 1" = 5′



NOTE: REMOVE VEGETATION AND SCARIFY ORIGINAL SOIL UNDER ENTIRE FILL AREA

NOTE: THOROGHLY MIX CLEAN, COARSE, SHARP SAND INTO TOP 4 INCHES OF ORIGINAL SOIL TO CREATE A TRANSITION ZONE

Site Evaluator Signature	SE #	Date
	391	8/19/2025

General Notes
(attachment to form HHE-200)
<1,000 gpd Septic System

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c) Any well to septic tank: 50'
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2. Force mains and pressure lines shall be flushed of any foreign material and pumps shall be checked for proper on/off cycle before being put into service.
3. Force mains, pump stations, and/or gravity piping subject to freezing shall be installed below frost line or adequately insulated.

SECTION 20

PROJECT COST ESTIMATE AND FINANCIAL CAPACITY

Section 20 – Project Cost Estimate and Financial Capacity

The project sitework costs are estimated to be the following:

1.	Site Preparation & Demolition	$40,000
2.	Aggregates for Common Driveway	$45,000
3.	Bituminous Pavement	$35,000
4.	Electrical Conduit and Risers	$20,000
5.	Stormwater BMPs	$20,000
6.	Water tap & services	$35,000
7.	Wastewater collection & disposal	$40,000
8.	Landscaping & Lawns	$35,000
	Total Sitework Estimate:	$270,000

The construction cost of the three duplex buildings is estimated at $1,500,000 based on an estimate of $250,000 per unit.

The applicant previously purchased the land so there is no additional land acquisition cost.

Enclosed is a letter from the applicant's bank indicating that the applicant has the financial capacity to complete the project.

Norway Savings Bank

September 2, 2025

Town of Windham
8 School Street
Windham, ME 04062

RE: 250 Windham Center Rd.

Ladies and Gentlemen,

At the request of Ron Smith, I write this letter to provide to you my opinion on the financial capacity of Ron Smith to undertake the project at 250 Windham Center Rd., Windham, ME.

I spoke with Ron about the plans and scope of the project in detail recently. Ron Smith maintains his banking relationship with Norway Savings Bank so I am familiar with his background and finances.

Based on my banking relationship with Mr. Smith and the information discussed with Ron about the proposal and plans for 250 Windham Center Rd., it is my opinion that Mr. Smith has the financial capacity to support this project.

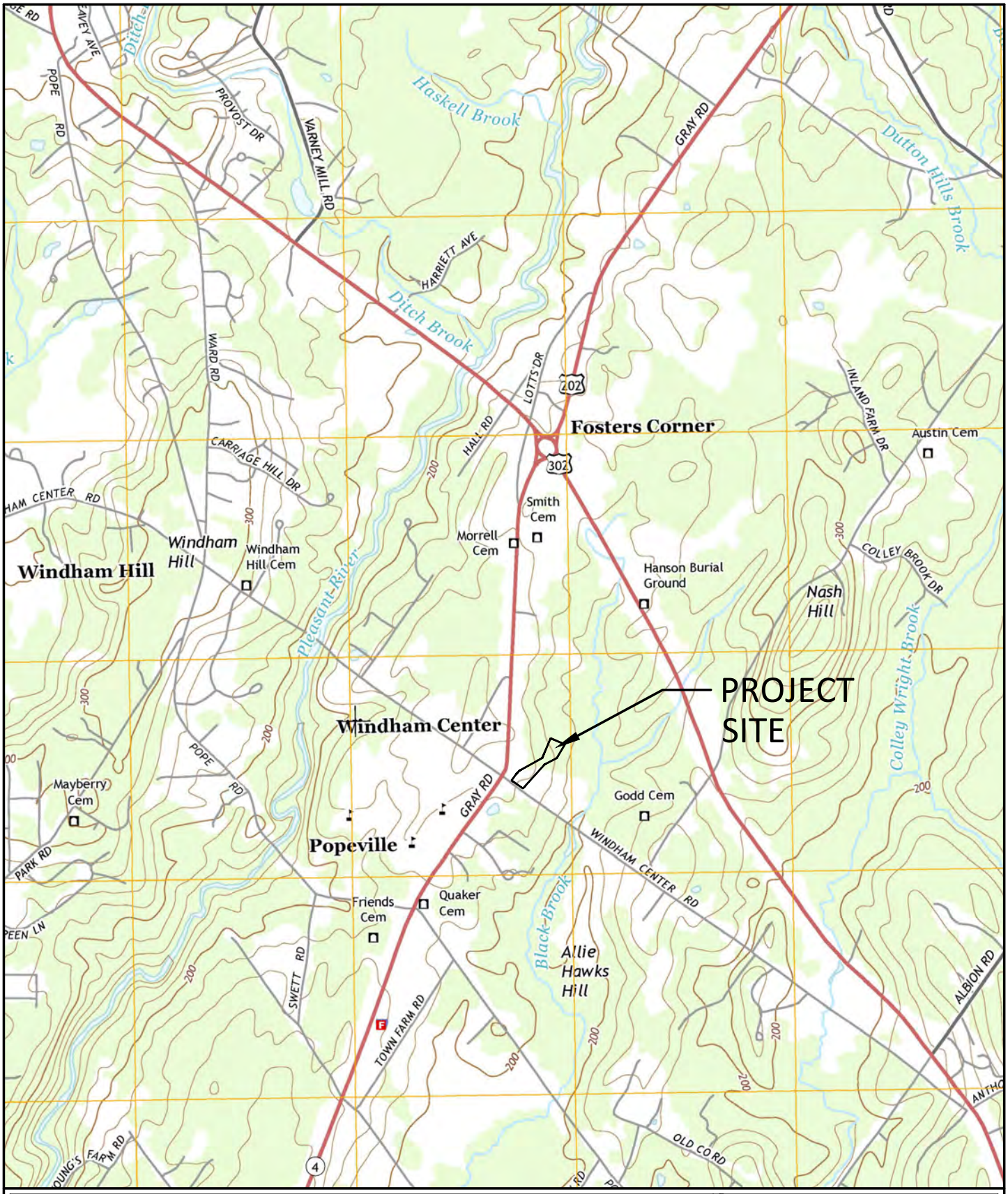
Sincerely,

Brian C. Desjardins
Regional Vice President
Commercial Lending

BCD/tbm

SECTION 21

SITE VICINITY MAP – USGS QUADRANGLE



SITE LOCATION MAP

250 WINDHAM CENTER ROAD
WINDHAM, MAINE

FOR RECORD OWNER:
CASCO BAY HOLDINGS, LLC.
PO BOX 275
CUMBERLAND, MAINE, 04021

SCALE: 1"=2000'
DATE: 8-18-2025
JOB NUMBER: 24035

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 591-5055

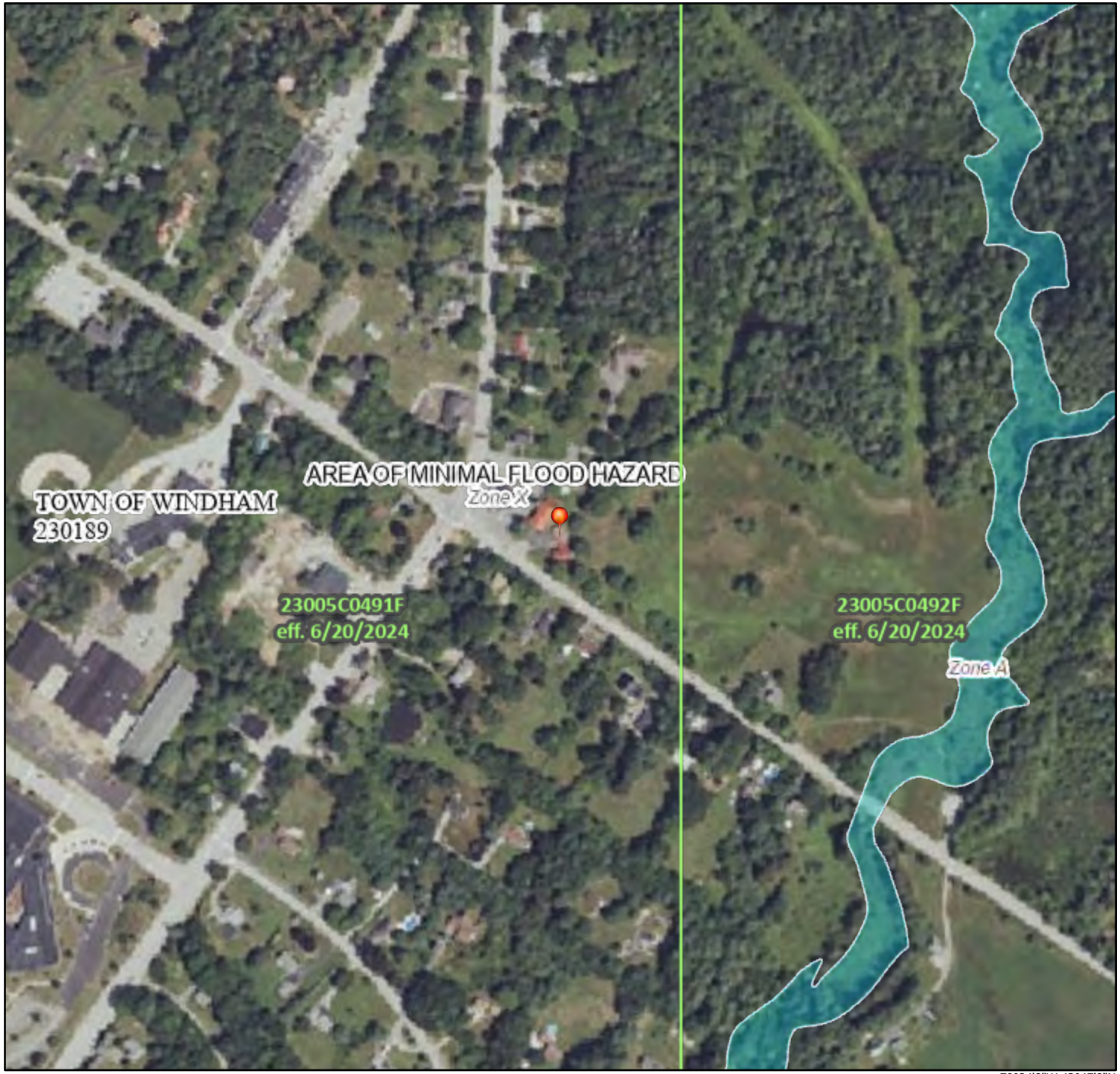
SECTION 22

FLOOD ZONES

National Flood Hazard Layer FIRMette

FEMA

70°24'45"W 43°47'34"N



70°24'8"W 43°47'8"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

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

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

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

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

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

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/2/2025 at 11:34 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

SECTION 23

IMPACT TO SITES OF HISTORICAL SIGNIFICANCE

Section 23 – Impact to Sites of Historical Significance

We have sent a letter request to The Maine Historic Preservation Commission to request their assessment of the project site, and will provide copies of any correspondence we receive to the Town.