Town of Lyman
Site Plan Application

For

DZA Commercial Spaces
1713 Alfred Road
Lyman, ME, 04002

Applicant
Emily Dancause
85 Gould Road,
Dayton, ME, 04005

July 2, 2025

Prepared By:

WALSH
ENGINEERING ASSOCIATES, INC.

One Karen Drive, Suite 2A
Westbrook, Maine
207.553.9898

DZA Commercial Spaces
1713 Alfred Road Lyman, ME

Site Plan Checklist Waivers

We are requesting a waiver regarding checklist item #7 - incineration devices. There are no plans for the project to include an incineration device.

We are requesting a waiver regarding checklist item #8 – machinery noise. There are no plans for the project to include machinery that will generate an appreciable noise at the property lines.

We are requesting a waiver regarding checklist item #12– landscaped areas. There are no plans for the project to include landscape plantings. All areas that are not buildings or pavement will consist of grass.

Performance Standards

8. Proposed exterior lighting will not create hazards to motorists traveling on adjacent public streets, is adequate for the safety of occupants and users of the site, and will not damage the value or diminish the usability of adjacent properties;

Proposed exterior lighting will provide ample lighting and safety for the site users. The proposed lighting is not expected to impact abutting properties. Refer to the photometric plan completed by Exposure Lighting in the attached project drawings for additional information.

16. The proposed project will not have an adverse impact on significant scenic vistas or on significant wildlife habitat which could be avoided by reasonable modification of the plan

Forested and wet meadow wetlands are located onsite based on a wetland delineation performed by Albert Frick Associates, Inc. on September 30, 2024. In addition to the freshwater wetlands, a regulated stream was located at the northwestern corner of the site. The proposed development will impact approximately 928 square feet of wetlands onsite. The proposed development seeks to minimize wetland impacts and will not have any impact on the regulated stream. The proposed development will not adversely impact wildlife habitat or scenic vistas.

Town of Lyman
Site Plan Application

For

Site Development
1713 Alfred Road
Lyman, ME, 04002

Applicant
Emily Dancause
85 Gould Road,
Dayton, ME, 04005

May 21, 2025

Prepared By:

WALSH
ENGINEERING ASSOCIATES, INC.

One Karen Drive, Suite 2A
Westbrook, Maine
207.553.9898

WALSH
ENGINEERING ASSOCIATES, INC.

Table of Contents
Site Plan Application
1713 Alfred Road Lyman, ME

MAP # _____ LOT # _____ DATE _____ PERMIT# SR____-____ PMT RECEIVED_____ NOD_____

----------above to be filled in by office ----------

TOWN OF LYMAN PLANNING
SITE PLAN REVIEW APPLICATION
For General and Commercial Uses

11 South Waterboro Road, Lyman Maine 04002

Telephone: (207) 247-0647 Email: ceo@lyman-me.gov

Owner Information

Property Owner: Emily Dancause

Mailing Address: 85 Gould Road, Dayton, ME 04005

Project Address: 1713 Alfred Road

Email: bdancause@roadrunner.com

Point of Contact if Other than the Property Owner

Note: the person(s) acting as an agent for the property owner must have written authorization from the owner giving permission to act on their behalf

Name: Todd Gammon

Telephone #: 207-229-6447

Email: todd@walsh-eng.com

NOTE: THIS APPLICATION MUST BE FILLED OUT IN ITS ENTIRETY, INCLUDING ALL SUBMITTALS OR IT WILL NOT BE ACCEPTED AND WILL BE RETURNED TO THE APPLICANT.

1. Zoning District: ☐ General Purpose ☐ Residential ☐ Shoreland ☑ Commercial ☐ Mobile Home
2. Purpose for Application:

   ☑ Proposal or plans that require Site Plan Review per the Lyman Zoning Ordinance

   ☐ Proposal or plans that require Planning Board Approval for Subdivision
3. Is the property part of an approved subdivision? ☐ yes ☑ no
4. Is the property classified in any of the following (check all that apply)? ☐ Tree Growth ☐ Open Space

   ☐ Farm & Open Space ☐ Resource Protection
5. Existing use of the property (describe in detail): Single family residential
6. Proposed Use of the property (Describe and be specific about the plans i.e. type of business, etc.):

   Two commercial buildings and business office building. A 30,000 SF gravel storage pad for outdoor storage of materials will also be located onsite.
7. Lot dimensions (include a sketch): Width Approx. 440 feet Depth Approx. 1,000 feet

   Road Frontage 440 feet Total area 8.5 Acres
8. Type of sewerage disposal (include HHE-200 Forms if possible): Existing Septic Proposed Septic
9. Lot Coverage: Existing % 1 Proposed % 26

Existing Structures: (dimensions – length and width)

Main structure: 25 by 45 # of stories 2 Garage/shed: _____ by ____ # of stories ____

Other: _____ by _____ # of stories ____

10. SUBMITTALS

a. **FEES:** Please make check payable to the **TOWN OF LYMAN**

SUBDIVISIONS: Preliminary: $350.00 application fee
plus $250.00 per lot
Final : $350.00 application fee
plus $250.00 per lot

ALL OTHERS: $ 350.00

b. A copy of the plumbing permit, if applicable. (This includes already installed systems regardless of age)

c. A current copy of the signed property deed(s).

d. A copy of official decisions (or actions pending) of other, state, federal or local officials (site location permit, minimum lot size waiver, Subdivision approval, Conditional Use Permits AND/OR Site Review Approvals, etc.)

e. Site Plan: ILLUSTRATE the following information about the lot and the proposed use of the lot on a SCALE DRAWING ON GRAPH PAPER or a SITE PLAN PREPARED BY A SURVEYOR, ARCHITECT OR ENGINEER.

- Lot dimensions.
- Names of abutting property owners. (This includes any property within 500 feet of the boundary lines including across the street.) Include the name, map and lot number, and mailing address of each abutter, which may be listed separately shall be supplied with the application.
- Location of abutting rights of way, public or private.
- Location of any abutting water bodies, including streams.
- Exact location of existing and proposed buildings, including dimensions and distance of each from nearest lot line(s).
- Location of sewage disposal system and water supply.
- Areas to be cleared, if applicable.
- Erosion control methods and landscaping plans, if applicable.
- Areas of fill, grading, cut or other earth-moving activity.
- Test pit locations, if applicable.

11. **ONSITE**: An onsite inspection (site walk) will be conducted by the Board for each application. If you add to a structure or are building new, **you MUST have the property and proposed structure(s) staked out**. This includes boundary lines to abutting properties.

PLEASE SUBMIT A TOTAL OF EIGHT (8) COPIES OF THIS APPLICATION INCLUDING THE ATTACHEMENTS LISTED ABOVE and SIX (6) STANDARD 1" X 2 5/8" MAILING LABELS for the APPLICANT and SIX (6) for the APPLICANT (S) AGENT/CONTRACTOR. ALSO PLEASE SUBMIT TWO (2) SETS OF LABELS WITH ABBUTTERS' NAMES AND ADDRESSES

NOTE: ALL APPLICANTS WILL BE NOTIFIED IN WRITING AS TO THE TIME AND PLACE THE PLANNING BOARD WILL MEET TO REVIEW YOUR APPLICATION.

To the best of my (our) knowledge, all information submitted on this application is true and correct. All proposed uses will be in conformance with the application and the Zoning Ordinance(s) of the Town of Lyman.

Signature: ____ Todd J. Dawson _____ Date: 5/21/2025

(applicant/owner of property and/or Power of Attorney)

SITE PLAN CHECKLIST

8 copies of the following information must be submitted with a complete Site Plan Application

SECTION	SUBMITTED	APPROVED		DESCRIPTION OF REQUIRED SUBMITTAL
8.3.4	$350 provided separately			Fee as established by the Board of Selectmen
8.3.5.C				Provide three (3) sets of mailing labels for abutters within 500' of the property. (Include mailing address and map and lot #)
8.3.8	See Site Plans		1.	A site plan drawn to scale not smaller than one-inch equals forty feet. (1" = 40')
	See application		2.	Name and address of the applicant plus the name of the proposed development.
	See Site Plans		3.	Total floor area, ground coverage and location of each proposed building, structure, or addition.
	See Site Plans		4.	Perimeter survey of the parcel, made and certified by a registered land surveyor licensed in Maine, relating to reference points. Plan must show true or magnetic North, a graphic scale, corners of the parcel, date of survey and total acreage.
	See Site Plans		5.	All existing and proposed setback dimensions.
	See Site Plans.		6.	The size, location, direction, and intensity of illumination of all major outdoor lighting apparatus and signs.
	N/A		7.	The type, size, and location of all incineration devices.
	N/A		8.	The type, size, and location of all machinery likely to generate appreciable noise at the lot lines, as well as estimated decibel level at property lines.
	See Site Plans		9.	The location, type, and size of all existing and proposed catch basins, storm drainage facilities, wetlands, streams, and watercourses as well as all utilities, both above and below ground.
	See Site Plans		10.	All existing contours and proposed finished grade elevations of the portions of the site which will be altered, and the system of drainage proposed to be constructed. Contour intervals shall be specified by the Planning Board.
	See Site Plans		11.	The location, type and size of all curbs, sidewalks, driveways, fences, retaining walls, parking space area, etc. and layout thereof, together with dimensions.
	Waiver Requested for Landscape Plan		12.	All proposed landscaped areas, size and type of plant material upon the premises.
	N/A		13.	All existing or proposed rights-of-way, easements and other legal restrictions which may affect the premises in question.
	See Site Plans		14.	The property lines of all properties abutting the proposed development, including properties across a street, or across a waterbody, together with the tax map and lot numbers, and property owners' names and mailing addresses on file at the Town Office within 10 days of the filing of the application.
	See Site Plans		15.	An appropriate box on each page of the plans for the signature(s) of the Planning Board.
	See Attached Deed		16.	Documentation of right, title, or interest in the proposed site.

SECTION	SUBMITTED	APPROVED		DESCRIPTION OF REQUIRED SUBMITTAL
	See Attached HHE-200s (Attachment 5)		17.	An on-site soils investigation report by a Maine State Licensed Site Evaluator. The report shall identify the type of soil, location of test pits and the proposed location and design for the subsurface disposal system.
	N/A		18.	The type of any raw, finished or waste materials to be stored inside or outside of roofed buildings, including their physical and chemical properties, if appropriate.
	See attached traffic summary (Attachment 4)		19.	Traffic date: the Planning Board may require that the application include a traffic engineering study, should the project be considered one of substantial magnitude along any of the town's state highways where fast-moving traffic occurs (i.e. Route 111, 35 or 5). Should a traffic study be requested by the Planning Board, the following data shall be included: • The estimated peak-hour traffic to be generated by the proposal. • Existing traffic counts and volumes on surrounding roads. • Traffic accident data covering the last three (3) years. • The capacity of surrounding roads, municipal facilities, parking, and any other improvements, which may be necessary on such roads and facilities to accommodate anticipated traffic generation. • The need for traffic signals and sign or other directional markers to regulate anticipated traffic.
	Will be provides as required		20.	Any other information or data the Planning Board determines is necessary to demonstrate compliance with Town, State, and Federal regulations.
	See attached Narrative (Attachment 1)			**Review Standards** – Please be prepared to provide evidence that the following standards will be met. All 16 criteria have to be met. If any of the criteria fail to be met the Board shall deny the project.
8.3.6.B	Attachment 1		1.	Will meet the definitions of the use, the Zoning District requirements, and any other requirements set forth in this Ordinance.
	Attachment 1		2.	Will not have a significant detrimental effect on the use and peaceful enjoyment of abutting properties as a result of noise, vibrations, fumes, odor, dust, light, glare, traffic, or other cause.
	Attachment 1		3.	Will not have a significant adverse effect on adjacent or nearby property values.
	Attachment 1		4.	Will not create a hazard to pedestrian or vehicular traffic or significant traffic congestion.
	Attachment 1		5.	Will not result in fire danger.
	Attachment 1		6.	Will not result in flood hazards or flood damage, drainage problems, ground or surface water contamination or soil erosion.
	Attachment 1		7.	Will not create a safety hazard because of inadequate access to the site, or buildings for emergency vehicles.
	Attachment 1		8.	Has proposed exterior lighting which will not create hazards to motorists traveling on adjacent public streets, is adequate for the safety

SECTION	SUBMITTED	APPROVED		DESCRIPTION OF REQUIRED SUBMITTAL
				of occupants and users of the site and will not damage the value of diminish the usability of adjacent properties.
	Attachment 1		9.	Makes provisions for buffers and on-site landscaping which provide adequate protection to neighboring properties from detrimental features of the development. The applicant shall provide a plan prepared by a Registered Landscape Architect, or other qualified professional approved by the Planning Board.
	Attachment 1		10.	Makes provisions for vehicular parking, loading, unloading, as well as vehicular and pedestrian circulation on the site, and onto adjacent public streets which would neither create hazards to safety nor impose significant burdens on public facilities.
	Attachment 1		11.	Makes adequate provisions for the disposal of wastewater and solid waste for the prevention of ground or surface water contamination.
	Attachment 1		12.	Makes adequate provisions to control erosion and sedimentation.
	Attachment 1		13.	Makes adequate provisions to handle storm water run-off and other drainage on the site.
	Attachment 1		14.	Provides for a water supply which meets the demands of the proposed use and meets the needs for fire protection purposes.
	Attachment 1		15.	Makes adequate provisions for the transportation, storage and disposal of hazardous substances and materials as defined by State and Federal Law; the storage of chemicals, explosives, or hazardous items as defined by the National Fire Protection Association Code 704, Class 3 or 4 materials are not permitted.
	Attachment 1		16.	Will not have an adverse impact on significant scenic vistas or on significant wildlife habitat which could be avoided by reasonable modification of the plan.

To Whom It May Concern,

By this letter, the undersigned owner/applicant, authorizes Walsh Engineering Associates, Inc. to act as the agent for the undersigned in the preparation and submission of all Federal, State, and Local City permit applications and relevant documents and correspondence for all necessary permits for the construction/reconstruction of the property at 1713 Alfred Road, Lyman, ME 04002; to attend meetings and site visits; to appear before all boards, commissions, and committees, and to provide such other services as are necessary and appropriate in furtherance of the aforementioned project.

Sincerely,

Emily Darcause
Signature

Emily Darcause
Printed Name

5/20/2025
Date

NANCY E HAMMOND, REGISTER OF DEEDS
E-RECORDED **Bk 19341 PG 7**
Instr # 2023035098
11/03/2023 10:46:19 AM
Pages 2 YORK CO

WARRANTY DEED

DLN: 1002340255085

KNOW ALL PERSONS BY THESE PRESENTS, THAT **Lisa Rose Tidwell** of Palm Coast, State of Florida, for valuable consideration paid, the receipt and sufficiency whereof is hereby acknowledged, hereby GRANT(S) unto **Emily L. Dancause,** having a mailing address of 85 Gould Road, Dayton, ME 04005, with WARRANTY COVENANTS, the land with any buildings thereon, situated in Lyman, County of York and State of Maine, described as follows:

PROPERTY DESCRIBED IN "EXHIBIT A"
ATTACHED HERETO AND MADE A PART HEREOF

Meaning and intending to convey the same premises conveyed to Lisa Rose Tidwell by virtue of deed of Raymond H. Lacourse and Stephanie M. Lacourse to Daniel Ray Tidwell and Lisa Rose Tidwell dated April 23, 2003 and recorded in the York County Registry of Deeds in Book 12781, Page 1. Daniel Ray Tidwell died August 24, 2023, leaving Lisa Rose Tidwell as surviving joint tenant.

Maine R.E. Transfer Tax Paid

Witness my/our hand(s) and seal(s) this 1st day of Novemb, 2023.

_____
Witness

Darlene Armstrong, Attorney-in-Fact for Lisa Rose Tidwell
Lisa Rose Tidwell
By: Darlene Armstrong, Attorney-in-fact

State of Rhode Island
County of Washington

November 1st, 2023

Personally appeared before me the above named Darlene Armstrong in her said capacity and acknowledged the foregoing instrument to be her free act and deed and the free act and deed of said Lisa Rose Tidwell.

TAMMY A. SOUSA NOTARY PUBLIC STATE OF RHODE ISLAND

Before me,

Tammy A Sousa
Notary Public / Attorney at Law
Printed Name: Tammy A. Sousa
My Comm. Exp: 8/15/2024

EXHIBIT A

A certain lot or parcel of land with the buildings thereon, situated in Lyman, in the County of York and State of Maine, on the northerly side of the road leading from Biddeford to Alfred, bounded and described as follows:

Beginning on the northerly side of the said road at the intersection of the northerly sideline of said road by the easterly sideline of land of Arthur L. Roberts; thence running northerly by said Roberts land ninety-nine (99) feet to a large pine stump marking a corner in said Roberts line; thence turning and running northeasterly by said Roberts land three hundred thirty (330) feet to an iron pipe driven into the ground beside a large yellow birch tree marking a corner in said Roberts line; thence turning and running in a southerly direction in a straight line and by land now or formerly of Will R. Merrill three hundred fifty-seven and nine tenths (357.9) feet to a stone Post on the northerly sideline of said road, said post being four hundred thirty-four and four tenths (434.4) feet easterly from said point of beginning; thence running westerly by said road four hundred thirty four and four tenths (434.4) feet to Roberts land and the point of beginning.

Also the exclusive right to take water from a spring on the opposite side of said road from above-described property situated on land of said Will R. Merrill, said spring being approximately three hundred eighty (380) feet southerly from the homestead place formerly of one Lord and to maintain a line of pipe as now exists from said spring to said house of said Lord land to erect and maintain poles and wires and pump, electric or otherwise at spring and right-of-way to pass at any time and all times from said highway to said spring to secure above privileges.

PARCEL II: Also a certain lot or parcel of land situated in said Lyman, on the northerly side of the road leading from Biddeford to Alfred, but not adjacent thereto, and more particularly bounded and described as follows:

Beginning at a point about ninety-nine (99) feet distant northerly from the apparent sideline of said Biddeford-Alfred Road at the corner of other land now or formerly of Roy LaForest Locke, et, ux, as described in the deed to them by the First National Bank of Biddeford, dated July 23, 1953, recorded in Book 1231, Page 541, being the first parcel herein described, which said point of beginning is recited therein as being marked by a large pine stump; thence continuing northerly by a line which is the prolongation of the westerly sideline of the Locke land as conveyed to them by the First National Bank of Biddeford by the aforementioned deed, and in the same course as the first course in said deed to them from said Bank, and by other land now or formerly of Will R. Merrill; thence generally easterly, southerly, southeasterly, southerly and westerly by said Merrill land and by other land of Roy Laforest Locke, et ux., to the point and place of beginning.

Contains fifteen acres, more or less.

ATTACHMENT 1

PROJECT NARRATIVE

Project Narrative
Site Development
1713 Alfred Road Lyman, ME

The Property is located at 1713 Alfred Road, Lyman, Maine and is identified by the Town of Lyman's Assessor's Office as Map 7, Lot 64. The property is within the commercial/residential district zone.

Existing Conditions

The property at 1713 Alfred Road consists of 8.498 acres of land and is mostly undeveloped with an existing building and gravel drive located in the southern portion of the site. The property does not fall within the effective flood zone. Forested and wet meadow wetlands are located onsite based on a wetland delineation performed by Albert Frick Associates, Inc. on September 30, 2024. In addition to the freshwater wetlands, a regulated stream was located at the northwestern corner of the site.

Proposed Improvements

General Project Description

The proposed development includes two 8,160 square foot commercial buildings designated as commercial facility (2) use based on a review of the town of Lyman zoning ordinance. The proposed development will also include a 2,400 square foot office building, designated business office use in the Town ordinance. The buildings will be connected with paved access ways and parking areas. The site will also include the construction of a 30,000 square foot of gravel storage area. Stormwater treatment onsite will be provided by drip edges along the proposed buildings and a wet pond located at the southeast corner of the property. Refer to sheet C2.0 for additional information on site layout and development. The proposed development will impact approximately 8,520 square feet of freshwater wetlands.

Project will meet the definition of the use, the zoning district requirements, and any other requirements set forth in the town of Lyman Zoning Ordinance

The proposed development is located within the commercial/residential district. The commercial space and office building are allowed uses with site plan approval. The proposed development provides adequate property line setbacks and street frontage. The proposed development will increase impervious area onsite resulting in a lot coverage of 26% – below the maximum 45% coverage requirement. For additional information on site layout, use, and setbacks, refer to sheet C2.1.

Project will not have a significant detrimental effect on the use and peaceful enjoyment of abutting properties as a result of noise, vibrations, fumes, odor, dust, light, glare, traffic, or other cause;

The proposed site use is a commercial facility and business office. Storage onsite will not include hazardous materials. The majority of surfaces are paved to minimize dust creation and traffic into and out of the site is expected to be minimal. The project will not create fumes, odor, vibrations,

and/or significant noise. As a result, this use is not expected to cause a significant detrimental effect on abutting properties.

The project will not have a significant adverse effect on adjacent or nearby property values.

The proposed site development and use are not expected to impact adjacent property values.

The project will not create a hazard to pedestrian or vehicular traffic or significant traffic congestion;

The project is not anticipated to be a hazard to pedestrian or vehicular traffic or cause significant traffic congestion. This project received a MDOT driveway permit after review by the regional traffic engineer. Refer to the attached traffic summary for additional information.

The project will not result in fire danger;

The proposed development provides adequate fire suppression measures, including adequate truck turning radius for the town fire truck, and a stormwater wet pond and dry hydrant for fire suppression water supply.

The project will not result in flood hazards or flood damage, drainage problems, ground or surface water contamination or soil erosion;

The proposed development is not located within a flood zone mapped by FEMA. Erosion and sediment controls will be deployed onsite as described in sheets C2.3 and C3.1 to minimize sediment transport and erosion.

The project will not create a safety hazard because of inadequate access to the site, or buildings for emergency vehicles;

The proposed development provides adequate turning radius and building access for emergency vehicles. Refer to sheet TR1.0 for additional information.

Proposed exterior lighting will not create hazards to motorists traveling on adjacent public streets, is adequate for the safety of occupants and users of the site, and will not damage the value or diminish the usability of adjacent properties;

Proposed exterior lighting includes building mounted lights and a light pole located at the office parking area. This will provide ample lighting and safety for the site users. The proposed lighting is not expected to impact abutting properties.

The proposed project makes provisions for buffers and on-site landscaping which provide adequate protection to neighboring properties from detrimental features of the development. The applicant shall provide a plan prepared by a Registered Landscape Architect, or other qualified professional approved by the Planning Board.

Site use includes a commercial facility and business office area which are not expected to be detrimental to neighboring properties. Any outdoor storage of materials will be fenced in with a

chain-link fence. All disturbed areas onsite will be revegetated with grass. Due to the small size of the development and the site use, the applicant requests a waiver from a formal landscape plan prepared by a registered landscape architect.

The proposed project makes provisions for vehicular parking, loading, unloading, as well as vehicular and pedestrian circulation on the site, and onto adjacent public streets which would neither create hazards to safety nor impose significant burdens on public facilities;

A total of 45 spaces have been provided onsite, which exceeds the required 9 spaces for business office and commercial facility use. Street parking will not be required for the proposed development. Refer to sheet C2.1 for parking and layout and calculations. Walkways have been provided along building exteriors to provide safe entrance and exit from the proposed buildings. The applicant requests a waiver for parking stall dimensions and aisle width for the office parking area. The provided aisle width is 24 feet, reduced from the required 26 feet with parking stall widths of 9 feet, reduced from the required 10 feet, for the office parking area. This waiver for reduced stall sizes will allow the project to minimize impacts to nearby wetland areas. Since adequate parking and walkways are provided onsite, the proposed project is not expected to result in increased hazards of burden on public facilities.

The proposed project makes adequate provisions for the disposal of wastewater and solid waste for the prevention of ground or surface water contamination;

Wastewater from each proposed building will discharge to one of three 1,000-gallon septic tanks. These septic tanks will gravity flow to a pump station located in the landscaped island between the two contractor buildings. This pump station discharges to a septic field located at the northeastern corner of the site. Refer to the HHE-200 included in attachment 5 for additional information on wastewater disposal design.

The proposed site use is not expected to produce a significant amount of solid waste. Solid waste will be disposed of into dumpsters located onsite. Site dumpsters will be screened from view through a chain-link fence with privacy slates.

The proposed project makes adequate provisions to control erosion and sedimentation;

Further erosion and sediment controls will be deployed onsite as described in sheets C2.3 and C3.1 to minimize sediment transport and erosion. These measures include installation of a stabilized construction entrance and perimeter sediment controls.

The proposed project makes adequate provisions to handle storm water run-off and other drainage on the site;

This project requires a MDEP stormwater permit associated with water quality treatment. The majority of the developed is conveyed to a wet pond to provide detention and treatment. This wet pond ultimately discharges to the swale along Alfred Road and a 30-inch diameter existing MDOT culvert (AP#2). In addition to the wet pond, half of each proposed building roof will drain to one of three drip edges. Drip edges provide treatment and detention before discharging offsite. Stormwater from the site ultimately discharges to Lords Brook.

A negligible increase in the peak flows for the 25-year storm event is proposed at AP#2. The flow will be directly conveyed to the existing MDOT 30-inch diameter culvert, which has sufficient capacity to handle the flow. This small increase within the subarea is not expected to negatively impact downgradient areas.

Refer to the pre- and post-development HydroCAD reports for the 25-year storm located in Attachment 5. Refer D1.0 and D2.0 in the Site plans for the subcatchment delineations.

The proposed project provides for a water supply which meets the demands of the proposed use, and meets the needs for fire protection purposes;

A private well will be provided for domestic water supply. Refer to sheet C2.4 for additional information of site utilities layout. Fire suppression water supply will be provided by a dry hydrant and stormwater wet pond. This will be reviewed with the Fire Dept.

The proposed project makes adequate provisions for the transportation, storage and disposal of hazardous substances and materials as defined by State and Federal Law; The storage of chemicals, explosives, or hazardous items as defined by the National Fire Protection Association Code 704, Class 3 or 4 materials are not permitted.

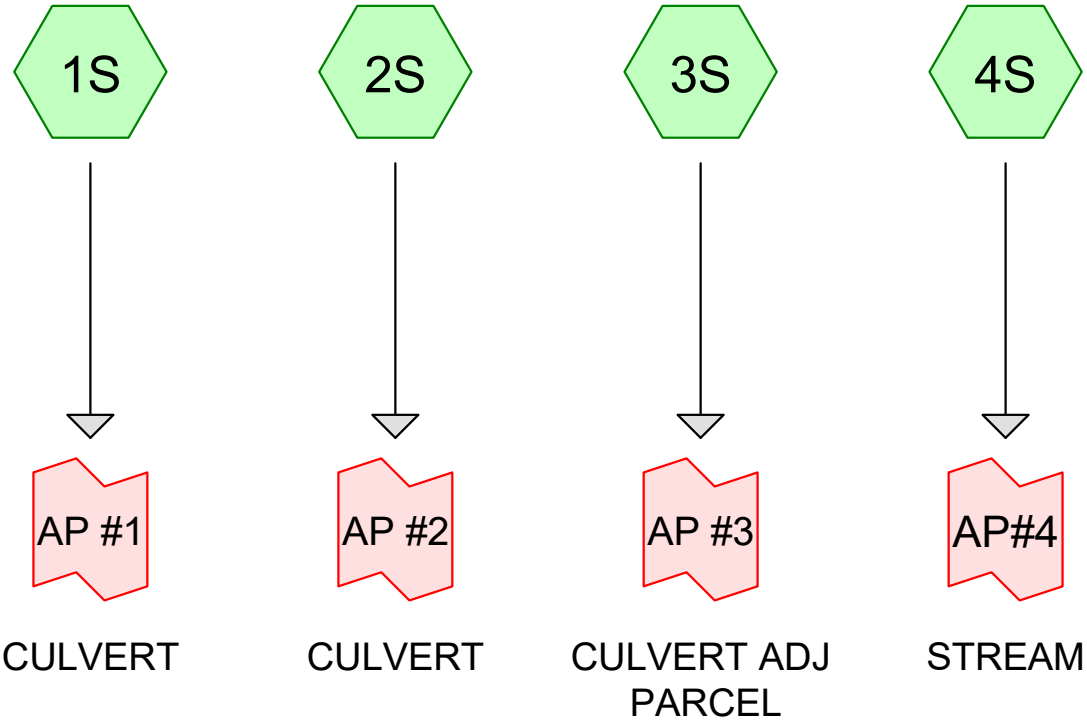
The proposed use will not involve transportation, storage and/or disposal of hazardous substances and materials.

The proposed project will not have an adverse impact on significant scenic vistas or on significant wildlife habitat which could be avoided by reasonable modification of the plan

Forested and wet meadow wetlands are located onsite based on a wetland delineation performed by Albert Frick Associates, Inc. on September 30, 2024. In addition to the freshwater wetlands, a regulated stream was located at the northwestern corner of the site. The proposed development will impact approximately 8,520 square feet of wetlands onsite requiring a NRPA permit. The proposed development seeks to minimize wetland impacts and will not have any impact on the regulated stream. The proposed development will not adversely impact wildlife habitat or scenic vistas.

ATTACHMENT 2

HydroCAD Report



Subcat Reach Pond Link

Routing Diagram for PreDev Model

Prepared by Walsh Engineering Associates, Inc., Printed 5/21/2025

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
72,222	39	>75% Grass cover, Good, HSG A (1S, 2S, 3S)
2,774	98	Impervious (1S, 2S)
99,109	30	Woods, Good, HSG A (2S, 4S)
943	77	Woods, Good, HSG D (2S)
73,712	32	Woods/grass comb., Good, HSG A (1S)
9,493	79	Woods/grass comb., Good, HSG D (1S)
258,253	**36**	**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.02 hrs, 2401 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 1S: Runoff Area=96,321 sf 1.64% Impervious Runoff Depth=0.50"
Flow Length=660' Slope=0.0100 '/' Tc=22.9 min CN=39 Runoff=0.4 cfs 4,047 cf

Subcatchment 2S: Runoff Area=95,263 sf 1.25% Impervious Runoff Depth=0.29"
Flow Length=709' Slope=0.0100 '/' Tc=49.9 min CN=35 Runoff=0.1 cfs 2,329 cf

Subcatchment 3S: Runoff Area=24,060 sf 0.00% Impervious Runoff Depth=0.50"
Flow Length=186' Tc=14.8 min CN=39 Runoff=0.1 cfs 1,011 cf

Subcatchment 4S: Runoff Area=42,609 sf 0.00% Impervious Runoff Depth=0.09"
Flow Length=128' Slope=0.0100 '/' Tc=34.0 min CN=30 Runoff=0.0 cfs 336 cf

Link AP #1: CULVERT Inflow=0.4 cfs 4,047 cf
Primary=0.4 cfs 4,047 cf

Link AP #2: CULVERT Inflow=0.1 cfs 2,329 cf
Primary=0.1 cfs 2,329 cf

Link AP #3: CULVERT ADJ PARCEL Inflow=0.1 cfs 1,011 cf
Primary=0.1 cfs 1,011 cf

Link AP#4: STREAM Inflow=0.0 cfs 336 cf
Primary=0.0 cfs 336 cf

Total Runoff Area = 258,253 sf Runoff Volume = 7,724 cf Average Runoff Depth = 0.36"
98.93% Pervious = 255,479 sf 1.07% Impervious = 2,774 sf

Summary for Subcatchment 1S:

Runoff = 0.4 cfs @ 12.58 hrs, Volume= 4,047 cf, Depth= 0.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
	11,537	39	>75% Grass cover, Good, HSG A
	73,712	32	Woods/grass comb., Good, HSG A
	9,493	79	Woods/grass comb., Good, HSG D
*	1,579	98	Impervious
	96,321	39	Weighted Average
	94,742		98.36% Pervious Area
	1,579		1.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	150	0.0100	0.16		**Sheet Flow, AB** Range n= 0.130 P2= 3.30"
6.0	250	0.0100	0.70		**Shallow Concentrated Flow, BC** Short Grass Pasture Kv= 7.0 fps
1.2	260	0.0100	3.76	11.27	**Trap/Vee/Rect Channel Flow, CD** Bot.W=5.00' D=0.50' Z= 2.0 '/' Top.W=7.00' n= 0.022 Earth, clean & straight
22.9	660	Total			

Summary for Subcatchment 2S:

Runoff = 0.1 cfs @ 13.36 hrs, Volume= 2,329 cf, Depth= 0.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
	36,625	39	>75% Grass cover, Good, HSG A
	56,500	30	Woods, Good, HSG A
	943	77	Woods, Good, HSG D
*	1,195	98	Impervious
	95,263	35	Weighted Average
	94,068		98.75% Pervious Area
	1,195		1.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
38.6	150	0.0100	0.06		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.30"
8.6	257	0.0100	0.50		**Shallow Concentrated Flow, BC** Woodland Kv= 5.0 fps
1.7	71	0.0100	0.70		**Shallow Concentrated Flow, CD** Short Grass Pasture Kv= 7.0 fps
1.0	231	0.0100	3.76	11.27	**Trap/Vee/Rect Channel Flow, DE** Bot.W=5.00' D=0.50' Z= 2.0 '/' Top.W=7.00' n= 0.022 Earth, clean & straight
49.9	709	Total			

Summary for Subcatchment 3S:

Runoff = 0.1 cfs @ 12.46 hrs, Volume= 1,011 cf, Depth= 0.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

Area (sf)	CN	Description
24,060	39	>75% Grass cover, Good, HSG A
24,060		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.3	150	0.0167	0.17		**Sheet Flow, AB** Grass: Short n= 0.150 P2= 3.30"
0.5	36	0.0280	1.17		**Shallow Concentrated Flow, BC** Short Grass Pasture Kv= 7.0 fps
14.8	186	Total			

Summary for Subcatchment 4S:

Runoff = 0.0 cfs @ 15.68 hrs, Volume= 336 cf, Depth= 0.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

Area (sf)	CN	Description
42,609	30	Woods, Good, HSG A
42,609		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.0	128	0.0100	0.06		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.30"

Summary for Link AP #1: CULVERT

Inflow Area = 96,321 sf, 1.64% Impervious, Inflow Depth = 0.50" for 25-yr event
Inflow = 0.4 cfs @ 12.58 hrs, Volume= 4,047 cf
Primary = 0.4 cfs @ 12.58 hrs, Volume= 4,047 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs

Summary for Link AP #2: CULVERT

Inflow Area = 95,263 sf, 1.25% Impervious, Inflow Depth = 0.29" for 25-yr event
Inflow = 0.1 cfs @ 13.36 hrs, Volume= 2,329 cf
Primary = 0.1 cfs @ 13.36 hrs, Volume= 2,329 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs

Summary for Link AP #3: CULVERT ADJ PARCEL

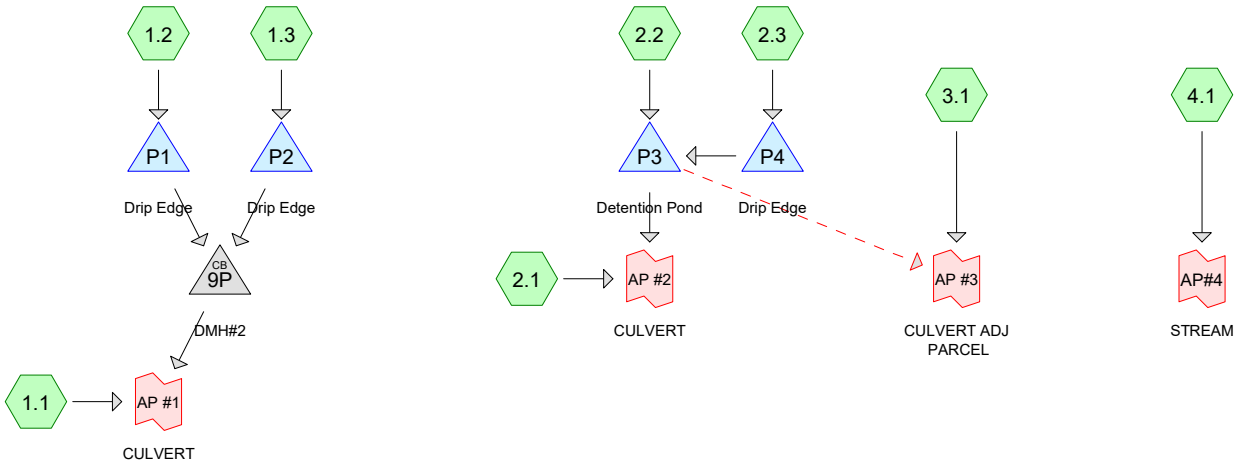
Inflow Area = 24,060 sf, 0.00% Impervious, Inflow Depth = 0.50" for 25-yr event
Inflow = 0.1 cfs @ 12.46 hrs, Volume= 1,011 cf
Primary = 0.1 cfs @ 12.46 hrs, Volume= 1,011 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs

Summary for Link AP#4: STREAM

Inflow Area = 42,609 sf, 0.00% Impervious, Inflow Depth = 0.09" for 25-yr event
Inflow = 0.0 cfs @ 15.68 hrs, Volume= 336 cf
Primary = 0.0 cfs @ 15.68 hrs, Volume= 336 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs



Subcat Reach Pond Link

Routing Diagram for PostDev Model

Prepared by Walsh Engineering Associates, Inc., Printed 5/21/2025

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
122,877	39	>75% Grass cover, Good, HSG A (2.1, 2.2, 3.1, 4.1)
88,218	98	Impervious (1.1, 1.2, 1.3, 2.1, 2.2, 2.3)
42,912	30	Meadow, non-grazed, HSG A (1.1)
4,246	78	Meadow, non-grazed, HSG D (1.1)
258,253	**58**	**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.02 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1.1: Runoff Area=47,569 sf 0.86% Impervious Runoff Depth=0.29"
Flow Length=667' Tc=31.4 min CN=35 Runoff=0.1 cfs 1,163 cf

Subcatchment 1.2: Runoff Area=1,300 sf 100.00% Impervious Runoff Depth=5.96"
Tc=6.0 min CN=98 Runoff=0.2 cfs 646 cf

Subcatchment 1.3: Runoff Area=4,080 sf 100.00% Impervious Runoff Depth=5.96"
Tc=6.0 min CN=98 Runoff=0.6 cfs 2,027 cf

Subcatchment 2.1: Runoff Area=17,344 sf 14.77% Impervious Runoff Depth=1.09"
Tc=6.0 min CN=48 Runoff=0.4 cfs 1,582 cf

Subcatchment 2.2: Runoff Area=158,747 sf 47.74% Impervious Runoff Depth=2.68"
Tc=6.0 min CN=67 Runoff=11.3 cfs 35,479 cf

Subcatchment 2.3: Runoff Area=4,080 sf 100.00% Impervious Runoff Depth=5.96"
Tc=6.0 min CN=98 Runoff=0.6 cfs 2,027 cf

Subcatchment 3.1: Runoff Area=13,786 sf 0.00% Impervious Runoff Depth=0.50"
Tc=6.0 min CN=39 Runoff=0.1 cfs 579 cf

Subcatchment 4.1: Runoff Area=11,347 sf 0.00% Impervious Runoff Depth=0.50"
Flow Length=55' Slope=0.0180 '/' Tc=6.2 min CN=39 Runoff=0.1 cfs 477 cf

Pond 9P: DMH#2 Peak Elev=194.11' Inflow=0.4 cfs 2,558 cf
6.0" Round Culvert n=0.013 L=98.2' S=0.0092 '/' Outflow=0.4 cfs 2,558 cf

Pond P1: Drip Edge Peak Elev=195.33' Storage=71 cf Inflow=0.2 cfs 646 cf
4.0" Round Culvert n=0.013 L=6.9' S=0.0145 '/' Outflow=0.2 cfs 618 cf

Pond P2: Drip Edge Peak Elev=196.24' Storage=441 cf Inflow=0.6 cfs 2,027 cf
4.0" Round Culvert n=0.013 L=125.0' S=0.0100 '/' Outflow=0.2 cfs 1,940 cf

Pond P3: Detention Pond Peak Elev=193.77' Storage=26,197 cf Inflow=11.5 cfs 37,419 cf
Primary=0.3 cfs 27,113 cf Secondary=0.0 cfs 0 cf Outflow=0.3 cfs 27,113 cf

Pond P4: Drip Edge Peak Elev=196.01' Storage=400 cf Inflow=0.6 cfs 2,027 cf
4.0" Round Culvert n=0.013 L=29.7' S=0.0421 '/' Outflow=0.3 cfs 1,940 cf

Link AP #1: CULVERT Inflow=0.4 cfs 3,721 cf
Primary=0.4 cfs 3,721 cf

Link AP #2: CULVERT Inflow=0.4 cfs 28,695 cf
Primary=0.4 cfs 28,695 cf

Link AP #3: CULVERT ADJ PARCEL Inflow=0.1 cfs 579 cf
Primary=0.1 cfs 579 cf

Link AP#4: STREAM Inflow=0.1 cfs 477 cf
Primary=0.1 cfs 477 cf

Total Runoff Area = 258,253 sf Runoff Volume = 43,979 cf Average Runoff Depth = 2.04"
65.84% Pervious = 170,035 sf 34.16% Impervious = 88,218 sf

Summary for Subcatchment 1.1:

Runoff = 0.1 cfs @ 12.93 hrs, Volume= 1,163 cf, Depth= 0.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
	4,246	78	Meadow, non-grazed, HSG D
	42,912	30	Meadow, non-grazed, HSG A
*	411	98	Impervious
	47,569	35	Weighted Average
	47,158		99.14% Pervious Area
	411		0.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.7	150	0.0067	0.12		**Sheet Flow, AB** Grass: Short n= 0.150 P2= 3.30"
9.8	325	0.0062	0.55		**Shallow Concentrated Flow, BC** Short Grass Pasture Kv= 7.0 fps
0.9	192	0.0100	3.76	11.27	**Trap/Vee/Rect Channel Flow, CD** Bot.W=5.00' D=0.50' Z= 2.0 '/' Top.W=7.00' n= 0.022 Earth, clean & straight
31.4	667	Total			

Summary for Subcatchment 1.2:

Runoff = 0.2 cfs @ 12.08 hrs, Volume= 646 cf, Depth= 5.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	1,300	98	Impervious
	1,300		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min**

Summary for Subcatchment 1.3:

Runoff = 0.6 cfs @ 12.08 hrs, Volume= 2,027 cf, Depth= 5.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	4,080	98	Impervious
	4,080		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min**

Summary for Subcatchment 2.1:

Runoff = 0.4 cfs @ 12.11 hrs, Volume= 1,582 cf, Depth= 1.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	2,561	98	Impervious
	14,783	39	>75% Grass cover, Good, HSG A
	17,344	48	Weighted Average
	14,783		85.23% Pervious Area
	2,561		14.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min**

Summary for Subcatchment 2.2:

Runoff = 11.3 cfs @ 12.09 hrs, Volume= 35,479 cf, Depth= 2.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	75,786	98	Impervious
	82,961	39	>75% Grass cover, Good, HSG A
	158,747	67	Weighted Average
	82,961		52.26% Pervious Area
	75,786		47.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min**

Summary for Subcatchment 2.3:

Runoff = 0.6 cfs @ 12.08 hrs, Volume= 2,027 cf, Depth= 5.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	4,080	98	Impervious
	4,080		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min**

Summary for Subcatchment 3.1:

Runoff = 0.1 cfs @ 12.32 hrs, Volume= 579 cf, Depth= 0.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

Area (sf)	CN	Description
13,786	39	>75% Grass cover, Good, HSG A
13,786		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min**

Summary for Subcatchment 4.1:

Runoff = 0.1 cfs @ 12.33 hrs, Volume= 477 cf, Depth= 0.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-yr Rainfall=6.20"

Area (sf)	CN	Description
11,347	39	>75% Grass cover, Good, HSG A
11,347		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	55	0.0180	0.15		**Sheet Flow, AB** Grass: Short n= 0.150 P2= 3.30"

Summary for Pond 9P: DMH#2

Inflow Area = 5,380 sf,100.00% Impervious, Inflow Depth = 5.71" for 25-yr event
Inflow = 0.4 cfs @ 12.16 hrs, Volume= 2,558 cf
Outflow = 0.4 cfs @ 12.16 hrs, Volume= 2,558 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.4 cfs @ 12.16 hrs, Volume= 2,558 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Peak Elev= 194.11' @ 12.16 hrs
Flood Elev= 196.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	193.60'	**6.0" Round Culvert** L= 98.2' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 193.60' / 192.70' S= 0.0092 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=0.4 cfs @ 12.16 hrs HW=194.11' (Free Discharge)
1=Culvert (Inlet Controls 0.4 cfs @ 1.94 fps)

Summary for Pond P1: Drip Edge

Inflow Area = 1,300 sf,100.00% Impervious, Inflow Depth = 5.96" for 25-yr event
Inflow = 0.2 cfs @ 12.08 hrs, Volume= 646 cf
Outflow = 0.2 cfs @ 12.13 hrs, Volume= 618 cf, Atten= 15%, Lag= 3.0 min
Primary = 0.2 cfs @ 12.13 hrs, Volume= 618 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Peak Elev= 195.33' @ 12.13 hrs Surf.Area= 280 sf Storage= 71 cf
Flood Elev= 197.95' Surf.Area= 840 sf Storage= 280 cf

Plug-Flow detention time= 60.5 min calculated for 618 cf (96% of inflow)
Center-of-Mass det. time= 34.3 min (778.9 - 744.7)

Volume	Invert	Avail.Storage	Storage Description
#1	196.70'	112 cf	**3.50'W x 80.00'L x 1.00'H Resevoir** 280 cf Overall x 40.0% Voids
#2	195.70'	56 cf	**3.50'W x 80.00'L x 1.00'H Filter** 280 cf Overall x 20.0% Voids
#3	194.70'	112 cf	**3.50'W x 80.00'L x 1.00'H underdrain** 280 cf Overall x 40.0% Voids
		280 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	194.95'	**4.0" Round Culvert** L= 6.9' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 194.95' / 194.85' S= 0.0145 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf

Primary OutFlow Max=0.2 cfs @ 12.13 hrs HW=195.33' (Free Discharge)
1=Culvert (Inlet Controls 0.2 cfs @ 1.75 fps)

Summary for Pond P2: Drip Edge

Inflow Area = 4,080 sf,100.00% Impervious, Inflow Depth = 5.96" for 25-yr event
Inflow = 0.6 cfs @ 12.08 hrs, Volume= 2,027 cf
Outflow = 0.2 cfs @ 12.28 hrs, Volume= 1,940 cf, Atten= 58%, Lag= 11.6 min
Primary = 0.2 cfs @ 12.28 hrs, Volume= 1,940 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Peak Elev= 196.24' @ 12.28 hrs Surf.Area= 1,734 sf Storage= 441 cf
Flood Elev= 197.95' Surf.Area= 2,601 sf Storage= 867 cf

Plug-Flow detention time= 74.3 min calculated for 1,940 cf (96% of inflow)
Center-of-Mass det. time= 48.5 min (793.1 - 744.7)

Volume	Invert	Avail.Storage	Storage Description
#1	196.70'	347 cf	**4.25'W x 204.00'L x 1.00'H Resevoir** 867 cf Overall x 40.0% Voids
#2	195.70'	173 cf	**4.25'W x 204.00'L x 1.00'H Filter** 867 cf Overall x 20.0% Voids
#3	194.70'	347 cf	**4.25'W x 204.00'L x 1.00'H underdrain** 867 cf Overall x 40.0% Voids
		867 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	194.95'	**4.0" Round Culvert** L= 125.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 194.95' / 193.70' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf

Primary OutFlow Max=0.2 cfs @ 12.28 hrs HW=196.24' (Free Discharge)
1=Culvert (Barrel Controls 0.2 cfs @ 2.75 fps)

Summary for Pond P3: Detention Pond

Inflow Area = 162,827 sf, 49.05% Impervious, Inflow Depth = 2.76" for 25-yr event
Inflow = 11.5 cfs @ 12.09 hrs, Volume= 37,419 cf
Outflow = 0.3 cfs @ 17.70 hrs, Volume= 27,113 cf, Atten= 97%, Lag= 336.3 min
Primary = 0.3 cfs @ 17.70 hrs, Volume= 27,113 cf
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Peak Elev= 193.77' @ 17.70 hrs Surf.Area= 16,340 sf Storage= 26,197 cf
Flood Elev= 195.00' Surf.Area= 18,839 sf Storage= 47,682 cf

Plug-Flow detention time= 786.0 min calculated for 27,102 cf (72% of inflow)
Center-of-Mass det. time= 690.7 min (1,531.6 - 840.9)

Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	45,336 cf	**Wet Pond (Prismatic)** Listed below
#2	192.00'	2,346 cf	**forebay (Prismatic)** Listed below (Recalc)
		47,682 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	9,796	0	0
192.01	13,073	114	114
193.00	14,406	13,602	13,716
194.00	15,796	15,101	28,817
195.00	17,241	16,519	45,336

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	160	0	0
193.00	493	327	327
194.00	974	734	1,060
195.00	1,598	1,286	2,346

Device	Routing	Invert	Outlet Devices
#1	Device 4	192.70'	**3.2" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Device 4	189.50'	**1.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 4	194.00'	**4.0' long x 1.25' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	189.00'	**15.0" Round Culvert** L= 42.6' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 189.00' / 188.00' S= 0.0235 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#5	Secondary	194.10'	**10.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.3 cfs @ 17.70 hrs HW=193.77' (Free Discharge)
└**4=Culvert** (Passes 0.3 cfs of 9.5 cfs potential flow)
  ├**1=Orifice/Grate** (Orifice Controls 0.3 cfs @ 4.66 fps)
  ├**2=Orifice/Grate** (Orifice Controls 0.1 cfs @ 9.90 fps)
  └**3=Sharp-Crested Rectangular Weir** (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=192.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

Summary for Pond P4: Drip Edge

Inflow Area = 4,080 sf,100.00% Impervious, Inflow Depth = 5.96" for 25-yr event
Inflow = 0.6 cfs @ 12.08 hrs, Volume= 2,027 cf
Outflow = 0.3 cfs @ 12.20 hrs, Volume= 1,940 cf, Atten= 45%, Lag= 7.2 min
Primary = 0.3 cfs @ 12.20 hrs, Volume= 1,940 cf

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs
Peak Elev= 196.01' @ 12.20 hrs Surf.Area= 1,734 sf Storage= 400 cf
Flood Elev= 197.95' Surf.Area= 2,601 sf Storage= 867 cf

Plug-Flow detention time= 72.1 min calculated for 1,939 cf (96% of inflow)
Center-of-Mass det. time= 46.7 min (791.4 - 744.7)

Volume	Invert	Avail.Storage	Storage Description
#1	196.70'	347 cf	**4.25'W x 204.00'L x 1.00'H Resevoir** 867 cf Overall x 40.0% Voids
#2	195.70'	173 cf	**4.25'W x 204.00'L x 1.00'H Filter** 867 cf Overall x 20.0% Voids
#3	194.70'	347 cf	**4.25'W x 204.00'L x 1.00'H underdrain** 867 cf Overall x 40.0% Voids
		867 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	194.95'	**4.0" Round Culvert** L= 29.7' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 194.95' / 193.70' S= 0.0421 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf

Primary OutFlow Max=0.3 cfs @ 12.20 hrs HW=196.01' (Free Discharge)
1=Culvert (Inlet Controls 0.3 cfs @ 3.59 fps)

Summary for Link AP #1: CULVERT

Inflow Area = 52,949 sf, 10.94% Impervious, Inflow Depth = 0.84" for 25-yr event
Inflow = 0.4 cfs @ 12.16 hrs, Volume= 3,721 cf
Primary = 0.4 cfs @ 12.16 hrs, Volume= 3,721 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs

Summary for Link AP #2: CULVERT

Inflow Area = 180,171 sf, 45.75% Impervious, Inflow Depth > 1.91" for 25-yr event
Inflow = 0.4 cfs @ 12.11 hrs, Volume= 28,695 cf
Primary = 0.4 cfs @ 12.11 hrs, Volume= 28,695 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs

Summary for Link AP #3: CULVERT ADJ PARCEL

Inflow Area = 13,786 sf, 0.00% Impervious, Inflow Depth = 0.50" for 25-yr event
Inflow = 0.1 cfs @ 12.32 hrs, Volume= 579 cf
Primary = 0.1 cfs @ 12.32 hrs, Volume= 579 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs

Summary for Link AP#4: STREAM

Inflow Area = 11,347 sf, 0.00% Impervious, Inflow Depth = 0.50" for 25-yr event
Inflow = 0.1 cfs @ 12.33 hrs, Volume= 477 cf
Primary = 0.1 cfs @ 12.33 hrs, Volume= 477 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.02 hrs

ATTACHMENT 3

Wetlands Report

Albert Frick Associates, Inc
Environmental Consultants
731 Foss Road Limerick, ME 04048
(207) 839-5563 FAX (207) 839-5564
www.albertfrick.com info@albertfrick.com

October 7, 2024

Todd Gammon, P.E.
Walsh Engineering Associates
One Karen Drive, Suite 2A
Westbrook, ME 04092

RE: Wetland Delineation – 1713 Alfred Road, Lyman

Dear Todd:

On September 30, 2024, I completed a wetland delineation on of the above-referenced property. A three-parameter approach outlined in the U.S. Army Corps of Engineers, Wetland Delineation Manual (1987 version) and the supplemental northeast region update was utilized. Wetlands were identified on the combined basis of vegetation, hydric soils and hydrology, where all characteristics are present and dominant. The palustrine wetland habitats were delineated with blue flagging. Forested and wet meadow wetlands were found within the wetland survey area. One Maine Department of Environmental Protection (MDEP) regulated stream was located. No vernal pool (VP) habitat or wetlands of special significance were identified. Attached is a site plan illustrating the location of the wetlands, stream, and drainages which were located with a Trimble Geo 7x hand-held submeter GPS unit.

Maine Department of Environmental Protection (DEP-Natural Resources Protection Act):

Wetlands:

Any wetland impacts greater than 4,300 sq. ft. will require DEP permitting. Among these activities are:

- Dredging, bulldozing, removing or displacing soil, sand, vegetations or other materials;
- Draining or otherwise dewatering
- Filling, including adding sand or other material to a sand dune; or
- Any construction, repair, or alteration of any permanent structure

The application process compels an applicant to first avoid impacts if possible, and where not possible, minimizes impacts to the resource. The DEP Application process provides a three-tiered review process as follows:

The **Tier 1** review process applies to any activity that involves a freshwater wetland alteration up to 15,000 sq. ft. and does not involve wetlands described in 'Projects not eligible for Tier I or Tier 2 review'

The **Tier 2** review process applies to any activity that involves a freshwater wetland alteration of 15,000 sq. ft. up to 1 acre and does not involve wetlands referenced in the next paragraph.

The **Tier 3** review process applies to any activity that involves a freshwater wetland alteration of one acre or more or an alteration listed in the following paragraph.

Projects that are not eligible for Tier 1 or Tier 2 review unless the MDEP determines that the activity will not negatively affect the freshwater wetlands or other protected natural resources present:

A. Activities located within 250 feet of:
1. A coastal wetland or
2. The normal high-water line, and within the same watershed, of any lake or pond classified as a Great Pond (i.e., in excess of 10 surface acres);

B. Activities occurring within freshwater wetlands, other than artificial ponds or impoundments, containing under normal circumstances at least 20,000 sq. ft. of aquatic vegetation, emergent marsh vegetation or open water;

C. Activities occurring within freshwater wetlands that are inundated during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Management Agency (FEMA) or other site-specific information;

D. Activities occurring within freshwater wetlands containing significant wildlife habitat that has been mapped, identified, or defined in either subsection of MDEP rule.

E. Activities occurring in peatlands dominated by shrubs, and sphagnum moss; or

F. Activities occurring within 25 feet of a river, stream or brook.

Streams:

The DEP administers a 75-foot setback from streams. DEP permits are necessary for intrusion into the stream setback. Any stream crossing will require a MDEP Permit-By-Rule.

Army Corps of Engineers (Clean Water Act):

Wetlands:

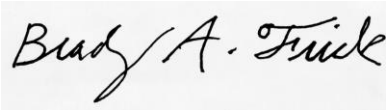
Dredge or fill activities in any of the wetlands will require Corps review per Section 404 of the Clean Water Act (Maine General Permit- "Maine GP"). Compensation *is* required for wetland impacts of 5,000 sq. ft. or greater, therefore I would recommend consultation prior to a permit submission requiring wetland impacts.

Town of Lyman:

Consultation with the town is recommended to verify any additional setbacks or regulations pertaining to site development.

Please contact me if you have any questions or matters for further discussion. I can be reached by phone at 756-9117 or by email at Brady@albertfrick.com.

Respectfully,



Brady A. Frick
President
USACE Certified Wetland Delineator

Enclosure (via email) Wetland Delineation Plan

ATTACHMENT 4

Traffic Summary

Traffic Summary
Site Development
1713 Alfred Road Lyman, ME

General
A traffic study was performed by Barton & Loguidice on February 17, 2025, for the proposed development. The study was reviewed by the MDOT regional traffic engineer. An MDOT driveway permit was obtained for this project.

Peak Trip Generation
Using peak hour trip generations from a similar site, it was estimated that the proposed development will result in 18 trips during the weekday AM peak hour and 29 trips during the weekday PM hour. This results in the facility being a low-volume trip generator that does not require a MDOT Traffic Movement Permit.

Capacity Analysis
The analysis shows with the development of the project, the average delay on the eastbound and westbound approaches is expected to increase by less than 1 second in each peak hour. The analysis shows that the site entrance approach is expected to operate at LOS A in the AM peak hour, and LOS C, with 24 seconds of delay, in the PM peak hour. The project will not have a significant impact on Alfred Road traffic.

Vehicle Site Distance
Site distances were measured from the proposed site entrance looking at Alfred Road. Looking left down Alfred Road from the proposed driveway, the site distance is estimated to be over 1,000 feet while looking right was measured to be 990 feet. These site distances exceed the site distance requirement provided in the Town of Lyman Zoning Ordinance of 10 feet for every mile per hour (550 feet for a speed limit of 55 miles per hour).

Accident analysis
A review of the 3 year accident data provided by the MDOT, shows that this stretch of Alfred Road matches the average crash rate for State of Maine arterials of this traffic volume.

ATTACHMENT 5

HHE-200s

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 FAX (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	LYMAN
Street or Road	1713 ALFRED ROAD
Subdivision, Lot #	

OWNER/APPLICANT INFORMATION

Name (last, first, MI): DANCAUSE BRIAN ■ Owner ☐ Applicant

Mailing Address of [redacted] Applicant	c/o WALSH ENGINEERING
Daytime Tel. #	229-6447

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/Applicant _____ Date _____

>>CAUTION: LPI APPROVAL REQUIRED<<

Town/City _____ Permit # _____

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

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

Fee $ _____ State Fee Fee $ _____ Locally Adopted Fee
Copy: [ ] Owner [ ] Town [ ] State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued 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 # 7 Lot # 64

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.

Local Plumbing Inspector Signature _____ (1st) Date Approved _____ (2nd) Date Approved _____

PERMIT INFORMATION

TYPE OF APPLICATION

■ 1. First Time System
☐ 2. Replacement System
Type Replaced: _____
Year Installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% 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(2000gpd+)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous components

SIZE OF PROPERTY

8.5 ☐ SQ. FT. ■ ACRES

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No of Units: _____
■ 3. Other: COMMERCIAL BUILDINGS (specify)

Current Use ☐ Seasonal ☐ Year Round ■ Undeveloped

SHORELAND ZONING

☐ Yes ■ No

TYPE OF WATER SUPPLY

■ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☐ 4. Public ☐ 5. Other:

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

3 TREATMENT TANKS

ASSURE WATERTIGHTNESS
■ 1. Concrete
■ a. Regular
☐ b. Low Profile
H-20 RATED IF IN TRAVELLED AREAS
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 3-1000's GAL.
SEE NOTE ON PAGE 3

DISPOSAL FIELD TYPE & SIZE

■ 1. Stone Bed ☐ 2. Stone Trench
☐ 3. Proprietary Device
☐ a. Cluster array ☐ c. Linear
☐ b. Regular ☐ d. H-20 loaded
☐ 4. Other: _____
SIZE: 1500 ■ sq. ft. ☐ lin. ft.
H-20 RATED IF IN TRAVELLED AREAS

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

552 gallons per day
BASED ON:
■ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C (other facilities)
SHOW CALCULATIONS for other facilities
COMMERICAL BUILDINGS
UP TO 46 EMLOYEES
AT 12 GALLONS PER DAY
EACH = 552 GPD
☐ 3. Section 4G (meter readings)
ATTACH WATER-METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
5 / C
at Observation Hole # TP 1
Depth 20 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

■ 1. Medium - 2.6 sq.ft./gpd
☐ 2. Medium-Large - 3.3 sq.ft./gpd
☐ 3. Large - 4.1 sq.ft./gpd
☐ 4. Extra-Large - 5.0 sq.ft./gpd

ASSURE WATERTIGHTNESS EFFLUENT/EJECTOR PUMP TO BE DESIGNED BY OTHERS

☐ 1. Not required
☐ 2. May be required
■ 3. Required
Specify only for engineered systems:
SEE NOTE ON PAGE 3
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. N43 d 28 m 52.10 s
Lon. W70 d 37 m 31.97 s
if g.p.s., state margin of error _____

SITE EVALUATOR STATEMENT

I certify that on 9/3/24 (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 Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	352 SE #	10/7/24 Date
BRADY A. FRICK Site Evaluator Name Printed	(207) 839-5563 Telephone Number	INFO@ALBERTFRICK.COM E-mail Address

ALBERT FRICK ASSOCIATES - 731 FOSS ROAD, LIMERICK, MAINE 04048 - (207) 839-5563

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

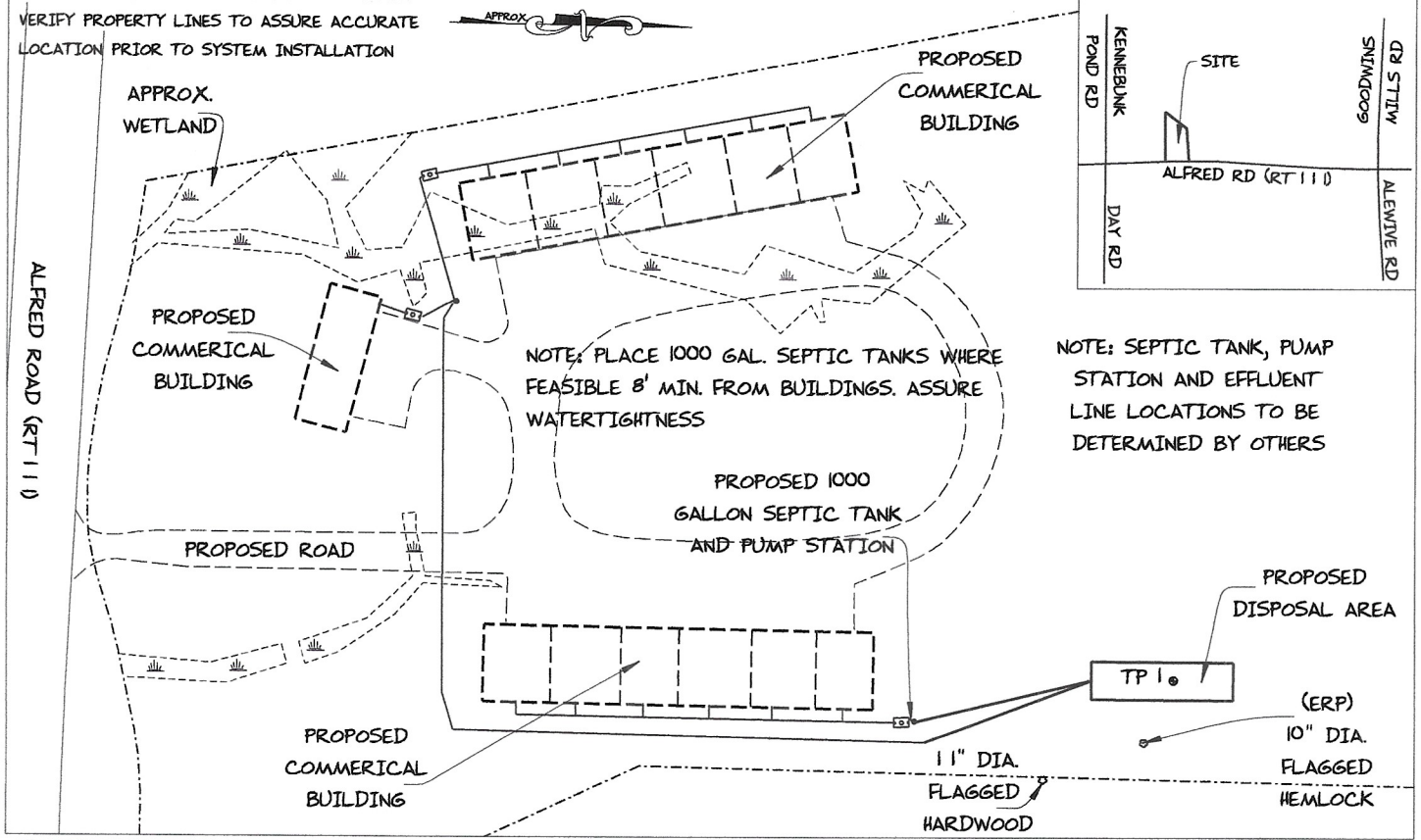
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health and Human Services
Division of Environmental Health
(207) 287-2070 FAX (207) 287-4172

Town, City, Plantation	Street, Road Subdivision	Owner's Name
LYMAN	1713 ALFRED ROAD	BRIAN DANCAUSE

ALBERT FRICK ASSOCIATES ARE NOT SURVEYORS.
PROPERTY INFORMATION APPROXIMATED PER TOWN TAX MAP AND AERIAL PHOTOGRAPH.
VERIFY PROPERTY LINES TO ASSURE ACCURATE LOCATION PRIOR TO SYSTEM INSTALLATION

SITE PLAN Scale 1" = 100 Ft. or as shown



SITE LOCATION PLAN (Attach Map from Maine Atlas Recommended)

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

Observation Hole TP 1 ■ Test Pit ☐ Boring
_____" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0	LOAMY SAND		BROWN	
10		FRIABLE	GRAY	
20	SAND		YELLOW BROWN	COMMON, DISTINCT
30				
40			LIGHT YELLOW BROWN	△△△ FREE WATER
50				

Soil Classification	Slope	Limiting Factor	
5 Profile / C Condition	0-3 %	20"	■ 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

Brad A. Frick — Site Evaluator Signature
352 — SE #
10/7/24 — Date

ALBERT FRICK ASSOCIATES – 731 FOSS ROAD, LIMERICK, MAINE 04048 – (207) 839-5563

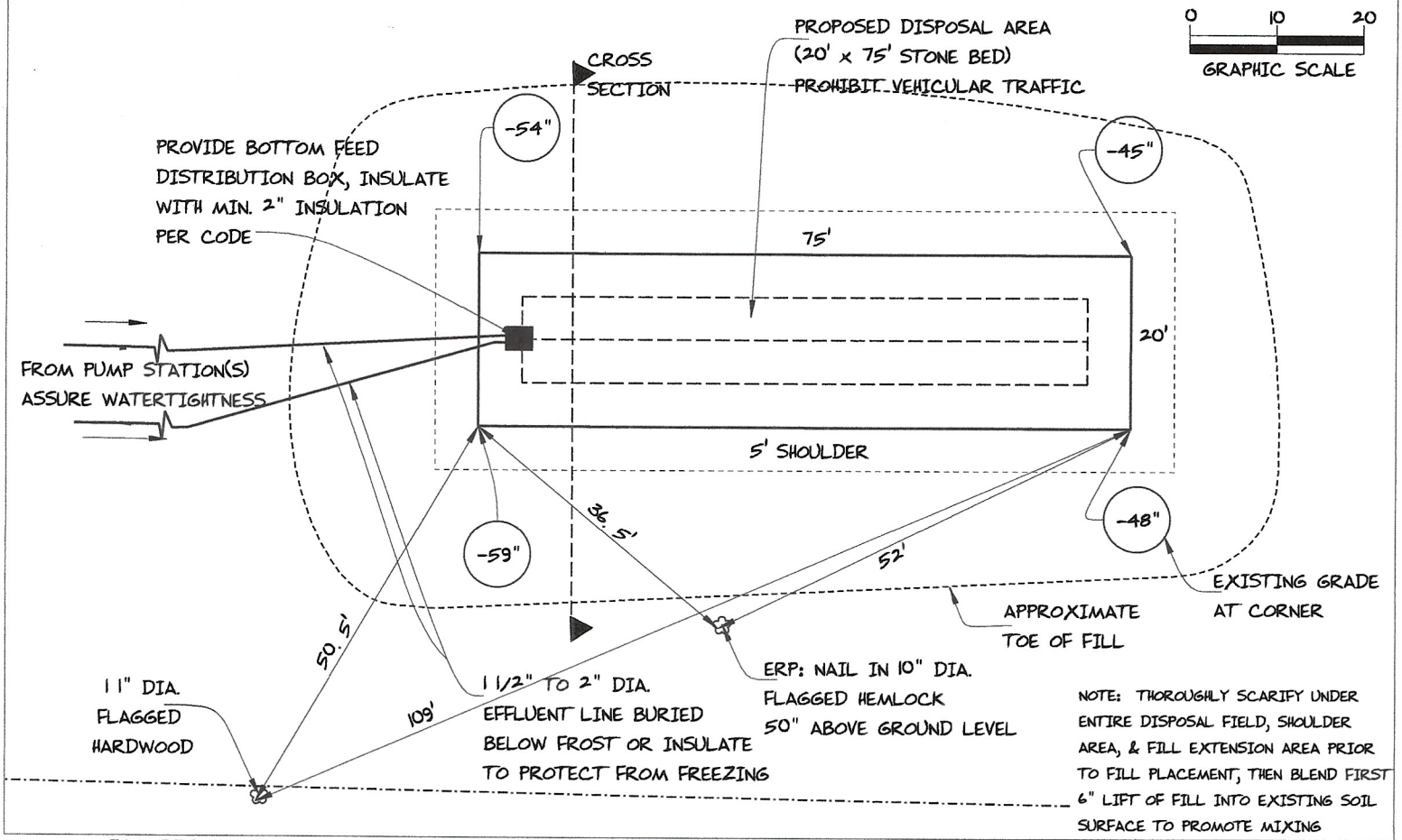
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health and Human Services
Division of Environmental Health
(207) 287-2070 FAX (207) 287-4172

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
LYMAN	1713 ALFRED ROAD	BRIAN DANCAUSE

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): ± 28" - 37"
Depth of Fill (Downslope): ± 31" - 42"
DEPTHS AT CROSS-SECTION (shown below)

CONSTRUCTION ELEVATIONS

Finished Grade Elevation
Top of Distribution Pipe or Proprietary Device
Bottom of Disposal Area

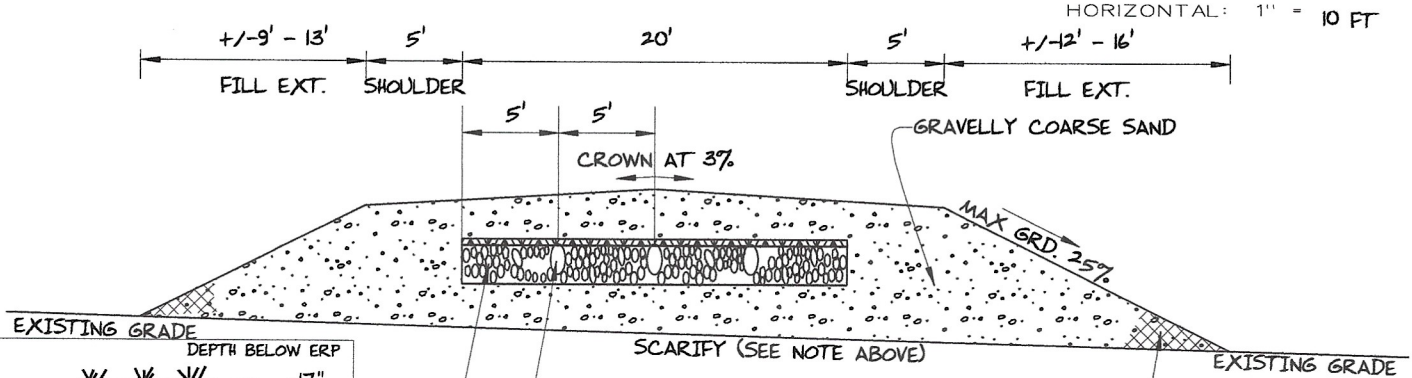
SEE DETAIL BELOW

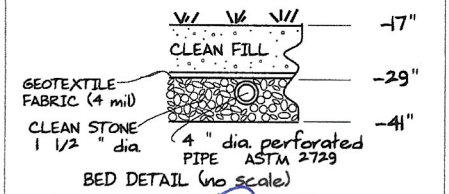
ELEVATION REFERENCE POINT

Location & Description 10" DIA. FLAGGED HEMLOCK, NAIL 50" ABOVE BASE
Reference Elevation is: 0.0" or _____

DISPOSAL AREA CROSS SECTION

SCALE:
VERTICAL: 1" = 5 FT
HORIZONTAL: 1" = 10 FT





BED DETAIL (no scale)

Site Evaluator Signature

352
SE #

10/7/24
Date

ALBERT FRICK ASSOCIATES – 731 FOSS ROAD, LIMERICK, MAINE 04048 – (207) 839-5563

Albert Frick Associates, Inc.
731 Foss Road Limerick, Maine 04048
(207) 839-5563

LYMAN	1713 ALFRED ROAD	N/F DANCAUSE
TOWN	LOCATION	APPLICANT'S NAME

1) The Plumbing and Subsurface Wastewater Disposal Rules adopted by the State of Maine, Division of Health and Human Services pursuant to 22 M.R.S.A. § 42 (the "Rules") are incorporated herein by reference and made a part of this application and shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system Installer should contact Albert Frick Associates, Inc. 839-5563, if there are any questions concerning materials, procedures or designs. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the Rules and with all state and municipal laws and ordinances pertaining to the permitting, inspection and construction of subsurface wastewater disposal systems.

2) This application is intended to represent facts pertinent to the Rules only. It shall be the responsibility of the owner/applicant, system Installer and/or building contractor to determine compliance with and to obtain permits under all applicable local, state and/or federal laws and regulations (including, without limitation, Natural Resources Protection Act, wetland regulations, zoning ordinances, subdivision regulations, Site Location of Development Act and Minimum Lot Size law) before installing this system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations. Prior to the commencement of construction/installation, the local plumbing inspector or Code Enforcement Officer shall inform the owner/applicant and Albert Frick Associates, Inc of any local ordinances which are more restrictive than the Rules in order that the design may be amended. All designs are subject to review by local, state and/or federal authorities. Albert Frick Associates, Inc.'s liability shall be limited to revisions required by regulatory agencies pursuant to laws or regulations in effect at the time of preparation of this application.

3) All information shown on this application relating to property lines, well locations, subsurface structures and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based upon information provided by the owner/applicant and has been relied upon by Albert Frick Associates, Inc. in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information. Well locations on abutting properties but not readily visible above grade should be confirmed by the owner/applicant prior to system installation to assure minimum setbacks.

4) Installation of a garbage (grinder) disposal is not recommended. If one is installed, an additional 1000 gallon septic tank or a septic tank filter shall be connected in series to the proposed septic tank. Risers and covers should be installed over the septic tank outlet per the "Rules" to allow for easy maintenance of filter.

5) The septic tank should be pumped within two years of installation and subsequently as recommended by the pump service, but in no event should the septic tank be pumped less often than every three years.

The system user shall avoid introducing kitchen grease or fats into this system. Chemicals such as septic tank cleaners and/or chlorine or water treatment backwash and controlled or hazardous substances shall not be disposed of in this system. Additives such as yeast or enzymes are discouraged, since they have not been proven to extend system life.

6) All septic tanks, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration. Risers and covers should be properly installed to provide access while preventing surface water intrusion to finished ground surface.
One 18" dia. (min) riser and cover is required over septic tank

Vehicular traffic over disposal system is prohibited unless specifically designed with H-20 rated components.

ATTACHMENT TO SUBSURFACE WASTEWATER DISPOSAL APPLICATION

LYMAN	1713 ALFRED ROAD	N/F DANCAUSE
TOWN	LOCATION	APPLICANT'S NAME

7) The actual waste water flow or number of bedrooms shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed

8) The general minimum setbacks between a well (public or private) and septic system serving a single family residence is 100-300 feet, unless the local municipality has a more stringent requirement. A well installed by an abutter within the minimum setback distances prior to the issuance of a permit for the proposed disposal system may void this design.

9) When a gravity system is proposed: BEFORE CONSTRUCTION/INSTALLATION BEGINS, the system installer or building contractor shall review the elevations of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum pitch requirements. In gravity systems, the invert of the septic tank(s) outlet(s) should be at least 4 inches above the invert of the distribution box outlet at the disposal area.

10) When an effluent pump is required: Pump stations should be sized per manufacturer's specifications to meet lift requirements and friction loss. Provisions shall be made to make certain that surface and ground water does not enter the septic tank or pump station, by sealing/grouting all seams and connections, and by placement of a riser and 18" dia. (min.) cover at or above grade.
An alarm device warning of a pump failure shall be installed. Also, when pumping is required of a chamber system, install a ' T' connection in the distribution box and place 3 inches of stone or a splash plate in the first chamber. Insulate gravity pipes, pump lines and the distribution box as necessary to prevent freezing.

11) On all systems, remove the vegetation, organic duff and old fill material from under the disposal area and any fill extension. Additional fill beyond indicated on plan may be necessary to replace organic matter. On sites where the proposed system is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soil by roto-tilling or scarifying with teeth of backhoe to a depth of at least 8 inches over the entire disposal and fill extension area to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper than 8 inches and compact before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage or differential settling). Do not use wheeled equipment on the scarified soil area until after 12 inches of fill is in place. Keep equipment off proprietary devices. Divert the surface water away from the disposal area by ditching or shallow landscape swales.

12) Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more that 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process.

13) Do not install systems on loamy, silty, or clayey soils during wet periods since soil smearing/glazing may seal off the soil interface.

14) Seed all filled and disturbed surfaces with perennial grass seed, with 4" min. soil or soil amendment mix suitable for growing, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover system. Woody trees or shrubs are not permitted on the disposal area or fill extensions.

15) If an advanced wastewater treatment unit is part of the design, the system shall be operated and maintained per manufacturer's specifications.

Albert Frick Associates, Inc.
731 Foss Road Limerick, Maine 04048
(207) 839-5563

ATTACHMENT 6

Site Plans