



File: 419

October 3, 2018

Ms. Amanda Lessard
Town of Windham
8 School Rd
Windham, ME 04062

RE: LUMBER WAREHOUSE, 989 ROOSEVELT TRAIL

Dear Amanda,

On behalf of 989 Roosevelt Trail LLC, John Hilmer. we are pleased to submit the attached plans for the renovation and addition to 989 Roosevelt Trail. This is the California Paint Store Building that has been vacant for some time.

The proposed uses in the building will include a woodworking shop, building custom cabinets and doors, lumber storage area in the addition, a small retail space in the existing building with the existing residential unit renovated in the existing building for residential use. It is the intent of the project to use the new addition to store lumber for retail sales and do small woodworking project that will be sold in the retail space. Complimentary items will also be sold in the retail space, such as tools and woodworking items. Most sales will be by phone with off site delivery to the job site.

Attached is the deed for the site. Note the Portland Pipeline has three pipes that cross the site. We have worked with them to develop the exit drive for trucks and are continuing to work with them for the building location. You will be provided a copy of their approval when it is ready. No other easements encumber the site.

The site is currently serviced with water from Portland Water District. This will continue with this project.

The site will be serviced with a septic system located under the parking lot. The space for the system is limited by the easement to the pipe line and the building. See the HHE-200 form for the design of the system.

The solid waste from the site will be handled by a private waste hauler. It will be stored inside until pick-up is scheduled.

The site will be lit from a building mounted light. Attached is the fixture catalog cut.

The landscape will consist of red maple trees located across the front and Shasta viburnum in front of the building.

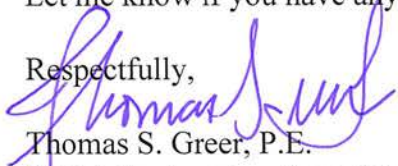
The traffic to this site will be very limited. It is expected to have 1 to 3 employees working and the residential unit as the major traffic. Some retail and delivery will round out the trips, 30 trips per day will likely be the average trips. The retail business hours will be from 8:00am-5:00pm Monday thru Friday. The peak times would be 7:00am to 8:00am and 5:00pm to 6:00pm. The business hour will also be Monday thru Friday 8:00am-5:00pm with some work done after hours while not disturbing neighbors.

This site has limited natural features. It was previously developed and the pipe lines cross the site. The site is a sand and gravel deposit.

This project does not require a DEP permit. Attached are stormwater calculations for the site. We expect infiltration along the front of the site as it currently exists.

Let me know if you have any questions.

Respectfully,



Thomas S. Greer, P.E.

Walsh Engineering Associates, Inc.

cc: John Hilmer, Joe Delaney, File

enc.

File: 419

October 12, 2018

Ms. Amanda Lessard
Town of Windham
8 School Rd
Windham, ME 04062

RE: LUMBER WAREHOUSE, 989 ROOSEVELT TRAIL

Dear Amanda,

Below are our responses to your comments:

The waiver request is attached.

The site is currently serviced by Portland Water District. No sprinklers are required. See attached findings from the Fire Marshall's office.

The plan has been updated to show locations of intersecting roads or driveways within 200 feet of the site.

Attached is the narrative of the design standards compliance.

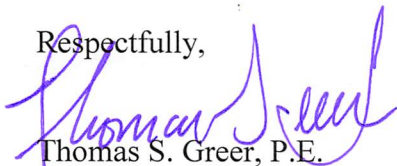
The existing sign on the building will be used with a new face.

The square footage of the building has been clarified on the plans.

The parking on site will consist of 5 spaces and one ADA space that will be striped. Additional parking is available in front of the overhead doors and off the end of the parking spaces. See the attached detail. We do not want to stripe these spaces. We would like to use them for either overflow parking or employee parking as required. These spaces will meet the demand.

Let me know if you have any questions.

Respectfully,



Thomas S. Greer, P.E.
Walsh Engineering Associates, Inc.

cc: John Hilmer, Joe Delaney, File

enc.



EXISTING SIGN
TO BE REUSED

KAY'S DECORATING CENTER
CALIFORNIA
Paints & Stains

Kay's DECORATING CENTER
PAINT • WALLPAPER

LUMBER WAREHOUSE
989 ROOSEVELT TRAIL
OCTOBER 12, 2018

File: 419

October 12, 2018

Ms. Amanda Lessard
Town of Windham
8 School Rd
Windham, ME 04062

RE: LUMBER WAREHOUSE, 989 ROOSEVELT TRAIL

Dear Amanda,

Below are our responses to the email from Jonathan Earle, dated 10/11/12:

1. *An ability to serve letter from the Portland Water District was not included as part of the application. A new water service is being shown on sheet C1.0 to serve the new warehouse building. Provide the size of service on the plans and indicate if this service is intended to be for domestic only or to also provide fire protection. Will the abandoned water service connection be removed/cut from the water main as is typically required from the District? The project is located inside the urban compact and appropriate street opening and utility location permits will need to be obtained from the Public Works Department.*

The existing site has water services from Portland Water District. We will be revising it to a 1 ½" service and discontinuing the existing service. We are requesting an Ability to Serve Letter from the water district.

2. *Trip generation was provided for the development and is well below the requirement to provide a traffic study.*

No response required.

3. *Sight distances should be showed on the site plan at both entrances.*

Sight Distances have been added to the plan. They are in excess of 600 feet.

4. *The project design includes two entrances (one entrance/exit and one exit only). A waiver request will need to be made to the Planning Board for the second entrance and for the provision of both entrances being wider than 40' (518.2.a and 518.2.b). The spacing between entrances is approximately 150' which is reasonable based on the site conditions and amount of truck traffic anticipated. Driveway entrance permits shall be obtained from the Public Works Department.*

We are requesting waivers for the two curb cuts and the width of the connections. They have been designed to accommodate a tractor trailer vehicle. We will provide Public Works with a Driveway Entrance Application.

5. *A full HHE-200 application was provided with the application. The location of the passing test pit should be shown on the site plan presumably within the approximate disposal field footprint shown.*

The test pit has been added to the plan.

6. *Provide installation location and detail for a stop sign at the site exit.*

A stop bar and sign have been added to the plan.

7. *A photometric plan for the building mounted light was provided and meets the ordinance requirement.*

No response required.

8. *The stormwater management report has been reviewed and the following conditions have been met:*

A. *Basic Standards – Provisions for temporary and permanent erosion and sediment control have been adequately provided.*

No response required.

B. *General Standard – A rock sandwich is proposed to be constructed to provide stormwater quality provisions. Water quality calculations were not provided in the stormwater management report indicate this BMP is providing treatment to 95% of the impervious area and 80% of the developed area as required. In addition, there appears to be a small portion of the developed area north of the proposed parking that drains to the northerly property line and bypassing the rock sandwich BMP.*

The impervious area drains to the center of the site along with ½ of Route 302. The soils are gravel and infiltrate all runoff. As such with no runoff, Chapter 500 Standards are met. The small section of the site drains to the north is smaller than the Route 302 area, thus compensating for the area being infiltrated.

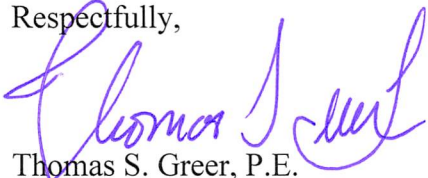
C. *Flooding Standard – The pre and post development stormwater plans and calculations have been reviewed. The plan shows one subcatchment tributary to the propose rock sandwich BMP. It appears a second analysis point should be considered at the northerly property line (near contour 323) to verify that the flooding standard is being met at this location.*

The soils on site are gravel, hydrologic soils Group A. All water infiltrates in the center of the site eliminating runoff from the parking area and Route 302. Calculations were considered unnecessary.

D. *Phosphorous Standard – Not applicable.*

No response required.

Respectfully,



Thomas S. Greer, P.E.

Walsh Engineering Associates, Inc.

cc: John Hilmer, Joe Delaney, File

enc.

Section 813 - C-1 Commercial District Design Standards Narrative

Architectural/ Building

1. Building Style: This building is traditional New England architecture. It is not a franchise building.
2. Materials: The building will use traditional materials. The use of wood clapboards and trim with asphalt shingles will complete the exterior.
3. Color: The use of painted trim and siding will produce a non-reflective siding. The colors are expected to be earth tones.
4. Roofline: The use of 5/12 and 8/12 roof lines provide the interest you would expect for a New England building. The rooflines are broken up with the dormers.
5. Facade: The facade has been kept very understated. It is close to Route 302, so limited windows in the small retail space are provided. This section of the building is being renovated so there are limited opportunities to open up more facade with windows.
The access to the retail space is a full light door from the parking. It is limited in scale to reflect the nature of the business. The trim for the facade facing the parking lot will be simple and consistent with the trim for the entire building.
6. Building Style: This project has a simple building with architectural details.
7. Entrance: This building is less than 20,000 square feet. The entrance is visible from the parking area.
8. Architectural Details: The design and detailing of the building is appropriate to the use and location of the building.

Site/Parking:

Screening and Utilities: This building fits into a very small building envelop. To make the parking work a loop driveway is part of the project. This leaves the two overhead doors visible from Route 302. Some landscaping is provided along Route 302, but is limited based on the Portland Pipe Line facilities. Maple trees will provide some screening and shade the parking.

Landscape/Lighting: The lighting is simple LED fixture mounted to the building. This site is small in comparison to other developments in the C-1 District and does not require extensive lighting.

Bike/Ped: This is a small site located away from any pedestrian access. We have provided a bike rack near the entrance but no other improvements are planned for sidewalks or outdoor activities.

Section 813 – Commercial District Design Standards

			C-1	C-2	C-3	VC
A.	Architecture/Building					
	1	Building Style	R ¹	R	R	R
	2	Materials	R	R	R	R
	3	Color	R	R	R	R
	4	Roofline	R	R	R	R
	5	Façade	R	R	R	R
	6	Building style coordination (multi-building)	R	R	R	R
	7	Entrance	R	R	R	R
	8	Architectural Details	R	R	R	R
	9	LEED certification				
B.	Site/Parking					
	1	Parking location				
	2	Internal traffic flow				
	3	Interconnected Parking Lots				
	4	Orientation of Building				
	5	Screening - parking		R		
	6	Screening - utilities & service areas/structures	R	R		R
	7	Parking Lot Landscaping				
	8	Low-Impact Design Stormwater				
	9	Shared Stormwater Treatment				
C.	Landscaping/Lighting					
	1	Lighting/Photometric plan	R			R
	2	Lighting coordinated with architecture	R			R
	3	Lighting coordinated with landscaping	R			R
	4	Existing trees preserved			R	
	5	Snow storage areas designated	R	R	R	R
	6	Planting variety				
	7	Planting suitability				
	8	Mass plantings				
	9	Illumination levels				
D.	Bike/Ped					
	1	Internal walkways	R			
	2	Links to community	R	R		R
	3	Outdoor activity area				
	4	Sidewalks	R			
	5	Crosswalks	R			
	6	Bike parking/racks	R	R		R

1. Any item listed with an R in the Table is a required Design Standard in that zoning district. In addition to meeting all Design Standards required, development must comply with a minimum of eight (8) other Design Standards. ***See Land Use Ordinance for detailed standards.***

TOWN OF WINDHAM MINOR SITE PLAN APPLICATION

Final Plan

(Section 811 – Site Plan Review, Submission Requirements)

The original signed copy of this application must be accompanied by:

- The required application and review escrow fees,
- Five (5) collated submission packets, which must include
 - Full size paper copies of each plan, map, or drawing, and
 - A bound copy of the required information found in Section 811 of the Land Use Ordinance.
 - The checklist below offers a brief description of these requirements for the purpose of determining the completeness of a submission. Please use the Ordinance for assembling the submission packets.
- Electronic submission in PDF format of:
 - All plans, maps, and drawings.
 - These may be submitted as a single PDF file or a PDF for each sheet in the plan set.
 - A PDF of the required information found in Section 811 of the Land Use Ordinance

The submission deadline for Final plans is three (3) weeks before the Staff Review Committee meeting for which it will be scheduled.

Applicants are strongly encouraged to schedule a brief submission meeting with Planning Staff, to walk through the application checklist at the time a Planning Board submission is made. This will allow applicants to receive a determination of completeness, or a punch list of outstanding items, at the time a submission is made.

If you have questions about the submission requirements, please contact:

Windham Planning Department	(207) 894-5960, ext. 2
Amanda Lessard, Planner	allessard@windhammaine.us
Ben Smith, Planning Director	bwsmith@windhammaine.us

Final Plan - Minor Site Plan

Project Name: 989 Roosevelt Trail

Tax Map: 21 **Lot:** 18

Estimated square footage of building(s): 1,624 Existing and 1,760 Addition

If no buildings proposed, estimated square footage of total development: _____

Is the total disturbance proposed > 1 acre? ☐ Yes ☒ No

Contact Information

1. Applicant

Name: 989 Roosevelt Trail, LLC , John Hilmer

Mailing Address: 61 Cato Lane, Nantucket, MA 02554-0711

Telephone: (508) 332-9721 Fax: _____ Email: hbnantucket@gmail.com

2. Record owner of property

x (Check here if same as applicant)

Name: _____

Mailing Address: _____

Telephone: _____ Fax: _____ E-mail: _____

3. Contact Person/Agent (if completed and signed by applicant's agent, provide written documentation of authority to act on behalf of applicant)

Name: Thomas S. Greer, P.E.

Company Name: Walsh Engineering Associates, Inc.

Mailing Address: One Karen Drive, Suite 2A, Westbrook, ME 04092

Telephone: (207) 553-9898 Fax: (207) 692-2273 E-mail: tgreer@walsh-eng.com

I certify all the information in this application form and accompanying materials is true and accurate to the best of my knowledge.

Thomas S. Greer AGENT 10/3/18
Signature Date

a.	Complete Sketch Plan Application form		
b.	Evidence of payment of application and escrow fees		
c.	Written information - submitted in bound report		
1	A narrative describing the proposed use or activity	X	
2	Name, address, & phone number of record owner, and applicant if different	X	
3	Names and addresses of all abutting property owners	X	
4	Documentation demonstrating right, title, or interest in property	X	
5	Copies of existing proposed covenants or deed restrictions	n/a	
6	Copies of existing or proposed easements on the property	X	
7	Name, registration number, and seal of the licensed professional who prepared the plan, if applicable	X	
8	Evidence of applicant's technical capability to carry out the project	X	
9	Assessment of the adequacy of any existing sewer and water mains, culverts and drains, on-site sewage disposal systems, wells, underground tanks or installations, and power and telephone lines and poles on the property	X	
10	Estimated demand for water supply and sewage disposal HHE-200	X	
11	Provisions for handling all solid wastes, including hazardous and special wastes	X	
12	Detail sheets of proposed light fixtures	X	
13	Listing of proposed trees or shrubs to be used for landscaping	X	
14	Estimate weekday AM and PM and Saturday peak hour and daily traffic to be generated by the project	X	
15	Description of important or unique natural areas and site features, including floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and animals, unique natural communities and natural areas, sand and gravel aquifers, and historic and/or archeological resources	X	
16	If the project requires a stormwater permit from MaineDEP or if the Staff Review Committee determines that such information is required, submit the following:	n/a	
	stormwater calculations		
	erosion and sedimentation control measures		
	water quality and/or phosphorous export management provisions		
17	If public water or sewerage will be utilized, provide statement from utility district regarding the adequacy of water supply in terms of quantity and pressure for both domestic and fire flows, and the capacity of the sewer system to accommodate additional wastewater.		
18	Financial Capacity	X	
	i. Estimated costs of development and itemize estimated major expenses		
	ii. Financing (submit one of the following)		
	a. Letter of commitment to fund		
	b. Self-financing		
	1. Annual corporate report		

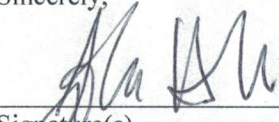
	2. Bank Statement	X	
	c. Other		
	1. Cash equity commitment of 20% of total cost of development		
	2. Financial plan for remaining financing		
	3. Letter from institution indicating intent to finance		
	iii. If a registered corporation a Certificate of Good Standing from:		
	Secretary of State, or		
	statement signed by corporate officer		
19	Technical Capacity (address both)	X	
	i. Prior experience		
	ii. Personnel		
d.	Plan Requirements - Existing Conditions		
i.	Location Map adequate to locate project within the municipality	X	
ii.	Vicinity Plan. Drawn to scale of not over 400 feet to the inch, and showing area within 250 feet of the property line, and shall show the following:	X	
	a. Approximate location of all property lines and acreage of parcels	X	
	b. Locations, widths and names of existing, filed or proposed streets, easements or building footprints	X	
	c. Location and designations of any public spaces	n/a	
	d. Outline of proposed subdivision, together with its street system and an indication of the future probable street system of the remaining portion of the tract	n/a	
iii.	North Arrow identifying Grid North; Magnetic North with the declination between Grid and Magnetic; and whether Magnetic or Grid bearings were used	X	
iv.	Location of all required building setbacks, yards, and buffers	X	
v.	Boundaries of all contiguous property under the total or partial control of the owner or applicant	X	
vi.	Tax map and lot number of the parcel or parcels on which the project is located	X	
vii.	Zoning classification(s), including overlay and/or subdistricts, of the property and the location of zoning district boundaries if the property is located in 2 or more districts or abuts a different district.	X	
viii.	Bearings and lengths of all property lines of the property to be developed, and the stamp of the surveyor that performed the survey.		
ix.	Existing topography of the site at 2-foot contour intervals	X	
x.	Location and size of any existing sewer and water mains, culvers and drains, on-site sewage disposal systems, wells, underground tanks or installations, and power and telephone lines and poles on the property and on abutting streets or land that may serve the development.	X	
xi.	Location, names, and present widths of existing public and/or private streets and rights-of way within or adjacent to the proposed development	X	
xii.	Location, dimensions, and ground floor elevation of all existing buildings	X	
xiii.	Location and dimensions of existing driveways, parking and loading areas, walkways, and sidewalks on or adjacent to the site.	X	
xiv.	Location of intersecting roads or driveways within 200 feet of the site.	X	

xv.	Location of the following:		
	a. Open drainage courses	n/a	
	b. Wetlands	n/a	
	c. Stone walls	n/a	
	d. Graveyards	n/a	
	e. Fences	n/a	
	f. Stands of trees or treeline, and	x	
	g. Other important or unique natural areas and site features, including but not limited to, floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and animals, unique natural communities and natural areas, sand and gravel aquifers, and historic and/or archaeological resources	x	
xvi.	Direction of existing surface water drainage across the site	x	
xvii.	Location, front view, dimensions, and lighting of existing signs	n/a	
xviii.	Location & dimensions of existing easements that encumber or benefit the site	x	
xix.	Location of the nearest fire hydrant, dry hydrant, or other water supply	x	
Plan Requirements - Proposed Development Activity			
i.	Location and dimensions of all provisions for water supply and wastewater disposal, and evidence of their adequacy for the proposed use, including soils test pit data if on-site sewage disposal is proposed	x	
ii.	Grading plan showing the proposed topography of the site at 2-foot contour intervals	x	
iii.	Direction of proposed surface water drainage across the site and from the site, with an assessment of impacts on downstream properties.	x	
iv.	Location and proposed screening of any on-site collection or storage facilities	n/a	
v.	Location, dimensions, and materials to be used in the construction of proposed driveways, parking and loading areas, and walkways, and any changes in traffic flow onto or off-site	x	
vi.	Proposed landscaping and buffering	x	
vii.	Location, dimensions, and ground floor elevation of all buildings or expansions	x	
viii.	Location, front view, materials and dimensions of proposed signs together with method for securing sign	n/a	
ix.	Location and type of exterior lighting. Photometric plan to demonstrate coverage area of all lighting may be required by Staff Review Committee.	x	
x.	Location of all utilities, including fire protection systems	x	
xi.	Approval block: Provide space on the plan drawing for the following words, "Approved: Town of Windham Staff Review Committee." along with space for signatures and date	x	
Electronic Submission			

To Whom It May Concern,

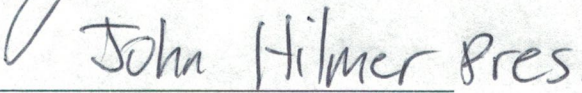
By this letter, the undersigned authorizes Walsh Engineering Associates, Inc. to act as the agent for the undersigned in the preparation and submission of all Federal, State, and Local City permit applications and relevant documents and correspondence for all necessary permits for the construction on the property at 989 Roosevelt Trail in Windham 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,



Signature(s)

10/1/18
Date



Owner(s)

**TOWN OF WINDHAM
SUBDIVISION & SITE PLAN APPLICATION**

Performance and Design Standards Waiver Request Form

(Section 808 – Site Plan Review, Waivers)
(Section 908 – Subdivision Review, Waivers)

For each waiver request from the Performance and Design Standards detailed in Section 811 or Section 911 of the Town of Windham Land Use Ordinance, as applicable, please submit a separate completed copy of this waiver request form.

Subdivision or Project Name:

Tax Map: 21 Lot:018

**Waivers are requested from the following Performance and Design Standards
(add rows as necessary):**

Ordinance Section	Standard	Mark which waiver this form is for
518.2.a	Curb Cuts and Driveway Openings	
518.2.b	Curb Cuts and Driveway Openings	

- 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.

518.2.a) This waiver is to add a second curb cut to the site. The second curb cut is for the exit driveway that will only be used by delivery trucks. This will allow the trucks to be able to pull back onto Route 302 without backing into the road. The site has 3 gas mains running through. The mains prevent the site from having a traditional truck turnaround, thus requiring the second curb cut.

518.2.b) This waiver is for the width of the curb cuts. The main entrance/exit will be 35 feet wide with 25 foot radii, making the curb cut 85 feet wide to accommodate turning trucks and two-way traffic. The exit only drive will be 22 feet wide with 20 foot radii, making the curb cut 66 feet wide to accommodate turning trucks.

(continued next page)

Ordinance Section: _____

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

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

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

Warranty Deed

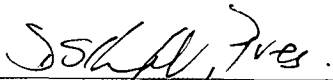
VESTPROP, INC. a Maine business corporation whose mailing address is 83 Pine Ridge, North Yarmouth, ME 04097 for consideration paid conveys to **989 Roosevelt Trail, LLC** a Maine Limited Liability Company whose mailing address is 61 Cato lane, Nantucket, MA 02554-2711 with Warranty Covenants, the land, with the improvements thereon, located in Windham, County of Cumberland, State of Maine, described as follows:

SEE EXHIBIT A/SCHEDULE A attached hereto and to be recorded herewith.

Also hereby conveying all rights, easements, privileges, and appurtenances belonging to the premises conveyed herewith.

Reference should be made to a Deed from Richard Commos and Colleen Jackson-Commoss to Vestprop, Inc. dated May 19, 2017 and recorded in the Cumberland County Registry of Deeds in Book 34023 Page 348.

Dated this 5th day of October 2017.




VESTPROP, INC.
BY: Daniel S. Knight
Its: President

STATE OF MAINE
 COUNTY OF CUMBERLAND

October 5, 2017

Personally appeared before me the above named **Daniel S. Knight** in his capacity as President of Vestprop Inc. and acknowledged the foregoing to be his free act and deed in his said capacity.



Notary Public/Attorney at Law
 Dawn D. Dyer
 Maine Bar #4691

Exhibit A

A certain lot or parcel of land situated on the easterly side of State Route 302 known as Roosevelt Trail, in the Town of Windham, County of Cumberland, State of Maine, said parcel being more particularly bounded and described as follows:

Beginning at a point in the easterly side of said State Route 302 at the northwesterly corner of land now or formerly of Town of Windham as described in a deed recorded at the Cumberland County Registry of Deeds;

Thence N 41°-42'-46" W, by and along Route 302, a distance of 238.00 feet to a point;

Thence S 48°-17'-14" W, by and along Route 302, a distance of 15.00 feet to a point;

Thence N 41°-42'-46" W, by and along Route 302, a distance of 100.00 feet to a point;

Thence N 48°-17'-14" E, by and along Route 302, a distance of 15.00 feet to a point;

Thence N 48°-17'-14" E, passing through land of the now of D.S.D. Properties, LLC, a distance of 140.76 feet to a point;

Thence S 23°-27'-07" E, by and along land now or formerly of Windham Excavating Company a described in a deed recorded in Book 12196 page 270, a distance of 86.04 feet to a point;

Thence S 30°-23'-44" E, by and along said land of Town of Windham, a distance of 261.38 feet to a point;

Thence S 48°-17'-14" W, by and along said land of Town of Windham, a distance of 62.50 feet to the point of beginning.

Meaning and intending to describe a certain parcel of land containing 34,491 square feet, more or less being a portion of the premises described in a deed to Vestprop, Inc., recorded in Book 34023 Page 348.

The above described premises is subject to and benefited by all matters of records that pertain to the above described parcel.

The bearings referenced herein are based upon Magnetic North.

Received
Recorded Register of Deeds
Oct 11, 2017 08:35:53A
Cumberland County
Nancy A. Lane

DSK, Pres.

Know all Men by these Presents, That

I, Wesley M. Snow, Blanche R. Snow, Andrew J. Hutchings, Genevieve M. Hutchings of Portland, County of Cumberland, State of Maine

in consideration of Six and 20/100 Dollars (\$6.20)

paid to our

full satisfaction by PORTLAND PIPE LINE COMPANY, a corporation duly organized and existing under the laws of the State of Maine and having an office and place of business at Portland in the County of Cumberland and State of Maine, the receipt whereof is hereby acknowledged, do hereby give, grant, bargain, sell, convey and confirm unto the said PORTLAND PIPE LINE COMPANY, its successors and assigns, a right of way and easement for the purpose of constructing, maintaining, operating, altering, repairing, removing, changing the size of and replacing a line of pipe for the transportation as a common carrier for hire of oil, crude petroleum and refined petroleum products or combinations thereof or similar thereto, natural and artificial gas, casinghead and natural gasoline, and any other liquids or gases over a route to be selected by the Grantee under, upon, over and through the lands situated in the Town of Windham, in the County of Cumberland, State of Maine, described as follows:

Bounded Northerly by land of William S. Linnell et al

" Easterly by land of Town of Windham

" Southerly by land of Town of Windham

" Westerly by U. S. Highway 302

together with the right of ingress and egress for all purposes incident to the grants herein made.

Also the right to lay, construct, maintain, operate, alter, repair, remove and replace at any time an additional line or lines of pipe alongside of the line or lines hereinbefore mentioned, as herein provided, upon payment to the Grantor, his administrators, heirs and assigns, for each additional line so laid of an amount equal to the consideration above named. Such additional line or lines shall be laid subject to the same rights and conditions as apply to the original line.

~~In Have and to Hold~~ the said rights of way and easements with all the privileges and appurtenances thereof unto the said PORTLAND PIPE LINE COMPANY, its successors and assigns, so long as a pipe line is maintained on said premises. The Grantor reserve s for himself and his heirs and assigns, the right to fully use and enjoy said premises except as the same may be necessary or convenient for the purposes herein granted to the said PORTLAND PIPE LINE COMPANY, its successors and assigns. The Grantor covenant s to and with the Grantee, its successors and assigns, that the Grantor is sole owner of the above described premises and have good right, title and capacity to convey in the manner aforesaid the rights of way and easements hereby granted, and that said premises are free of all encumbrances except Mortgage to Casco Loan & Bldg. Ass'n

The said PORTLAND PIPE LINE COMPANY, for itself, its successors and assigns, by the acceptance hereof, agrees to pay to the Grantor or his administrators, executors, heirs or assigns, any damages to grass, timber, growing crops and improvements, which may result from its acts or omissions in laying, maintaining, operating, replacing, changing or removing said pipe line s said damage, if any, if not mutually agreed upon to be ascertained and determined by three disinterested persons, one of whom shall be appointed by the Grantor or his administrators, executors, heirs or assigns, one by PORTLAND PIPE LINE COMPANY or its successors or assigns, and the third by the two so appointed; and the award of such three persons shall be final and conclusive.

PORTLAND PIPE LINE COMPANY further agrees for itself, its successors and assigns, to bury and maintain all pipe lines so as not to interfere with the cultivation of said lands.

It is understood and agreed by the parties hereto that this written instrument contains the entire agreement between them.

And each of the above named grantors releases to the grantee, its successors and assigns, so far as is necessary to accomplish the grant of the rights of way and easements above described, all rights of homestead secured to them or either of them by any applicable statute and all other rights and interests therein, including rights of dower, of courtesy or by descent.

~~In Witness Whereof~~, the Grantor has hereunto set his hand and seal this 7th day of August, 1941. Blanche R. Snow, wife of Wesley M. Snow hereby releasing her dower interest also Andrew J. Hutchins and his wife Genevieve M. Hutchins hereby release their interest in the above described premises under a Sales Agreement to purchase with the said Wesley M. Snow.

Signed, Sealed and Delivered in Presence of:

J. M. Eastman

to all

Wesley M. Snow Seal
Blanche R. Snow Seal
Andrew J. Hutchings Seal
Genevieve M. Hutchings Seal

State of Maine

, County of Cumberland

ss.

On the Seventh day of August, 1941, personally appeared Wesley M. Snow, of the foregoing written instrument and acknowledged the same to be his free act and deed

Before me, J. M. Eastman, Justice of the Peace

Received August 28

1941, at 9 o'clock 30 m. A.M., and recorded according to the original.

JOHN HILMER

61 cato ln Nantucket MA 02554 · 508-332-9721

hbnantucket@gmail.com

EXPERIENCE

2006 – PRESENT

SELF EMPLOYED BUILDER

I have been a subcontractor completing high end, residential and commercial building projects. Currently employing ten people, and maintaining a fleet of 5 trucks and various construction equipment. We currently build between 8 and twelve high end houses per year.

2002 – 2006

CARPENTER, ST. PETER CONSTRUCTION

Worked on high end residential carpentry crew. High production framing. From laborer to journeymen carpenter.

EDUCATION

7 2001

HIGH SCHOOL DIPLOMA, MADISON AREA MEMORIAL HIGH SCHOOL

SKILLS

- Precision framer
- Construction management
- Attention to detail
- Excellent leader
- Skilled construction coordinator

CREDENTIALS ECT.

Licensed crane operator owner.

Amateur draftsman.

Loving father

CDL class b



STATE OF MAINE - DEPARTMENT OF PUBLIC SAFETY
OFFICE OF STATE FIRE MARSHAL
45 COMMERCE DR STE 1
AUGUSTA, ME 04333-0001

Construction Permit

No. 25723

In accordance with the provisions of M.R.S.A. Title 25, Chapter 317, Sec.317 and Title 5, Section 4594-F, permission is hereby granted to construct or alter the following referenced building according to the plans hitherto filed with the Commissioner and now approved. No departure from application form/plans shall be made without prior approval in writing. Nothing herein shall excuse the holder of this permit for failure to comply with local ordinances, zoning laws, or other pertinent legal restrictions.

Each permit issued shall be displayed at the site of construction.

Building: HB LUMBER INC.
Location: 989 ROOSEVELT TRL, WINDHAM, ME 04062-5644
Owner: JOHN HIGMER
Owner Address: PO BOX 2085, NANTUCKET, MA 02584-2085

Occupancy Type: Business
Secondary Use: Other
Use Layout: Separated Use
No Sprinkler System
Fire Alarm System
Barrier Free
Construction Mode: New Building
Unprotected Wood Frame: Type V (000)
Final Number of Stories: 2

Permit Date: 10/04/2018

Expiration Date: 04/03/2019

COMMISSIONER OF PUBLIC SAFETY



STATE OF MAINE - DEPARTMENT OF PUBLIC SAFETY
OFFICE OF STATE FIRE MARSHAL
45 COMMERCE DR STE 1
AUGUSTA, ME 04333-0001

Construction Permit

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Secondary Use: Other
Use Layout: Separated Use
No Sprinkler System
Fire Alarm System
Barrier Free
Construction Mode: New Building
Unprotected Wood Frame: Type V (000)
Final Number of Stories: 2

Permit Date: 10/04/2018

Expiration Date: 04/03/2019

COMMISSIONER OF PUBLIC SAFETY

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

5358
Maine Dept. Health & Human Services
Div. Environmental Health, 11SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION		>> CAUTION: LPI APPROVAL REQUIRED <<	
City, Town, or Plantation	Windham	Town/City	Permit #
Street or Road	989 Roosevelt Trail	Date Permit Issued	Fee: \$ Double Fee Charged []
Subdivision, Lot #		Local Plumbing Inspector Signature	L.P.I. #
OWNER/APPLICANT INFORMATION		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.	
Name (last, first, MI)	Vestprop, Inc. <input checked="" type="radio"/> Owner <input type="radio"/> Applicant	Fee: \$ state min fee \$ Locally adopted fee	Copy: [] Owner [] Town [] State
Mailing Address of	83 Pine Ridge Road	Municipal Tax Map # Lot #	
Owner/Applicant	North Yarmouth 04097		
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.		CAUTION: INSPECTION REQUIRED I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. (1st) date approved	
Signature of Owner or Applicant Date		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. <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
SIZE OF PROPERTY 1.1 AC SQ. FT. ACRES	DISPOSAL SYSTEM TO SERVE 1. Single Family Dwelling Unit, No. of Bedrooms: 2 2. Multiple Family Dwelling, No. of Units: 3. Other: 5 employees 12500 sq ft (specify) Current Use Seasonal Year Round Undeveloped
SHORELAND ZONING Yes No	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 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: 1000 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: 640 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 240 gallons per day BASED ON: 1. Table 4A (dwelling unit(s)) 2. Table 4C (other facilities) SHOW CALCULATIONS for other facilities 180 + 60 gpd 3. Section 4G (meter readings) ATTACH WATER METER DATA
SOIL DATA & DESIGN CLASS PROFILE CONDITION S1 B at Observation Hole # TPI Depth 7.48" 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	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. _____ d _____ m _____ s Lon. _____ d _____ m _____ s if g.p.s, state margin of error: _____

SITE EVALUATOR STATEMENT		
I certify that on 5/22/18 (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 Maurice Hampton	SE # 263	Date 5/22/18
Site Evaluator Name Printed Maurice Hampton	Telephone Number 756-2900	E-mail Address

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

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

Windham

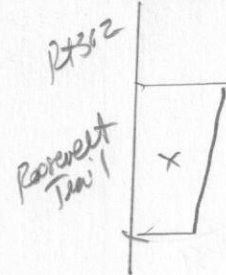
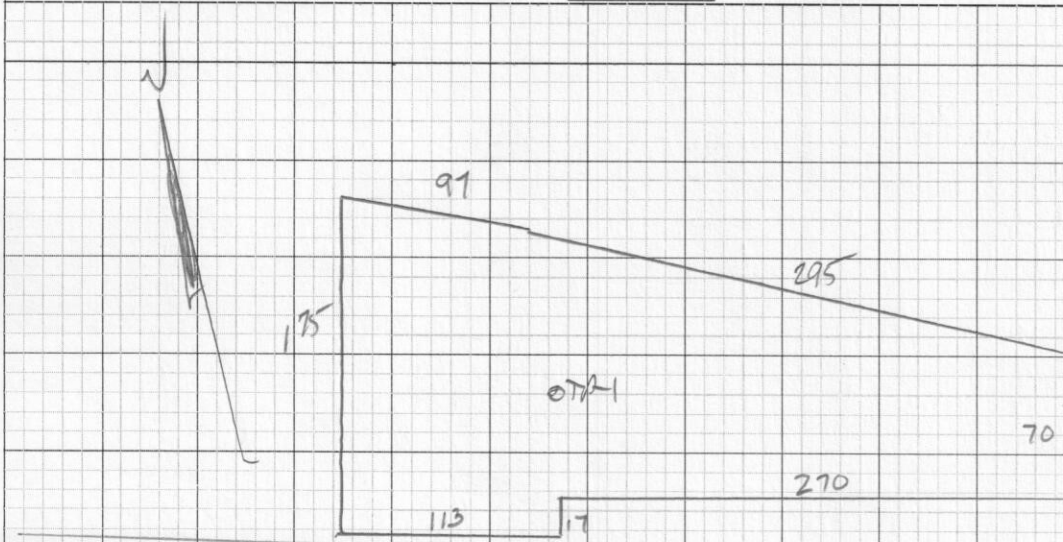
989 Roosevelt Trail

Vestprop Inc

SITE PLAN

Scale 1" = 100 ft. or as shown

SITE LOCATION PLAN
(map from Maine Atlas
recommended)



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

Observation Hole TP1 ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

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

Texture	Consistency	Color	Mottling
0 loose sand	frisk	Dark Brown	
10 Sand	frisk	Brown	
20			None
30 Stony Sand	frisk	Tan	Noted
40			
50			

Texture	Consistency	Color	Mottling
0			
10			
20			
30			
40			
50			

Soil Classification <u>S</u> <u>B</u> Profile Condition	Slope <u>2</u> %	Limiting Factor <u>740</u> "	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input checked="" type="checkbox"/> Pit Depth
---	---------------------	---------------------------------	--

Soil Classification _____ Profile Condition	Slope ____ %	Limiting Factor ____ "	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
---	-----------------	---------------------------	---

W. Hampton
Site Evaluator Signature

2603
SE #

5/22/18
Date

5358

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

Windham

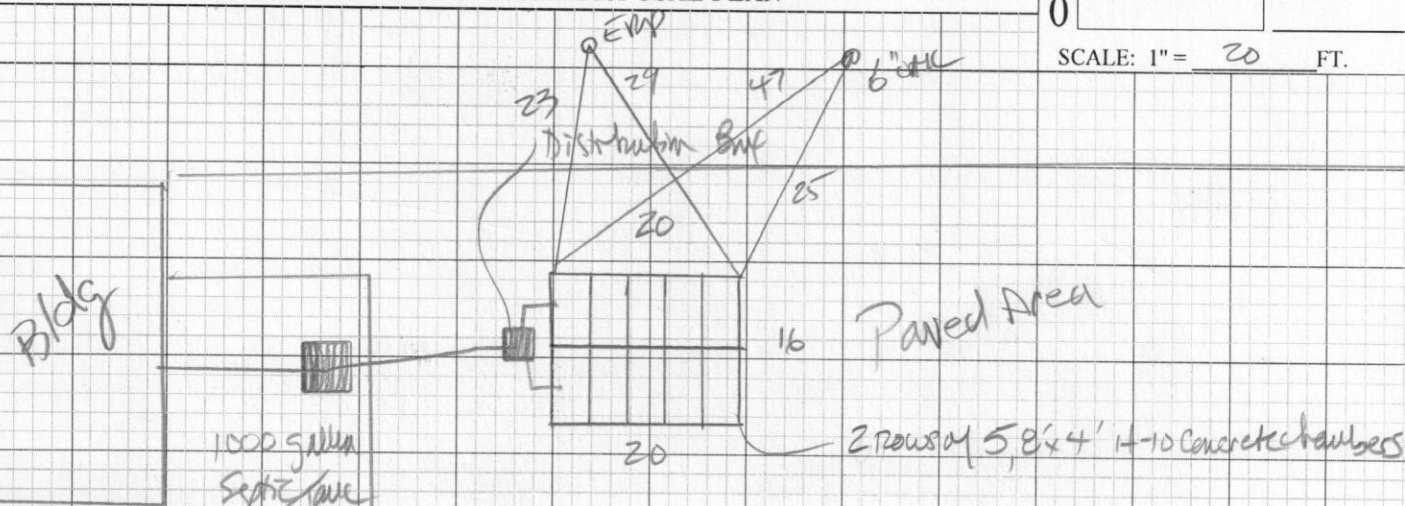
989 Roosevelt Trail

Vestprop Inc

SUBSURFACE WASTEWATER DISPOSAL PLAN

0

SCALE: 1" = 20 FT.



Note: Materials and installation shall be in accordance with Maine Subsurface Wastewater Disposal Rules dated 08/15 as amended.

FILL REQUIREMENTS

CONSTRUCTION ELEVATIONS

ELEVATION REFERENCE POINT

Depth of Fill (Upslope)

0

Finished Grade Elevation

-40

Location & Description: Nail 42" up

Depth of Fill (Downslope)

0

Top of Distribution Pipe or Proprietary Device

-50

4' 6" OALC

Bottom of Disposal Area

-69

Reference Elevation: 0"

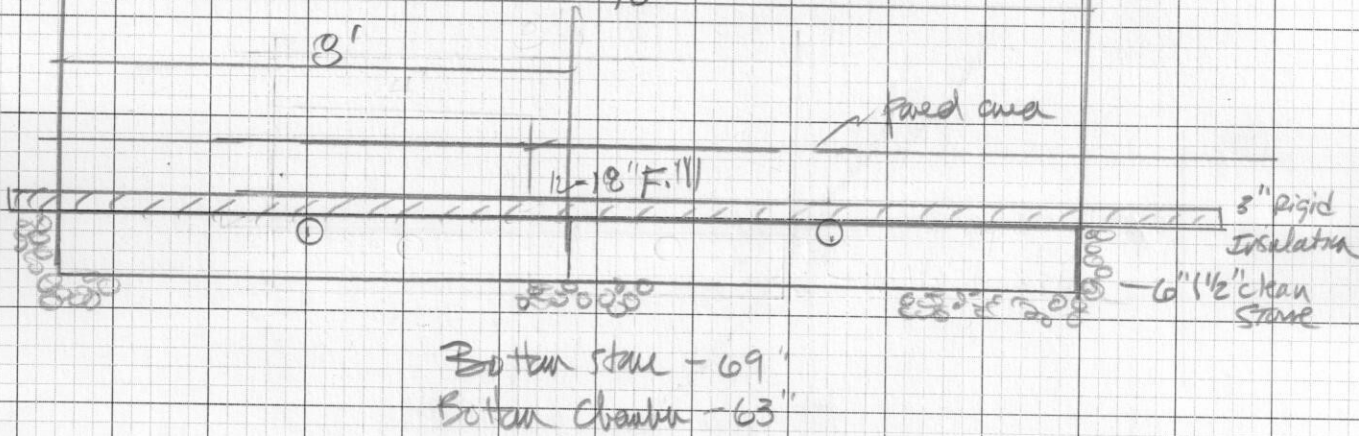
DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 3 ft.

Vertical 1" = 3 ft.

NOTE: All ground to be filled must be scarified.



W. Hampton

Site Evaluator Signature

263

SE #

5/22/16

Date



September 28, 2018

Amanda Lessard, Town Planner
Town of Windham
8 School Street
Windham, ME 04062

RE: John Hilmer and 989 Roosevelt Trail, LLC – financial capacity

Dear Ms. Lessard,

At the request of, and with permission from, John Hilmer, I write this letter to indicate my opinion of the noted LLC and his financial capacity to develop the property at 989 Roosevelt Trail in Windham.

Based on my discussions with John about his plans, costs, equity contribution for this property, and some financial disclosure, it is my opinion that they have the financial capacity to complete the building project.

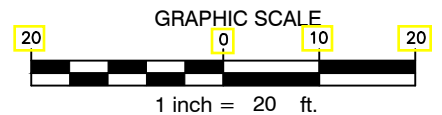
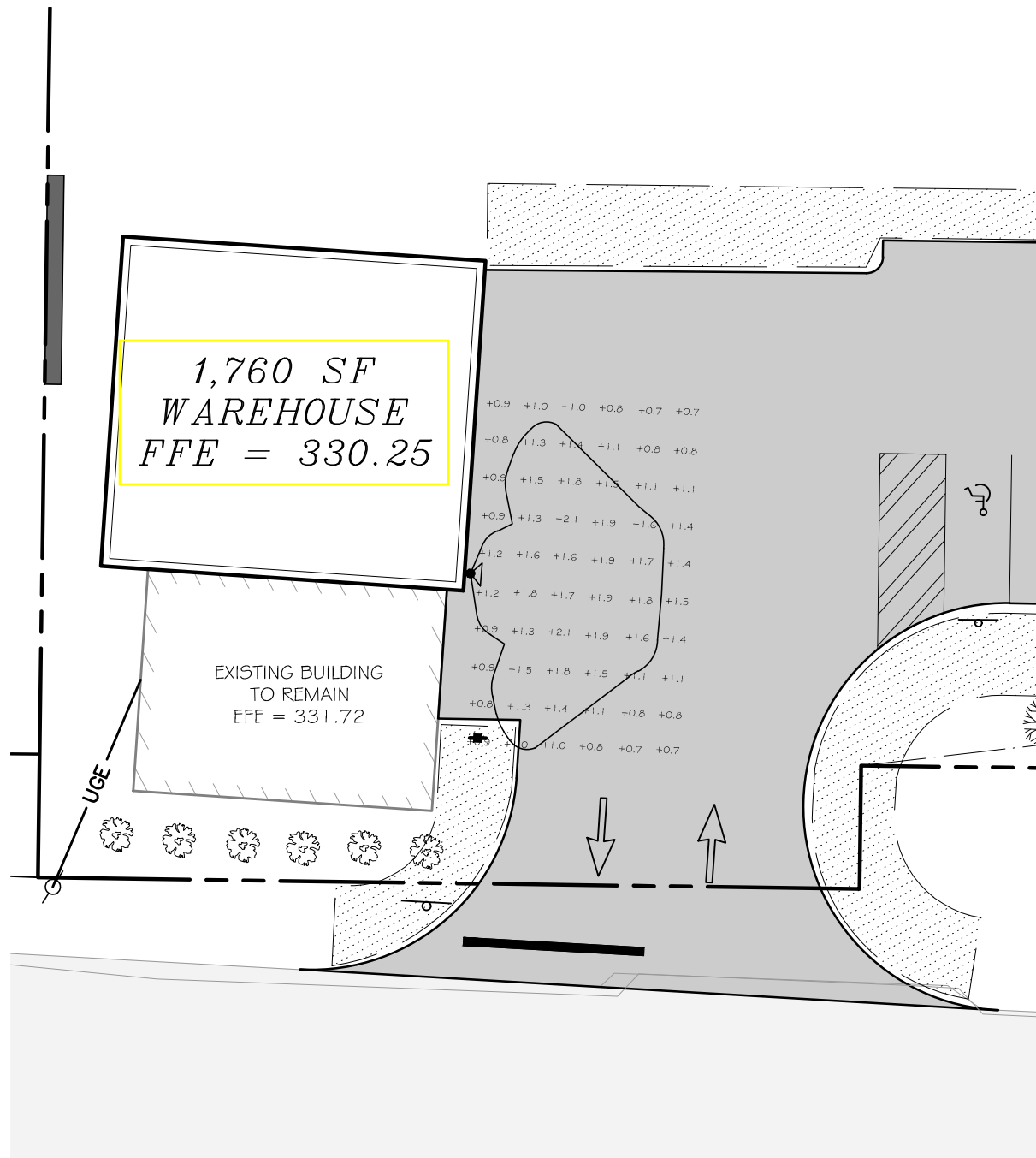
This letter is not a commitment to lend. I look forward to consideration of a financing request for John.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter H. Godsoe", written over a horizontal line.

Peter H. Godsoe
Regional Vice President
Commercial Lending

PHG/tbm



WALSH
ENGINEERING ASSOCIATES, INC.

One Karen Dr., Suite 2A | Westbrook, Maine 04092
ph: 207.553.9898 | www.walsh-eng.com

Copyright © 2017

Lumber Warehouse

989 Roosevelt Trail
Windham, Maine 04092

Sheet Title:

Photometrics

Job No.: 419

Date: OCT 12, 2018

Scale: AS SHOWN

Drawn: JDC

Checked: TSG



TYPE S1 & S1W



VIPER S SERIES

Small Viper Luminaire

SPECIFICATIONS

Intended Use:

The Beacon Viper luminaire is available with a wide choice of different LED Wattage configurations and optical distributions designed to replace HID lighting up to 400W MH or HPS.

Construction:

- One piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- Two-piece silicone and micro-cellular polyurethane foam gasket ensures a weather-proof seal around each individual LED.

LED/Optics:

- 100V through 277V, 50 Hz to 60 Hz (UNV), or 347V or 480V input.
- Power factor is .92 at full load.
- All electrical components are rated at 50,000 hours at full load and 25°C ambient conditions per MIL- 217F Notice 2.
- Dimming drivers are standard with connections for external dimming equipment available upon request.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher.
- Plug disconnects are listed by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.

Electrical:

- Fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections.
- The housing is designed for an optional twist lock photo control receptacle.
- Ambient operating temperature -40°C to 40°C
- Surge protection - 20KA; shuts off at end of life.
- Optional 7-pin ANSI C136.41-2013 twist-lock photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices.
- Lifeshield™ Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. A luminaire equipped with the device may be reliably operated in any ambient temperature up to 55°C (131°F). Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.).

Controls/Options:

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the Motion Response system reduces the Wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full Wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration.
- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on hours of operation or time of night (see www.beaconproducts.com/products/energeni).
- Also available with Beaconnect Wireless Control System (see Beaconnect product page for more details www.beaconproducts.com/products/beaconnect).

Installation:

- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included.

Finish:

- Beacote V polyester powder-coat electrostatically applied and thermocured.
- Beacote V finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

Listings:

- DesignLights Consortium (DLC) qualified, consult DLC website for more details: <http://www.designlights.org/QPL>
- Listed to UL1598 and CSA22.2#250.0-24 for wet locations and 40°C ambient temperatures
- 3G rated for ANSI C136.31 high vibration applications
- IDA approved

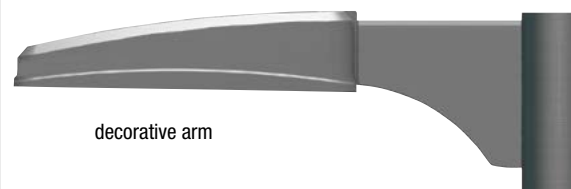
Warranty:

Five year limited warranty (for more information visit: www.hubbelllighting.com/resources/warranty).

PRODUCT IMAGE(S)

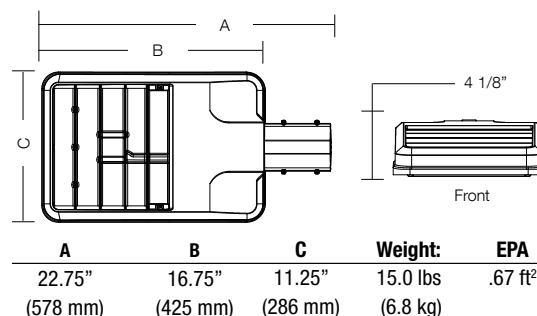


rectangular arm

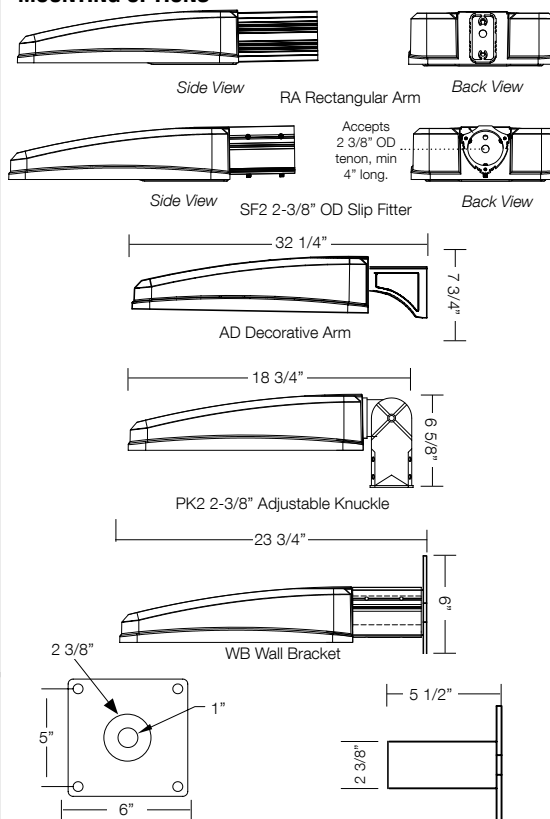


decorative arm

DIMENSIONS



MOUNTING OPTIONS



CERTIFICATIONS/LISTINGS



*3000K and warmer CCTs only

Web: www.securitylighting.com

2100 Golf Road, Suite 460, Rolling Meadows, IL 60008-4704

Phone: 1-800-LIGHT IT, 1-800-544-4848, Fax: 847-279-0642

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STORMWATER MANAGEMENT REPORT

for

Lumber Warehouse

989 Roosevelt Trail

Windham, Maine

October 1, 2018

Project Description

This project is the renovation of the existing structure on site and the addition of a 1,880 sq. ft. new structure. The structure will be used for a cabinet shop and lumber storage. The existing structure will be a small retail space and residential apartment.

The site will have an entrance/exit for vehicles off Roosevelt Trail (Route 302) to a small parking area. Large trucks will use the exit only driveway to get back onto Route 302.

Existing Conditions

The site has an existing structure and driveway area that was formerly used as a retail space. The Portland Pipe Line has 3 gas mains that ran across the site with gravel access road. The site is sloped in the rear with some forest vegetation.

Developed Conditions

The site will have additional 10,700 sq. ft. of building and pavement added to it, with minor changes in the back of the site. The site generally drains to a low area in the front with some area draining to the rear of the site.

Soils

The site is on a sand and gravel deposit. The depth to groundwater is greater than 48" The County Soils Map for the area, shows this site as Hinkley, gravely sand, which are well drained.

Drainage


The site is graded to have the paved area general drain to the area adjacent Route 302. A stone sandwich is used to drain the area above the site under the exit driveway. The stormwater will infiltrate in these areas.


Methodology

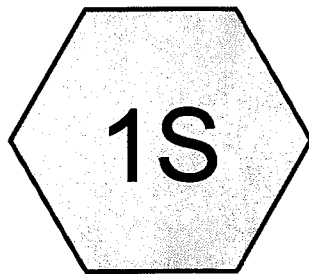
The stormwater runoff analysis has been undertaken utilizing the HydroCAD Stormwater Modeling System software (Version 10) developed by the Applied Microcomputer Systems of Chocorua, New Hampshire. The program is based upon the TR-20 computer program and the TR-55 tabular method, both of which are based upon techniques developed by the USDA Soil Conservation Service. The analysis was undertaken for the 2-, 10-, and 25-year frequencies (3.1, 4.6, and 5.8 inches, respectively). Twenty-four hour storms with a Type III distribution were the basis for the analysis.

Conclusions

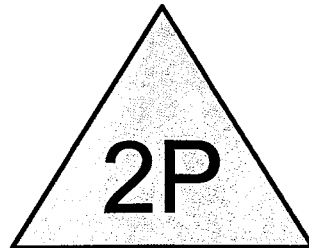
This project will infiltrate all of the stormwater through the 25 year storm. No unreasonable impacts to downstream properties or environments will occur.


Thomas S. Greer, PE
Walsh Engineering Associates, Inc.





DEVELOPED SITE



INFLITRATION AREA



LUMBER WAREHOUSE, TSG 10.3.18

Prepared by Hewlett-Packard Company

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Type III 24-hr 2 YEAR Rainfall=3.10"

Printed 10/1/2018

Page 2

Summary for Subcatchment 1S: DEVELOPED SITE

Runoff = 0.62 cfs @ 12.10 hrs, Volume= 0.046 af, Depth> 0.61"

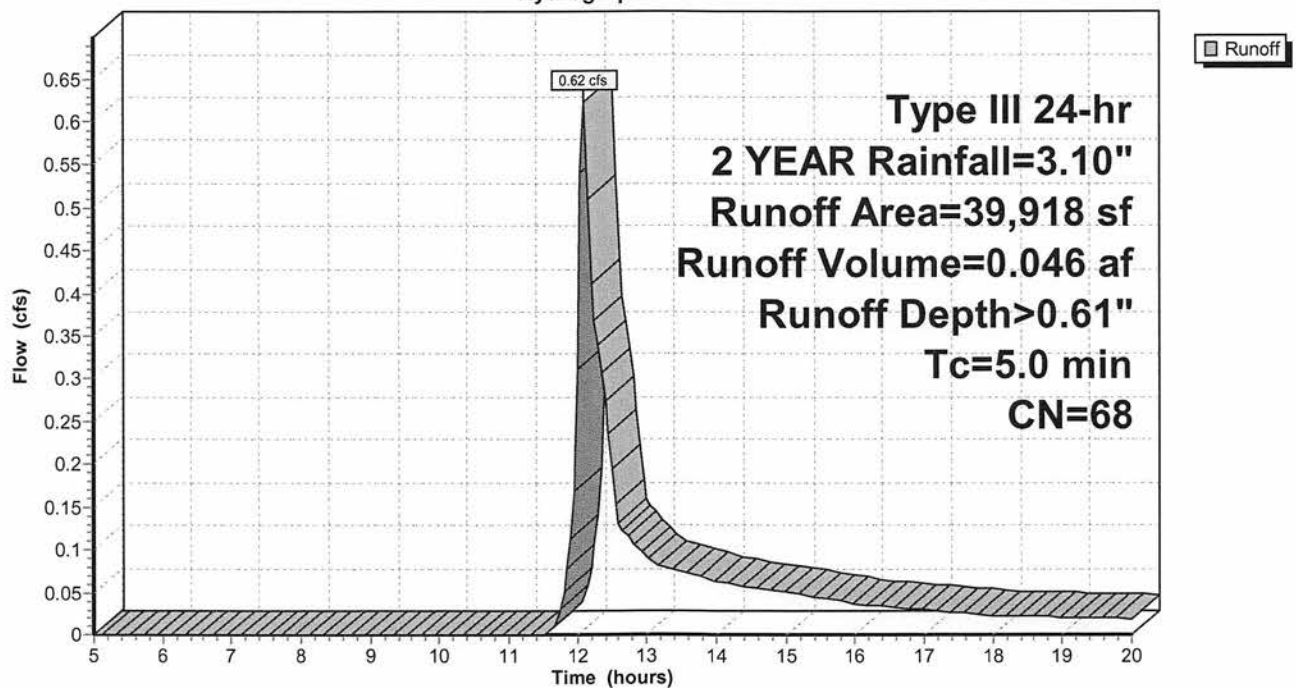
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YEAR Rainfall=3.10"

	Area (sf)	CN	Description
*	19,502	98	IMPERVIOUS
*	20,416	40	LANDSCAPED
	39,918	68	Weighted Average
	20,416		51.14% Pervious Area
	19,502		48.86% Impervious Area

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

Subcatchment 1S: DEVELOPED SITE

Hydrograph



LUMBER WAREHOUSE, TSG 10.3.18

Type III 24-hr 2 YEAR Rainfall=3.10"

Prepared by Hewlett-Packard Company

Printed 10/1/2018

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 3

Summary for Pond 2P: INFILTRATION AREA

Inflow Area = 0.916 ac, 48.86% Impervious, Inflow Depth > 0.61" for 2 YEAR event
 Inflow = 0.62 cfs @ 12.10 hrs, Volume= 0.046 af
 Outflow = 0.17 cfs @ 12.53 hrs, Volume= 0.046 af, Atten= 72%, Lag= 25.8 min
 Discarded = 0.17 cfs @ 12.53 hrs, Volume= 0.046 af
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

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

Peak Elev= 24.77' @ 12.53 hrs Surf.Area= 861 sf Storage= 484 cf

Plug-Flow detention time= 23.4 min calculated for 0.046 af (100% of inflow)

Center-of-Mass det. time= 22.8 min (857.9 - 835.0)

Volume	Invert	Avail.Storage	Storage Description
#1	24.00'	11,200 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.00	400	0	0
25.00	1,000	700	700
26.00	5,000	3,000	3,700
27.00	10,000	7,500	11,200

Device	Routing	Invert	Outlet Devices
#1	Discarded	24.00'	8.000 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 18.00'
#2	Primary	26.00'	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

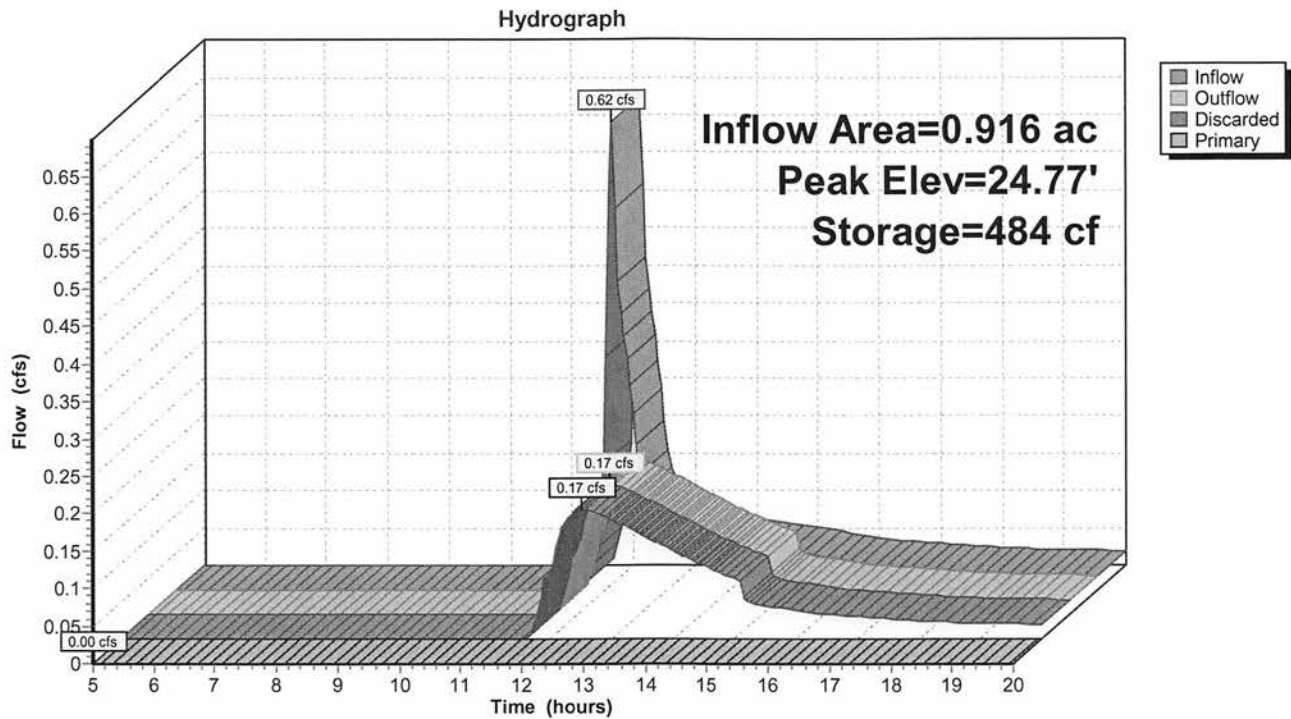
Discarded OutFlow Max=0.17 cfs @ 12.53 hrs HW=24.77' (Free Discharge)

↑1=Exfiltration (Controls 0.17 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=24.00' (Free Discharge)

↑2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: INFILTRATION AREA



LUMBER WAREHOUSE, TSG 10.3.18

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Type III 24-hr 10 YEAR Rainfall=4.60"

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Summary for Subcatchment 1S: DEVELOPED SITE

Runoff = 1.66 cfs @ 12.09 hrs, Volume= 0.112 af, Depth> 1.46"

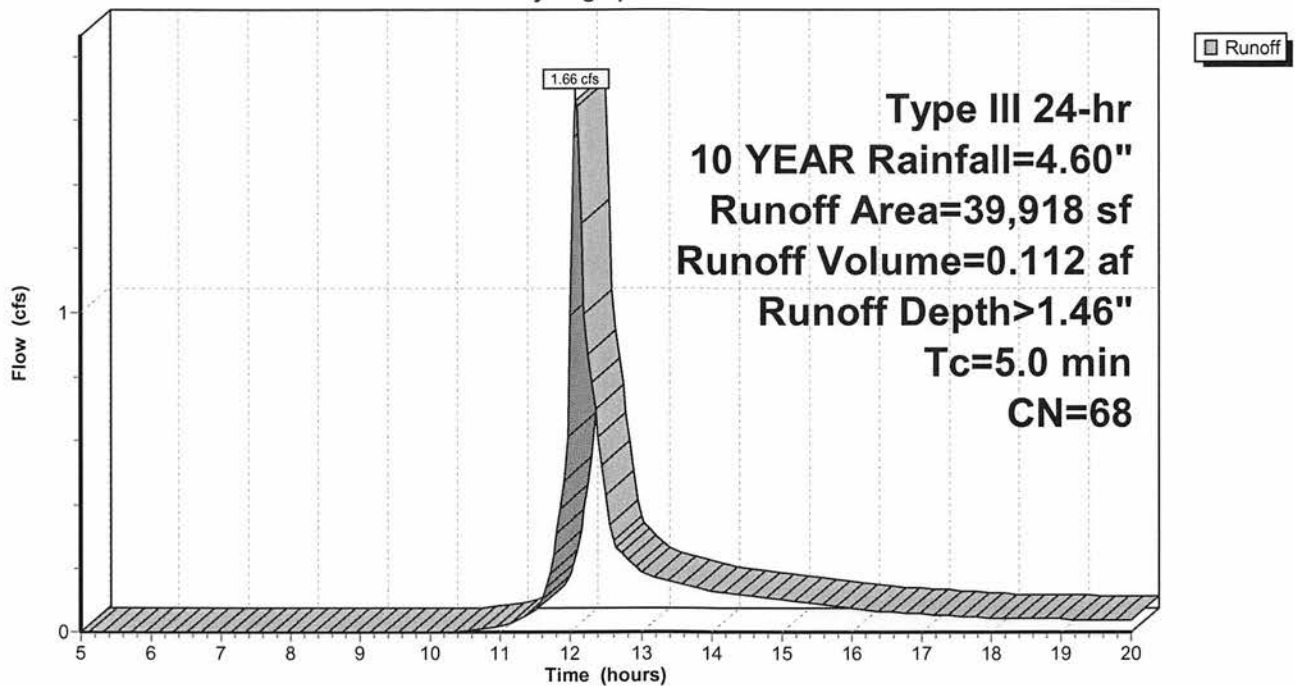
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YEAR Rainfall=4.60"

	Area (sf)	CN	Description
*	19,502	98	IMPERVIOUS
*	20,416	40	LANDSCAPED
	39,918	68	Weighted Average
	20,416		51.14% Pervious Area
	19,502		48.86% Impervious Area

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

Subcatchment 1S: DEVELOPED SITE

Hydrograph



LUMBER WAREHOUSE, TSG 10.3.18

Type III 24-hr 10 YEAR Rainfall=4.60"

Prepared by Hewlett-Packard Company

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Summary for Pond 2P: INFILTRATION AREA

Inflow Area = 0.916 ac, 48.86% Impervious, Inflow Depth > 1.46" for 10 YEAR event
 Inflow = 1.66 cfs @ 12.09 hrs, Volume= 0.112 af
 Outflow = 0.51 cfs @ 12.46 hrs, Volume= 0.112 af, Atten= 69%, Lag= 22.2 min
 Discarded = 0.51 cfs @ 12.46 hrs, Volume= 0.112 af
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 25.39' @ 12.46 hrs Surf.Area= 2,551 sf Storage= 1,388 cf

Plug-Flow detention time= 37.2 min calculated for 0.111 af (100% of inflow)
 Center-of-Mass det. time= 36.6 min (850.9 - 814.3)

Volume	Invert	Avail.Storage	Storage Description
#1	24.00'	11,200 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

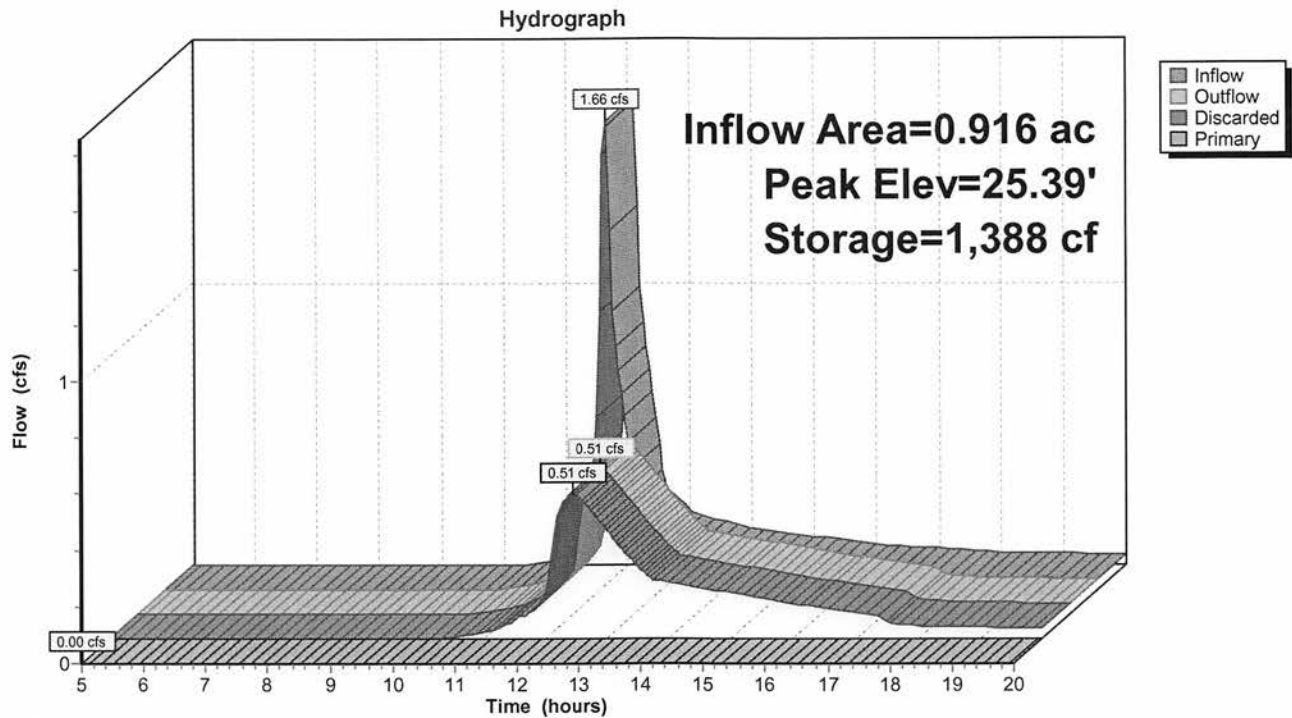
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.00	400	0	0
25.00	1,000	700	700
26.00	5,000	3,000	3,700
27.00	10,000	7,500	11,200

Device	Routing	Invert	Outlet Devices
#1	Discarded	24.00'	8.000 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 18.00'
#2	Primary	26.00'	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

Discarded OutFlow Max=0.51 cfs @ 12.46 hrs HW=25.39' (Free Discharge)
 ↑1=Exfiltration (Controls 0.51 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=24.00' (Free Discharge)
 ↑2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: INFILTRATION AREA



LUMBER WAREHOUSE, TSG 10.3.18

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Type III 24-hr 25 YEAR Rainfall=5.80"

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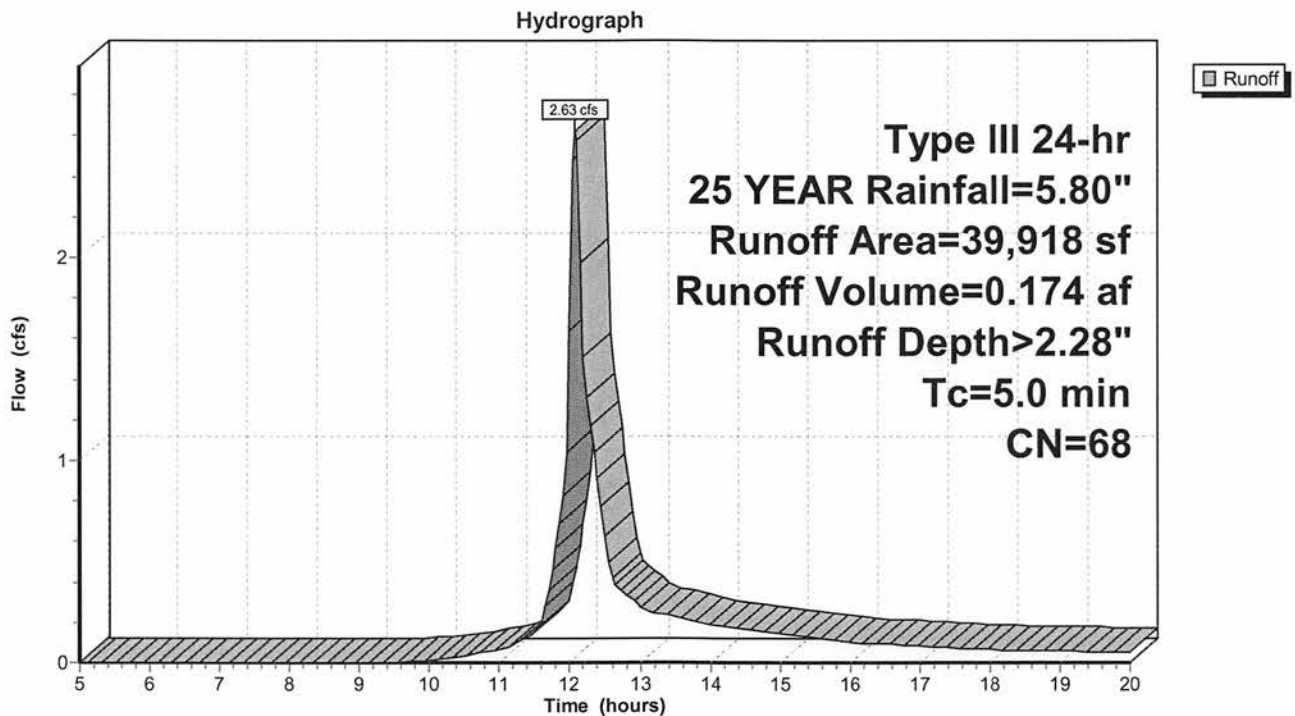
Summary for Subcatchment 1S: DEVELOPED SITE

Runoff = 2.63 cfs @ 12.08 hrs, Volume= 0.174 af, Depth> 2.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	19,502	98	IMPERVIOUS
*	20,416	40	LANDSCAPED
	39,918	68	Weighted Average
	20,416		51.14% Pervious Area
	19,502		48.86% Impervious Area

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

Subcatchment 1S: DEVELOPED SITE

LUMBER WAREHOUSE, TSG 10.3.18

Type III 24-hr 25 YEAR Rainfall=5.80"

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Summary for Pond 2P: INFILTRATION AREA

Inflow Area = 0.916 ac, 48.86% Impervious, Inflow Depth > 2.28" for 25 YEAR event
 Inflow = 2.63 cfs @ 12.08 hrs, Volume= 0.174 af
 Outflow = 0.76 cfs @ 12.46 hrs, Volume= 0.174 af, Atten= 71%, Lag= 22.5 min
 Discarded = 0.76 cfs @ 12.46 hrs, Volume= 0.174 af
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 25.69' @ 12.46 hrs Surf.Area= 3,744 sf Storage= 2,328 cf

Plug-Flow detention time= 41.5 min calculated for 0.173 af (100% of inflow)
 Center-of-Mass det. time= 41.0 min (845.4 - 804.4)

Volume	Invert	Avail.Storage	Storage Description
#1	24.00'	11,200 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.00	400	0	0
25.00	1,000	700	700
26.00	5,000	3,000	3,700
27.00	10,000	7,500	11,200

Device	Routing	Invert	Outlet Devices
#1	Discarded	24.00'	8.000 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 18.00'
#2	Primary	26.00'	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

Discarded OutFlow Max=0.76 cfs @ 12.46 hrs HW=25.69' (Free Discharge)
 ↑1=Exfiltration (Controls 0.76 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=24.00' (Free Discharge)
 ↑2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: INFILTRATION AREA

