

**MAJOR SUBDIVISION
PRELIMINARY PLAN APPLICATION
TO TOWN OF WINDHAM**

FOR

**ANGLERS ROAD COMMONS
APARTMENTS**

**ANGLERS ROAD
WINDHAM, MAINE**

PREPARED FOR

TIMOTHY CLINTON

**PO BOX 87
SCHITUATE, MA 02066**

PREPARED BY

DM ROMA
CONSULTING ENGINEERS

**PO BOX 1116
WINDHAM, ME 04062**

FEBRUARY 4, 2019

DM ROMA

CONSULTING ENGINEERS

February 4, 2019

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

**Re: Preliminary Major Subdivision Review
Anglers Road Commons Apartments
Timothy Clinton - Applicant**

Dear Amanda:

On behalf of Tim Clinton we are pleased to submit the enclosed application and plans for Preliminary Major Subdivision Review of a 44-unit residential development on a 6-acre parcel located on Angler's Road. The property is in the Commercial-1 zoning district and is a portion of the property currently owned by the Windham Economic Development Corporation near the intersection of Angler's Road and Roosevelt Trail. The proposed development will consist of a mixture of 32 two-bedroom and 12 three-bedroom residential apartments on a new 900-foot long roadway.

The project has been revised significantly from our Sketch Plan presentation to create a more residential scaled development with an inviting neighborhood feel. A formal sidewalk network with a connection to the park property is proposed to provide a recreation feature for the residents of the project and the surrounding community. The loop road configuration will also provide opportunity for a turn-around for the RSU-14 school busses and a second means of access for emergency vehicles.

We are currently in the process of completing our detailed design of an Engineered Wastewater Disposal Field that will accommodate the 10,000 gallons-per-day design flow for the project. We are also coordinating the water service with the Portland Water District and working with the Maine DEP on our application for a Stormwater Permit. As such, additional details regarding stormwater management and utility design will be forthcoming upon further coordination with the applicable agencies.

Upon your review of this information, please let us know if you have any questions or require any additional information.

Sincerely,

DM ROMA CONSULTING ENGINEERS

Dustin Roma

Dustin M. Roma, P.E.
President

Project Name: ANGLERS ROAD COMMONS APARTMENTS

Tax Map: 80 **Lot:** 66

Number of lots/dwelling units: 44 UNITS **Estimated road length:** 800 FEET

Is the total disturbance proposed > 1 acre? **Yes** **No**

Contact Information

1. Applicant

Name: TIMOTHY CLINTON

Mailing Address: PO BOX 87, SCHITUATE, MA 02066

Telephone: _____ Fax: _____ E-mail: _____

2. Record owner of property

_____ (Check here if same as applicant)

Name: WINDHAM ECONOMIC DEVELOPMENT CORPORATION

Mailing Address: 8 SCHOOL ROAD, WINDHAM, ME 04062

Telephone: _____ Fax: _____ Email: _____

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

Name: DUSTIN ROMA

Company Name: DM ROMA CONSULTING ENGINEERS

Mailing Address: PO BOX 1116, WINDHAM, ME 04062

Telephone: 310 - 0506 Fax: _____ E-mail: DUSTIN@DMROMA.COM

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

Dustin Roma

2-4-2019

Signature

Date

Preliminary Plan - Major Subdivision: Submission Requirements

A. Mandatory Written Information		Applicant	Staff
1	A fully executed and signed application form	X	
2	Evidence of payment of the application and escrow fees	X	
3	Proposed name of the subdivision	X	
4	Verification of right, title, or interest in the property, and any abutting property, by deed, purchase and sales agreement, option to purchase, or some other proof of interest.	X	
5	Copy of the most recently recorded deed for the parcel, along with a copy of all existing deed restrictions, easements, rights-of-way, or some other proof of interest	X	
6	Copy of any existing or proposed covenants or deed restrictions intended to cover all or part of the lots or dwellings in the subdivision	X	
7	Copy of any existing or proposed easements on the property	X	
8	Name, registration number and seal of the Maine Licensed Professional Land Surveyor who conducted the survey	X	
9	Name, registration number and seal of any other licensed professional of the state who prepared the plan (if applicable)	X	
10	An indication of the type of sewage disposal to be used in the subdivision	X	
	i. If connecting to public sewer, provide a letter from Portland Water District stating the District has the capacity to collect and treat the waste water	N/A	
	ii. If using subsurface waste water disposal systems (septic), submit test pit analyses prepared by a Maine Licensed Site Evaluator or Certified Soil Scientist. Test pit locations must be shown on a map.	X	
11	Indicate type of water supply system(s) to be used in the subdivision.	PUBLIC	
12	If connecting to public water, submit a written statement from the Portland Water District indicating there is adequate supply and pressure for the subdivision.	PENDING	
13	Names and addresses of the record owner, applicant, and adjoining property owners	X	
14	An acceptable title opinion proving right of access to the proposed subdivision or site for any property proposed for development on or off of a private way or private road.	N/A	
15	The name and contact information for the road association who's private way or road is used to access the subdivision.	N/A	

Applicant Staff

16	Financial Capacity.	PENDING	
	i. Estimated costs of development, and itemization of major costs	X	
	ii. Financing - provide one of the following:	PENDING	
	a. Letter of commitment to fund from financial institution, governmental agency, or other funding agency		
	b. Annual corporate report with explanatory material showing availability of liquid assets to finance development		
	c. Bank statement showing availability of funds if personally financing development		
	d. Cash equity commitment		
	e. Financial plan for remaining financing		
	f. Letter from financial institution indicating an intention to finance		
	iii. If a corporation, Certificate of Good Standing from the Secretary of State		
17	Technical Capacity	X	
	i. A statement of the applicant's experience and training related to the nature of the development, including developments receiving permits from the Town.	X	
	ii. Resumes or similar documents showing experience and qualifications of full-time, permanent or temporary staff contracted with or employed by the applicant who will design the development.	X	

B. Mandatory Plan Information			
1	Name of subdivision, date and scale	X	
2	Stamp of the Maine License Professional Land Surveyor that conducted the survey, including at least one copy of original stamped seal that is embossed and signed	X	
3	Stamp with date and signature of the Maine Licensed Professional Engineer that prepared the plans.	X	
4	North arrow identifying all of the following: Grid North, Magnetic North, declination between Grid and Magnetic, and whether Magnetic or Grid bearings were used in the plan design	X	
5	Location map showing the subdivision within the municipality	X	
6	Vicinity plan showing the area within 250 feet, to include:	X	
	i. approximate location of all property lines and acreage of parcels	X	
	ii. locations, widths, and names of existing, filed, or proposed streets, easements or building footprints	X	
	iii. location and designations of any public spaces	X	
	iv. outline of proposed subdivision, together with its street system and indication of future probably street system, if the proposed subdivision encompasses only part of the applicants entire property.	X	
7	Standard boundary survey of parcel, including all contiguous land in common ownership within the last 5 years	X	
8	Proposed lot lines with approximate dimensions and area of each lot.	X	
9	Contour lines at 2-foot intervals, or at intervals required by the Board, showing elevations in relation to the required datum.	X	

		Applicant	Staff
10	Typical cross sections of the proposed grading for roadways, sidewalks, etc., including width, type of pavement, elevations, and grades.	X	
11	Wetland areas shall be delineated on the survey. If none, please note.	NONE	
12	Number of acres within the proposed subdivision, location of property lines, existing buildings, vegetative cover type, specimen trees, if present, and other essential existing physical features.	X	
13	Rivers, streams, and brooks within or adjacent to the proposed subdivision. If any portion of the proposed subdivision is located in the direct watershed of a great pond, note which great pond.	X	
14	Zoning district in which the proposed subdivision is located, and the location of any zoning boundaries affecting the subdivision.	X	
15	Location & size of existing and proposed sewers, water mains, culverts, bridges, and drainage ways on or adjacent to the property to be subdivided. The Board may require this information to be depicted via cross-section, plan or profile views.	X	
16	Location, names, and present width of existing streets, highways, easements, building lines, parks, and other open spaces on or adjacent to the subdivision	X	
17	Location and widths of any streets, public improvements, or open space within the subdivision (if any) shown on the official map and the comprehensive plan	X	
18	All parcels of land proposed to be dedicated to public use and the conditions of such dedication.	X	
19	Location of any open space to be preserved or common areas to be created, and general description of proposed ownership, improvement, and management	X	
20	Approximate location of treeline after development	X	
21	Delineate boundaries of any flood hazard areas and the 100-year flood elevation as depicted on the Town's Flood Insurance Rate Map	X	
22	Show any areas within or adjacent to the proposed subdivision which have been identified by the Maine Department of Inland Fisheries and Wildlife "Beginning with Habitat project maps or within the Comprehensive Plan..	X	
23	Show areas within or adjacent to the proposed subdivision which are either listed on or eligible for the National Register of Historic Places, or have been identified in the comprehensive plan or by the Maine Historic Preservation Commission as sensitive or likely to contain such sites	N/A	
24	Erosion & Sedimentation control plan, prepared in accordance with MDEP Stormwater Law Chapter 500 Basic Standards, and the MDEP Maine Erosion and Sediment Control Best Management Practices, published March 2003.	X	
25	Stormwater management plan, prepared by a Maine Licensed Professional Engineer in accordance with the most recent edition of Stormwater Management for Maine: BMPS Technical Design Manual, published by the MDEP 2006.	X	

C. Submission information for which a waiver may be granted.		Applicant	Staff
1	High-intensity soil survey by a Certified Soil Scientist	WAIVER	
2	Landscape Plan	PENDING	
3	Hydrogeologic assessment - required if i) subdivision is not served by public sewer and either any part of the subdivision is over a sand and gravel aquifer or has an average density of more than one dwelling unit per 100,000 square feet, or ii) where site considerations or development design indicate greater potential of adverse impacts on groundwater quality.	PENDING	
	a) map showing basic soil types		
	b) depth to the water table at representative points		
	c) Drainage conditions throughout the subdivision		
	d) data on existing ground water quality		
	e) analysis and evaluation of the effect of the subdivision on groundwater		
	f) map showing location of any subsurface wastewater disposal systems and drinking water wells within the subdivision & within 200 feet of the subdivision boundaries.		
4	Estimate of the amount and type of vehicular traffic to be generated on a daily basis and at peak hours	X	
5	Traffic Impact Analysis for subdivisions involving 28 or more parking spaces or projected to generate more than 140 vehicle trips per day.	PENDING	
6	If any portion of the subdivision is in the direct watershed of a great pond,	WAIVER	
	i) phosphorous impact analysis and control plan		
	ii) long term maintenance plan for all phosphorous control measures		
	iii) contour lines at an interval of 2 feet		
	iv) delineate areas with sustained slopes greater than 25% covering more than one acre		
Electronic Submission		X	

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: ANGLERS ROAD COMMONS APARTMENTS

Tax Map: 80 **Lot:** 66

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

Ordinance Section	Standard	Mark which waiver this form is for
910.C.1.C.1	HIGH INTENSITY SOIL SURVEY	X
910.C.1.C.6	PHOSPHORUS IMPACT ANALYSIS	X
518.B.2.A.1	ONE CURB CUT IN THE C-1 ZONE	X

- 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.

1. THE PROJECT WILL INCLUDE A DETAILED HYDROGEOLOGICAL ASSESSMENT OF A LARGE WASTEWATER DISPOSAL FIELD AND DETAILED TEST PIT ANALYSIS OF THE STORMWATER SYSTEM. THE SITE IS ALSO A RECLAIMED GRAVEL PIT. A HIGH INTENSITY SOIL SURVEY WOULD BE UNNECESSARY GIVEN THE SCOPE OF THE PROJECT AND THE DETAILED ANALYSIS THAT WILL BE PERFORMED FOR WASTEWATER AND STORMWATER.

2. THE MDEP REQUIRES THAT THE PROJECT BE DESIGNED UTILIZING THE GENERAL STANDARDS OF MDEP CHAPTER 500 BASED ON THE SIZE AND SCOPE OF THE PROJECT, WHICH REQUIRES 95% OF THE SITE TO RECEIVE TREATMENT. RATHER THAN REQUIRING TWO SEPARATE METHODOLOGIES THAT ESSENTIALLY ACCOMPLISH SIMILAR OBJECTIVES, IT IS MORE APPROPRIATE TO WAIVE THE PHOSPHORUS DESIGN AND INSTEAD REQUIRE THE SITE TO COMPLY WITH THE MDEP GENERAL STANDARD.

(continued next page)

3. THE SECOND CURB CUT PROVIDES IMPROVED VEHICLE CIRCULATION AND IS NECESSARY DUE TO THE NUMBER OF DWELLING UNITS.

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.

PROJECT NARRATIVE

SECTION 1 – PROPOSED USE NARRATIVE

The property is a 6.09-acre vacant lot with frontage access from Anglers Road. The lot is located within the Commercial-1 Zoning District and is partially located within the Aquifer Protection B Zoning Overlay District. The proposed project includes the construction of 22 detached two-family dwelling structures for a total of 44 residential apartment units. The proposed access roadway will be a 20-foot wide paved surface and will include sidewalks and curbing. The project will be served by public water from the Portland Water District and a shared private wastewater disposal field. Electrical and gas service will be extended to the units underground. A trail connection with the adjacent Donnabeth Lippman Park will be constructed as part of the project.

SECTION 2 – RECORD OWNER INFORMATION

The property is owned by the Windham Economic Development Corporation. See Application Form for additional information.

SECTION 3 – ABUTTING PROPERTY OWNERS

See Boundary Survey and Subdivision Plan.

SECTION 4 – TITLE, RIGHT, OR INTEREST

A copy of the current deed along with a copy of the Purchase & Sale Agreement was submitted with the Sketch Plan.

SECTION 5 – COVENANTS OR DEED RESTRICTIONS

The property currently is encumbered by an easement for a stormwater bioinfiltration basin benefiting the Town of Windham. See attached easement recorded in the Cumberland County Registry of Deeds Book 32853, Page 231). The intent is to tie in the drainage that enters the infiltration basin into the proposed stormwater filtration basin.

SECTION 6 – EASEMENTS

See section 5.

SECTION 7 – LICENSED PROFESSIONALS

The plans and applications were prepared by DM Roma Consulting Engineers. Dustin Roma is a Maine Licensed Professional Engineer PE#12131. The Boundary Survey was

prepared by Main-Land Development Consultants, Inc. The septic system and hydrogeologic assessment will be prepared by Summit Geoengineering.

SECTION 8 – TECHNICAL ABILITY

The design professionals at DM Roma Consulting Engineers, Main-Land Development Consultants, and Summit Geoengineering have been performing similar consulting and design work in Southern Maine for many years, including many projects in Windham and the surrounding communities.

SECTION 9 – UTILITIES

The project will be served with domestic potable water by the Portland Water District, who will review the project development plans and provide a letter indicating their ability to serve the project upon completion of their technical review. A single on-site wastewater disposal systems is currently being designed and will be submitted to the State to be reviewed and approved as an Engineered System. Gas will be provided by Maine Natural Gas, and underground power will be provided by Central Maine Power Company.

SECTION 10 – WATER SUPPLY AND SEWAGE DISPOSAL

See section 9.

SECTION 11 – SOLID WASTES

The residential lots will utilize the Town's curbside trash collection program to dispose of solid wastes.

SECTION 12 – VEHICLE TRAFFIC

The project has been designed to utilize the existing curb cut on Anglers Road, which was designed for optimal traffic management. A waiver is being requested to allow 2 curb cuts so that the roadway can be constructed as a loop. Based on the Institute of Transportation Engineers Trip Generation Manual, 9th edition, 44 residential apartment dwellings are expected to generate approximately 28 peak hour trip-ends and 280 total daily vehicle trips.

SECTION 13 – UNIQUE NATURAL AREAS

There are no known unique natural areas within the project vicinity.

SECTION 14 – STORMWATER MANAGEMENT

A stormwater management report and stormwater maintenance plan is included as an attachment.

SECTION 15 – FINANCIAL CAPACITY

The expected construction costs to complete the sitework portion of the project are as follows:

• Clear and grub roadway areas	\$10,000
• Construct gravel roadways	\$100,000
• Bituminous Pavement	\$60,000
• Electrical Conduit & Risers	\$25,000
• Stormwater BMPs	\$40,000
• Leach Field & Septic	\$200,000
• Water main and services	\$65,000
• Landscaping & Lawns	\$50,000
Total Construction Costs	\$550,000

A letter indicating the ability to fund the project will be submitted with the final plan.

EASEMENT AGREEMENT

This EASEMENT AGREEMENT is entered into as of the 5 day of ^{January, 2016}~~December, 2015~~, by and between the WINDHAM ECONOMIC DEVELOPMENT CORPORATION, a non-profit corporation duly organized and existing under the laws of the State of Maine, with a principal place of business in Windham, Maine (“Grantor”) and the TOWN OF WINDHAM, a Maine municipality, having a place of business at 8 School Road, Windham, ME 04062 (“Grantee”).

Reference is made to the following facts which constitute the background to this instrument:

A. Grantor is the owner of a certain parcel of land located in the Town of Windham, Cumberland County, Maine shown as “Windham Map 80, Lot 66” on a certain plan entitled “Existing Conditions & Boundary Survey Plan” prepared for Windham Economic Development Corporation by Main-Land Development Consultants, Inc., last revised on December 17, 2015, Project: Anglers Road Development, Drawing No. S1.1 (the “Plan”), and also being a portion of the land conveyed to Grantor by a Warranty Deed dated December 30, 2009 and recorded in Cumberland County Registry of Deeds in Book 27503, Page 221 (the “WEDC Property”);

B. Grantee is the owner of a certain parcel of land shown as “Proposed Conveyance To The Town Of Windham” on the Plan and described in a deed from Grantor to Grantee to be recorded on near or even date herewith; and

C. Grantor desires to grant to Grantee certain stormwater drainage easement rights over a portion of the WEDC Property as hereinafter set forth.

NOW, THEREFORE, for One Dollars (\$1.00) and other good and valuable consideration in hand this day paid, the receipt and sufficiency of which are hereby acknowledged, Grantor does hereby GRANT to Grantee the perpetual right and easement (i) to construct, maintain, repair and replace a stormwater bioinfiltration basin within that portion of the WEDC Property described on Exhibit A attached hereto and made a part hereof and shown as “Proposed Bioinfiltration Basin Easement” on the Plan attached hereto as Exhibit B and made a part hereof (the “Easement Area”); and (ii) to collect surface and groundwater drainage from adjoining property and to discharge the same in and through the Easement Area hereinabove described.

Grantee agrees to (i) comply with any and all laws regarding stormwater discharge; (ii) be responsible for any charges (including any fines or penalties), payments or improvements or

mitigations associated with or required as a result of the stormwater discharge and any adverse impact on water quality or lands of third parties; (iii) take responsibility for obtaining any and all requisite permits in connection therewith; and (iv) promptly and fully remediate any unlawful discharges from or onto the Easement Area.

Grantee agrees to indemnify and hold harmless Grantor and all those claiming by, under or through Grantor from all loss, claim, cost, damage and expense for damage to persons or property arising out of the use by Grantee, and all parties claiming by, through or under Grantee, of the rights and easements granted herein, except as and to the extent that any such loss, claim, cost, damage or expense is the result of the negligence of Grantor, or any party acting by, through or under Grantor.

Whenever any work is to be performed by Grantee on WEDC Property pursuant to the provisions of a right or easement granted hereunder, such work shall be performed in a safe, diligent and workmanlike manner and in compliance with all applicable laws, ordinances, orders, rules, regulations and requirements of all governmental authorities having jurisdiction thereover and with all necessary permits and approvals having been issued therefore.

Except in cases of emergency, whenever Grantee shall intend to enter upon WEDC Property to perform any work pursuant to the provisions hereof, Grantee shall give Grantor reasonable advance notice, either by telephone or in writing, of its intent to enter upon such property, the manner and extent of such entry, and the reasons therefore.

The rights and easements created hereby shall run with the land and shall be binding upon and inure to the benefit of Grantor and Grantee, and their respective successors and assigns, as owners of the respective parcels benefiting from and burdened by the respective rights and easements created herein.

This Easement Agreement shall be governed by the laws of the State of Maine, as the same may now exist or as may be hereafter enacted.

Executed as an instrument under seal in any number of counterpart copies, each of which shall be deemed an original for all purposes as of the day and year first above written.

GRANTOR:

SIGNED, SEALED and DELIVERED
in presence of:

WINDHAM ECONOMIC
DEVELOPMENT CORPORATION

Judith H. Vance
witness:

By Thomas Bartell
PRINT Thomas Bartell
ITS Executive Director

STATE OF MAINE
Cumberland, ss.

January 5, 2016
~~December 5, 2015~~

Then personally appeared the above named Thomas Bartil, as Executive Director of Windham Economic Development Corporation and acknowledged the foregoing instrument to be his free act and deed and the free act and deed of Windham Economic Development Corporation.

Before me,

Linda S. Morrell
Notary Public
Print Name LINDA S. MORRELL
Commission Expires My Comm. Expires April 12, 2016
Notary Public - Maine

Affix Notarial Seal Here

SEAL

GRANTEE:

SIGNED, SEALED and DELIVERED
in presence of:

TOWN OF WINDHAM

Judith H. Vance
Witness:

By [Signature]
PRINT Anthony T. Plante
ITS Town Manager

STATE OF MAINE
Cumberland, ss.

January 5, 2016
~~December 5, 2015~~

Then personally appeared the above named Anthony Plante, as Manager of the Town of Windham and acknowledged the foregoing instrument to be his free act and deed and the free act and deed of the Town of Windham.

Before me,

Linda S. Morrell
Notary Public
Print Name LINDA S. MORRELL
Commission Expires My Comm. Expires April 12, 2016
Notary Public - Maine

Affix Notarial Seal Here

SEAL

Exhibit A
Bioinfiltration Basin Easement
0.2+/- Acres

A certain Bioinfiltration Basin Easement, situated on the southerly side of Anglers Road, so-called, in the Town of Windham, County of Cumberland, and State of Maine, being more particularly bounded and described as follows, to wit:

Beginning at a point on the said southerly side of Anglers Road, said point being South 44 degrees-39 minutes- 23 seconds West, along the said southerly side of Anglers Road, a distance of fifty-four and twenty-six hundredths (54.26) feet from the northwesterly corner of land now or formerly of Chaffin Pond Abode, LLC (Book 31554, Page 49);

Thence, from the Point of Beginning, South 45 degrees-19 minutes- 26 seconds East, a distance of forty-five and zero hundredths (45.00) feet to a point;

Thence, South 44 degrees-13 minutes- 41 seconds East, a distance of two hundred and zero hundredths (200.00) feet to a point;

Thence, North 45 degrees-46 minutes- 19 seconds West, a distance of thirty-eight and ninety-three hundredths (38.93) feet to a point on the southerly side of land to be conveyed to the Town of Windham;

Thence, generally northeasterly along said land to be conveyed to the Town of Windham and by a circular curve deflecting to the left, a distance of ninety-seven and seven hundredths (97.07) feet to a point, said curve having a radius of three hundred twenty-five and zero hundredths (325.00) feet, and a chord bearing North 41 degrees-25 minutes- 46 seconds East, a distance of ninety-six and seventy-one hundredths (96.71) feet;

Thence, North 32 degrees-52 minutes- 23 seconds East, along said land to be conveyed to the Town of Windham, a distance of thirty-six and forty-two hundredths (36.42) feet to a point on the said southerly side of Anglers Road;

Thence, North 49 degrees-56 minutes- 23 seconds East, along the said southerly side of Anglers Road, a distance of fifty-seven and sixty-five hundredths (57.65) feet to a point;

Thence, North 44 degrees-39 minutes- 23 seconds East, along the said southerly side of Anglers Road, a distance of ten and sixty-nine hundredths (10.69) feet to the Point of Beginning;

The above-described easement contains 0.2+/- acres.

All bearings are referenced to Maine State Grid, West Zone, NAD83.

All Book and Pages refer to the Cumberland County Registry of Deeds.

Meaning and intending to describe the easement area for a bioinfiltration basin located on a parcel of land conveyed from R & T Enterprise, LLC to Windham Economic Development Corporation by deed dated December 30, 2009 and recorded in Cumberland County Registry of Deeds in Book 27503, Page 221.

Reference is herein made to a plan entitled "Existing Conditions & Boundary Survey Plan" prepared for Windham Economic Development Corporation by Main-Land Development Consultants, Inc., last revised on December 17, 2015, Project: Anglers Road Development, Drawing No. S1.1.

Received
Recorded Register of Deeds
Jan 12, 2016 02:05:53P
Cumberland County
Nancy A. Lane

STORMWATER MANAGEMENT REPORT

ANGLERS ROAD COMMONS WINDHAM, MAINE

A. Narrative

Tim Clinton is proposing to develop property located on Anglers Road in Windham as a 44-unit residential apartment development. The property is approximately 6.5 acres, is located in the Commercial 1 Zoning District and is identified as Lot 66 on the Town of Windham Assessors Map 80.

The project consists (22) duplex style structures containing (12) three-bedroom residential apartments and (32) two-bedroom residential apartments. The development will also include the construction of approximately 860 linear feet of paved roadway, reconstruction of a portion of the exiting Anglers Road, paved driveways, utility services and stormwater infrastructure. The development will be served by public water, common subsurface septic, natural gas and underground electric, telephone and cable.

The property was previously part of a gravel pit which has yet to be reclaimed. In general, the site drains southeasterly across Town owned land to Chaffin Pond located approximately 265 feet from the southerly property boundary. The Chaffin Pond watershed is defined by the Maine Department of Environmental Protection (MDEP) as a Lake Watershed Most at Risk from Development.

B. Alterations to Land Cover

The 6.5-acre parcel was previously developed as a gravel pit. The site currently consists of approximately 2.7 acres of un-revegetated surface. The remaining property is undeveloped woods.

The proposed development will generate approximately 64,947 square feet (1.49 acres) of new impervious surface consisting of the proposed buildings, paved roadway and driveways and paved path within the open space. The development also proposes approximately 114,395 square feet (2.63 acres) of new landscaped area resulting in a total new developed area of approximately 179,342 square feet (4.12 acres).

Since the project is within a Lake Watershed Most at Risk from Development and will generate over 20,000 square feet of new impervious surface, a Stormwater Permit will need to be obtained from the MDEP. The stormwater design will be required to meet the Basic and Phosphorous Standards of the Chapter 500 Stormwater Management Rules. Since the project will generate

less than three (3) acres of new impervious surface and less than five (5) acres of new developed area and Chaffin Pond is not indicated as severely blooming, the MDEP allows the project to meet the General Standards in lieu of providing the Phosphorous Standard calculations.

In addition, the development will require Subdivision approval from the Town of Windham Planning Board. The Town's Land Use Ordinance requires the project to implement Best Management Practices (BMPs) to provide both stormwater quality and quantity control.

The site is relatively flat within the limits of the previously developed gravel pit (1-3%) with steeper slopes located within the undeveloped portion of the property with some slopes steeper than 3H:1V. The onsite soils as identified on the Medium Intensity Soil Maps for Cumberland County, Maine published by the Natural Resources Conservation Service are primarily Hinckley loamy sand. The soils within the proposed development are in the hydrologic soils group "A". The soils map has been included as Attachment 1 of this report.

C. Methodology and Modeling Assumptions

The proposed stormwater management system has been designed utilizing Best Management Practices (BMPs) to maintain existing drainage patterns while providing stormwater quality improvement measures. The goal of the storm drainage design is to remove potential pollutants while promoting infiltration and filtration of runoff generated by the development.

D. Basic Standards

The project is required by the Town and the Maine Department of Environmental Protection (MDEP) to provide permanent and temporary Erosion Control Best Management Practices. These methods are outlined in detail in the plan set.

E. General Standard

The project is required by the MDEP and the Town of Windham to comply with Section 4B-General Standards of the MDEP Chapter 500 Stormwater Management. This document outlines the requirement of the project to provide stormwater quality treatment for no less than 95% of the new impervious surface and 80% of the total new developed area associated with the project. The water quality requirements will be met with the utilization of an underdrained filter basin and roof dripedges installed around each of the apartment buildings. As a result of the proposed stormwater infrastructure, the project provides water quality treatment for over 99% of the site's new impervious surfaces and 84% of the new developed areas. Calculations can be found on the Stormwater Treatment Plan and included as Attachment 2 of this report.

F. Flooding Standards

The Windham Land Use Ordinance requires that projects requiring Subdivision Review shall comply with Section 4E-Flooding Standards of the MDEP Chapter 500 Stormwater Management. The stormwater design incorporates a closed drainage system discharging to an underdrained filter basin. The proposed BMP will collect the tributary runoff and gradually discharge the stormwater over a 24- to 48-hour period with larger storms overtopping the riprap reinforced spillway. This flow will drain across publicly owned land and within 265 feet of the property line, discharge into Chaffin Pond. Due to the proposed BMP design and the proximity to a large body of water, we are requesting a waiver of Section 911.J.6 of the Town of Windham Land Use Ordinance.

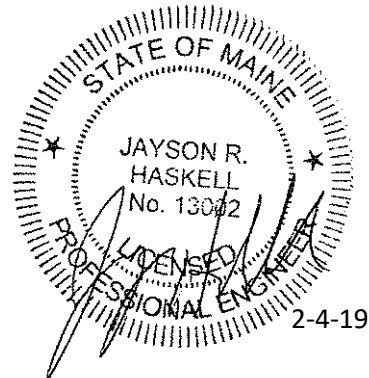
G. Maintenance of common facilities or property

The owner/applicant will be responsible for the maintenance of the stormwater facilities. Enclosed is an Inspection, Maintenance and Housekeeping Plan for the project.

Prepared by:

DM ROMA CONSULTING ENGINEERS

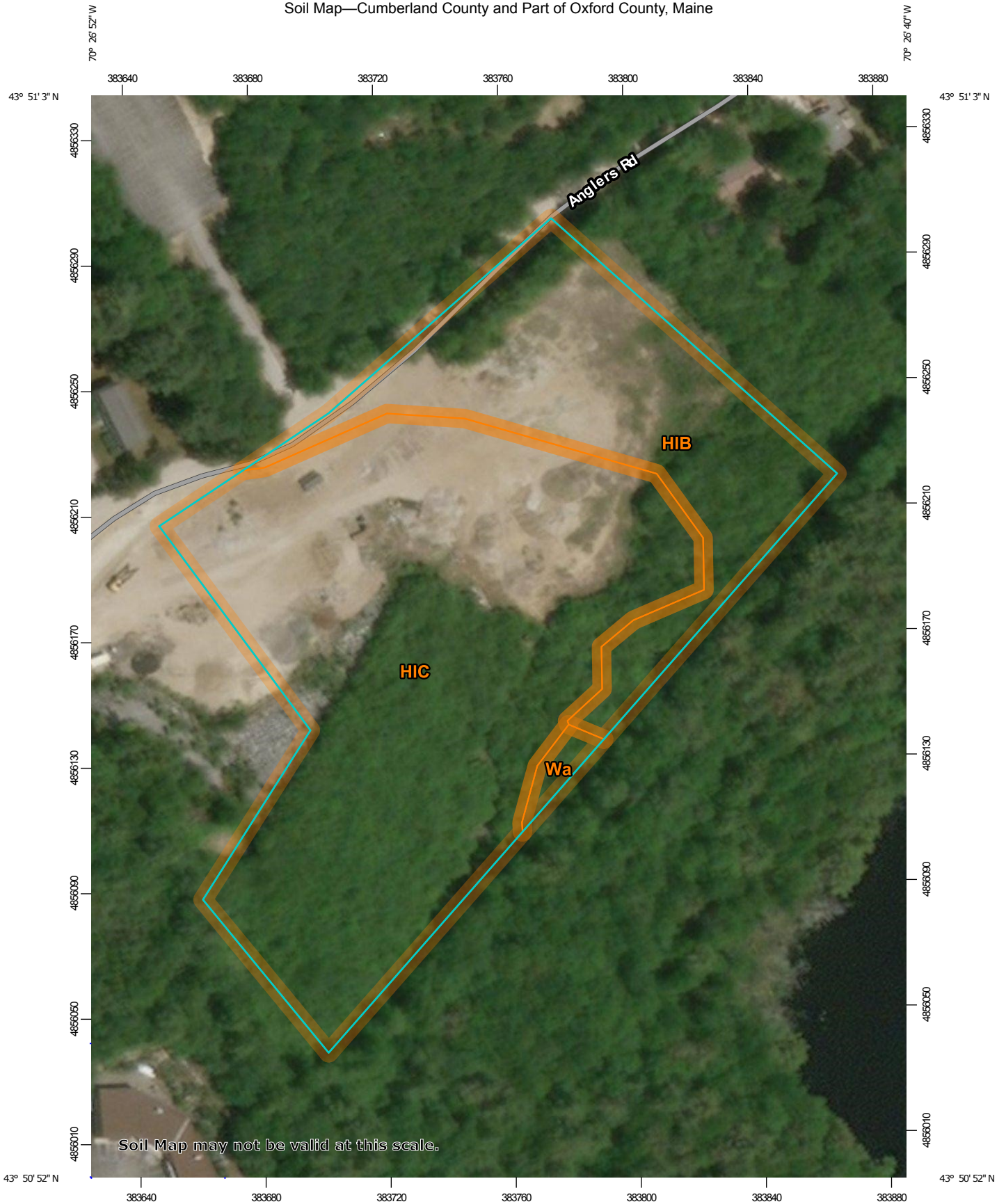
Jayson R. Haskell, P.E.
Southern Maine Regional Manager



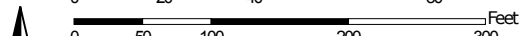
ATTACHMENT 1

SOILS MAP

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



Map Scale: 1:1,680 if printed on A portrait (8.5" x 11") sheet.



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




Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

11/20/2018
Page 1 of 3


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Cumberland County and Part of Oxford County, Maine

Survey Area Data: Version 15, Sep 6, 2018

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

Date(s) aerial images were photographed: Apr 29, 2012—Jun 26, 2016

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HIB	Hinckley loamy sand, 3 to 8 percent slopes	2.0	29.7%
HIC	Hinckley loamy sand, 8 to 15 percent slopes	4.7	69.1%
Wa	Walpole fine sandy loam	0.1	1.1%
Totals for Area of Interest		6.8	100.0%

ATTACHMENT 2

STORMWATER TREATMENT CALCULATIONS

Stormwater Treatment Table
 Anglers Road Residential Apartments

	Total Watershed Area (SF)	New Paved Impervious Area (SF)	New Building Area (SF)*	New Landscaped Area (SF)	Existing/Offsite Impervious Area (SF)**	Existing/Offsite Landscaped Area (SF)**	Existing Undeveloped Area (SF)	Treatment Provided	New Impervious Area Treated In Treatment Device (SF)	New Landscaped Area Treated In Treatment Device (SF)	Treatment Device
WS-10	68,237	733	4,694	28,791	409	242	33,368	No	0	0	None
WS-20	238,080	43,070	16,450	85,604	10,963	2,919	79,074	Yes	43,070	85,604	FB
Total		43,803	21,144	114,395					43,070	85,604	

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

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

New Impervious Area =	64,947 sf
Impervious Area Requiring Treatment (95%) =	61,700 sf
Impervious Area Treatment Provided =	64,214 sf
	99% New Impervious Area Treated
New Developed Area =	179,342 sf
Developed Area Requiring Treatment (80%) =	143,474 sf
Developed Area Treatment Provided =	149,818 sf
	84% New Developed Area Treated

Filter Basin FB-1

Tributary Impervious Area= 54,033 sf (WS-20 Impervious Area)
Tributary Landscaped Area= 88,523 sf (WS-20 Landscaped Area)

Water Quality Volume (WQV) Calculation

WQV (Required) = $1.0 \times \text{Impervious Area} + 0.4 \times \text{Landscaped Area}$

WQV (Required) = 7,454 cf

Stage Storage Volume

Elevation	Area (sf)	Storage (cf)
298.25	4,521	0
300	7,028	10,025
301.5	8,692	21,793

Outlet Elevation = 299.75

Storage Volume Provided= 8,317 cf > Required

Filter Bottom Calculation

Filter Area (Required) = $5\% \times \text{Impervious Area} + 2\% \times \text{Landscaped Area}$

Filter Area (Required) = 4,472 sf

Filter Area Provided = 4,521 sf > Required

Typical Drip Edge Sizing Calculations

Tributary Impervious Area= 1,220 sf
Tributary Landscaped Area= 0 sf

Water Quality Volume (WQV) Calculation

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

WQV (Required) = 102 cf

Drip Edge sizing:

Width	1.5	feet
Depth	1.5	feet
Effective Area	210	sf
% Void (crushed stone)	40%	
Total Volume Provided:	126	cf > Required

ATTACHMENT 3

INSPECTION, MAINTENANCE & HOUSEKEEPING PLAN



INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

ANGLERS ROAD COMMONS
ANGLERS ROAD
WINDHAM, MAINE

Responsible Party

Owner: Tim Clinton
P.O. Box 87
Schituate, MA 02066

The owner is responsible for the maintenance of all stormwater management structures and related site components and the keeping of a maintenance log book with service records. Records of all inspections and maintenance work performed must be kept on file with the owner and retained for a minimum of five years. The maintenance log will be made available to the Town and Maine Department of Environmental Protection (MDEP) upon request. At a minimum, the maintenance of stormwater management systems will be performed on the prescribed schedule.

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

During Construction

- 1. Inspection and Corrective Action:** It is the contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. Inspection shall occur on all disturbed and impervious areas, erosion control measures, material storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as 24 hours before and after a storm event and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections.
- 2. Maintenance:** Erosion controls shall be maintained in effective operating condition until areas are permanently stabilized. If best management practices (BMPs) need to be repaired, the repair work should be initiated upon discovery of the problem but no later than the end of the next workday. If BMPs need to be maintained or modified, additional

BMPs are necessary, or other corrective action is needed, implementation must be completed within seven calendar days and prior to any rainfall event.

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

Housekeeping

- 1. Spill prevention:** Controls must be used to prevent pollutants from construction and waste materials on site to enter stormwater, which includes storage practices to minimize exposure of the materials to stormwater. The site contractor or operator must develop, and implement as necessary, appropriate spill prevention, containment, and response planning measures.
- 2. Groundwater protection:** During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials. Any project proposing infiltration of stormwater must provide adequate pre-treatment of stormwater prior to discharge of stormwater to the infiltration area, or provide for treatment within the infiltration area, in order to prevent the accumulation of fines, reduction in infiltration rate, and consequent flooding and destabilization.
- 3. Fugitive sediment and dust:** Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control, but other water additives may be considered as needed. A stabilized construction entrance (SCE) should be included to minimize tracking of mud and sediment. If off-site tracking occurs, public roads should be swept immediately and no less than once a week and prior to significant storm events. Operations during dry months, that experience fugitive dust problems, should wet down unpaved access roads

once a week or more frequently as needed with a water additive to suppress fugitive sediment and dust.

4. **Debris and other materials:** Minimize the exposure of construction debris, building and landscaping materials, trash, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials to precipitation and stormwater runoff. These materials must be prevented from becoming a pollutant source.
5. **Excavation de-watering:** Excavation de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water removed from the ponded area, either through gravity or pumping, must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the Department.
6. **Authorized Non-stormwater discharges:** Identify and prevent contamination by non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are:
 - (a) Discharges from firefighting activity;
 - (b) Fire hydrant flushings;
 - (c) Vehicle washwater if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited);
 - (d) Dust control runoff in accordance with permit conditions and Appendix (C)(3);
 - (e) Routine external building washdown, not including surface paint removal, that does not involve detergents;
 - (f) Pavement washwater (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used;
 - (g) Uncontaminated air conditioning or compressor condensate;
 - (h) Uncontaminated groundwater or spring water;
 - (i) Foundation or footer drain-water where flows are not contaminated;
 - (j) Uncontaminated excavation dewatering (see requirements in Appendix C(5));
 - (k) Potable water sources including waterline flushings; and
 - (l) Landscape irrigation.
7. **Unauthorized non-stormwater discharges:** Approval from the MDEP does not authorize a discharge that is mixed with a source of non-stormwater, other than those discharges in compliance with Section 6 above. Specifically, the MDEP's approval does not authorize discharges of the following:

- (a) Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials;
- (b) Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance;
- (c) Soaps, solvents, or detergents used in vehicle and equipment washing; and
- (d) Toxic or hazardous substances from a spill or other release.

Post construction

- 1. Inspection and Corrective Action:** All measures must be maintained by the owner in effective operating condition. A qualified third party inspector hired by the owner shall at least annually inspect the stormwater management facilities. This person should have knowledge of erosion and stormwater control including the standards and conditions of the site's approvals. The inspector shall be certified through the MDEP to inspect the stormwater infrastructure. The following areas, facilities, and measures must be inspected, and identified deficiencies must be corrected. Areas, facilities, and measures other than those listed below may also require inspection on a specific site.
 - A. Vegetated Areas:** Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.
 - B. Ditches, Swales, and Open Channels:** Inspect ditches, swales, and other open channels in the spring, late fall, and after heavy rains to remove any obstructions to flow, remove accumulated sediments and debris, control vegetative growth that could obstruct flow, and repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or side slopes.
 - C. Culverts:** Inspect culverts in the spring, late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the culvert's inlet and outlet.
 - D. Catch Basins:** Inspect and, if required, clean out catch basins at least once a year, preferably in early spring. Clean out must include the removal and legal disposal of any accumulated sediments and debris at the bottom of the basin, at any inlet grates,

at any inflow channels to the basin, and at any pipes between basins. If the basin outlet is designed to trap floatable materials, then remove the floating debris and any floating oils (using oil-absorptive pads).

- E. Underdrained Filter Basins:** Underdrained filter basins are not intended to function as snow storage areas, and winter plowing operations shall ensure that snow is not plowed or dumped into the basins. The basins should be inspected semi-annually and following major storm events for the first year and every six months thereafter. The basin should drain within 48 hours following a one-inch storm and if a larger storm fills the system to overflow, it shall drain within 36 to 60 hours. If ponding exceeds 48 hours, the top of the filter bed must be rototilled to reestablish the soil's filtration capacity. If water ponds on the surface of the bed for more than 72 hours, the top several inches of the filter shall be replaced with fresh material. Inspect for debris and sediment build up in the forebay and basin and remove as needed. Mowing of the basin can only occur semi-annually to a height of no less than 6 inches utilizing a hand-held string trimmer or push-mower. Any bare areas or erosion rills shall be repaired with new filter media or sandy loam then seeded and mulched. The basin should also be inspected annually for destabilization of side slopes, embankment settling and other signs of structural failure.
- F. Roofline Drip edges:** The drip edges should be inspected semi-annually and following major storm events for the first year and every six months thereafter. The reservoir crushed stone should drain within 48 hours following a one-inch storm and if a larger storm fills the system to overflow, it shall drain within 36 to 60 hours. If ponding exceeds 48 hours, the stone reservoir course shall be removed and the filter bed be rototilled to reestablish the soil's filtration capacity. If water ponds in the reservoir course for more than 72 hours, the top several inches of the filter shall be replaced with fresh material. Inspect for debris and sediment build up at surface and remove as needed. The drip edges are part of the stormwater management plan and cannot be paved over or altered in anyway.
- G. Regular Maintenance:** Clear accumulations of winter sand along roadway once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along pavement shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader.
- H. Documentation:** Keep a log (report) summarizing inspections, maintenance, and any corrective actions taken. The log must include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal. The log must be made accessible to Town staff upon request. The permittee shall retain a

copy of the log for a period of at least five years from the completion of permanent stabilization. Attached is a sample log.

Re-certification

Submit a certification of the following to the MDEP within three months of the expiration of each five-year interval from the date of issuance of the permit.

- (a) **Identification and repair of erosion problems.** All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
- (b) **Inspection and repair of stormwater control system.** All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.
- (c) **Maintenance.** The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the Department, and the maintenance log is being maintained.

Municipalities with separate storm sewer systems regulated under the Maine Pollutant Discharge Elimination System (MPDES) Program may report on all regulated systems under their control as part of their required annual reporting in lieu of separate certification of each system. Municipalities not regulated by the MPDES Program, but that are responsible for maintenance of permitted stormwater systems, may report on multiple stormwater systems in one report.

Duration of Maintenance

Perform maintenance as described.

STORMWATER MAINTENANCE LOG

(SHEET 1 OF 2)

ANGLERS ROAD COMMONS ANGLERS ROAD WINDHAM, MAINE

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

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Vegetated Areas	Inspect slopes and embankments early in Spring.			
Ditches, swales, and other open channels	Inspect after major rainfall event producing 1" of rain in two hours.			
	Inspect for erosion or slumping & repair			
	Mowed at least annually.			
Culverts	Inspect semiannually and after major rainfall.			
	Repair erosion at inlet or outlet of pipe.			
	Repair displaced riprap.			
	Clean accumulated sediment in culverts when >20% full.			
Catch Basins and Outlet Structures	Inspect to ensure that structure is properly draining.			
	Remove accumulated sediment semiannually.			
	Inspect grates/inlets and remove debris as needed.			

STORMWATER MAINTENANCE LOG

(SHEET 2 OF 2)

ANGLERS ROAD COMMONS ANGLERS ROAD WINDHAM, MAINE

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Underdrained Filter Basins And Roofline Drip edges	Check after each rainfall event to ensure that pond drains within 24-48 hours.			
	Replace top several inches of filter if pond does not drain within 72 hours.			
	Mow grass no more than twice a year to no less than 6 inches in height.			
	Inspect semi-annually for erosion or sediment accumulation and repair as necessary.			
Regular Maintenance	Clear accumulation of winter sand in paved areas annually.			