

## SUBDIVISION AMENDMENT APPLICATION

## CUMBERLAND FORESIDE VILLAGE

TOWN OF CUMBERLAND, ME



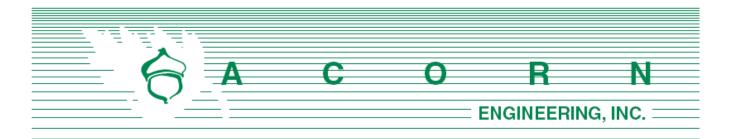
Prepared By: ACORN ENGINEERING, INC. For: HERITAGE VILLAGE DEVELOPMENT GROUP LLC

APRIL 3, 2023

## **Section** A

**Cover Letter/Project Narrative** 





Cumberland Planning Board Town of Cumberland, Maine Cumberland, ME 04101 April 3, 2023

## Subject:Town of Cumberland Subdivision Amendment<br/>Cumberland Foreside Village, 5th Amendment<br/>Applicant:Heritage Village Development Group LLC, (Peter Kennedy)

Ms. Nixon:

On behalf of Heritage Village Development Group LLC and owner Peter Kennedy, Acorn Engineering, Inc. (Acorn) is resubmitting this application previously approved by the board on December 20, 2022 for the purpose of recording the subdivision plan at the registry.

### This application is submitted for:

- 1. The construction of a 350' extension of Sky View Drive within a new ROW. The proposed road extension will include a 24-foot traveled way, curbs, a 5-foot paved sidewalk, underground utilities, and a closed drainage system. A new hammerhead turnaround will also be incorporated within an easement on lot 107A.
- 2. This proposal also splits lot 107 and creates lot 107A. The extension of Sky View Drive will provide access and frontage to the new lot.

Stormwater management and erosion control measures have been addressed on the plans and in writing within the application materials.

The subdivision/project area is subject to an existing Maine DEP Approval Order # L-21578-39-A and a MDOT Permit ID 01-00070-A-M. Please note that there are many easements on the site including a 100'-Beautification Easement along the Interstate 295 frontage, drainage easements along the Route One Commercial Lots (Comm. 3, 4 & 5). None of the existing easements will be revised or are affected by this proposed amendment.

The applicant proposes to keep the new extension a private way at this time. The applicant/owner intends to build the new road to meet Town and contract zone standards so that, in the future, it can be accepted by the Town. A Minor Revision Application will also be submitted to MDEP as part of the required permitting for the proposed changes,

The application fee including review escrow of \$600 is also attached to this submission. We look forward to working with you on this project.

Sincerely,

Aum Lekel

Sam Lebel, P.E. Project Manager Acorn Engineering, Inc.

The following documents and drawings are included in this application:

#### Documents:

- Section A: Cover Letter/Project Narrative
- Section B: Major Subdivision Application
- Section C: Right, Title, & Interest
- ➢ Section D: Abutter List
- Section E: Financial & Technical Capacity
- Section F: Stormwater Management Report
- > Section G: Erosion & Sedimentation Control Report

Drawings:

Cumberland Foreside Village Subdivision Amendment Plan Set, dated 10/25/2022 Including: 5<sup>th</sup> Amended Subdivision Plan, dated 10/20/2022



## **Section B**

**Subdivision Application** 



## **APPENDIX B**

## APPLICATION FOR MAJOR OR MINOR SUBDIVISIONS

Applicant's Contact Information			
Name: <u>Heritage Village Development Group LLC, c/o Peter Kennedy</u>			
Mailing Address: <u>12 Carroll Street, Falmouth, Maine</u>			
Email Address:pdkennedy4@gmail.com			
Phone#: Office:         Cell:         207-831-4586         Fax:			
Interest in property: <u>Own</u> Interest in abutting properties, if any: <u>none</u>			
Interest in abutting properties, if any:			
Property Owner's Contact Information			
Name: Same as applicant			
Mailing Address:			
Email Address:			
Email Address:			
Applicant's Architect, Landscape Architect, Engineer, Planner or Surveyor Contact			
<b>Information</b> (If more than one, please attach contact info for each one.)			
Name: <u>Acorn Engineering, Inc, Sam Lebel, P.E. (authorized agent)</u>			
Mailing Address: P.O. Box 3372, Portland, Maine 04104			
Email Address: slebel@acorn-engineering.com			
Phone#: Office: 207-775-2655 Cell: Fax:			
Project Information			
Name of Project: _Cumberland Foreside Village			
Address of site: Sky View Drive			
CCRD Book/Page #: Tax Map/Lot #:			
CCRD Book/Page #:       Tax Map/Lot #:         Zoning District:       Heritage Village - Contract Zone Overlay District (If any): None			
Site size (acres):         4.5         # of Lots:         1         # Buildings:         # Dwellings:         55			
Minor Subdivision X Major Subdivision Conservation Subdivision			
OTHER INFORMATION			
1. Is Board of Adjustment and Appeals approval required? <u>None</u>			
2. Are any ordinance waivers requested? Yes X No (If yes, attach a list of waivers requested and reason for the request.)			
3. Application fee per Town ordinance: \$ \$ \$			
4. This application form and all accompanying materials must be submitted to the Town Planner			
at least 21 days prior to the meeting at which it is to be considered by the Planning Board.			
The undersigned, being the applicant, owner or legally authorized representative, states that all			
information contained in this application is true and correct to the best of his/her knowledge and			
hereby does submit the information for review by the Town and in accordance with applicable			
ordinances, statutes and regulations of the Town, state and federal governments.			
Sum Lebel 4323			
own num			

Signature

Date

Heritage Village Development Group, LLC c/o Peter D. Kennedy 12 Carroll Street Falmouth, Maine 04105 (207) 831-4586, pdkennedy4@gmail.com

October 25, 2022

To Whom it May Concern:

This letter is to inform you that Acorn Engineering, Inc. in Portland, Maine is authorized to represent me throughout the permitting process for my project located within Cumberland Foreside Village Subdivision in the Town of Cumberland.

Sincerely,

Teto A. Henry

Peter D. Kennedy Heritage Village Development Group, LLC

## **APPENDIX D**

## MAJOR TRADITIONAL OR CLUSTERED SUBDIVISION SUBMISSION REQUIREMENTS AND CHECKLIST

The subdivision plan for a major traditional or clustered subdivision shall consist of an electronic submission and two (2) paper copies of all required application materials. Major subdivision review is a two-step process: 1) preliminary plan review and approval; 2) final plan review and approval. Occasionally, both preliminary and final approval may be granted by the Planning Board at the same meeting if all required information for both preliminary and final approval have been submitted, reviewed and approved by staff.

### PRELIMINARY PLAN

- **A.** Preliminary plan location map. The preliminary plan shall be accompanied by a location map drawn at a scale of not over 1,000 feet to the inch to show the relation of the proposed subdivision to the adjacent properties and to the general surrounding area. The preliminary plan shall show all the area within 1,000 feet of any property line of the proposed subdivision. Within such area the location map shall show:
  - **1.** All existing subdivisions and approximate tract lines of adjacent parcels together with the names of the record owners of all adjacent parcels of land, those directly abutting or directly across any street adjoining the proposed subdivision.
  - 2. Locations, widths and names of existing, filed or proposed streets, easements, and building lines pertaining to the proposed subdivision and to the adjacent properties.
  - 3. The boundaries and designations of zoning districts, parks and other public spaces.
  - 4. An outline of the proposed subdivision together with its street system and an indication of the future probable street system of the remaining portion of the tract, if the preliminary plan submitted covers only part of the subdivider's entire holding.
- **B.** Preliminary plan maps and information. The preliminary plan shall be submitted in 2 copies of one or more maps or drawings which may be printed or reproduced on paper with all dimensions shown in feet or decimals of a foot, drawn to a scale of one inch equals not more than 100 feet or, for plans describing construction of required improvements, a scale of one inch equals 40 feet; drawings are not to exceed 24 inches by 36 inches. All materials must also be provided in an electronic format. All plans shall be accompanied by the following information:
  - **1.** Proposed subdivision name or identifying title and the name of the municipality.
  - 2 Name and address of record owner, subdivider and designer of preliminary plan.
  - **3** Date of plan submission, true North point and graphic scale.
  - **4.** Number of acres within the proposed subdivision, location of property lines, existing easements, buildings, watercourses and other essential existing physical features.
  - 5. The names of all subdivisions immediately adjacent and the names of owners of record of adjacent acreage.

- **6.** The space standard and setback provisions of the Chapter 315, Zoning, applicable to the area to be subdivided and any zoning district boundaries affecting the subdivision.
- 7. The location and size of any existing or proposed sewers and water mains, culverts, hydrants, and drains on the property to be subdivided. This shall show the connections with existing sewer or water systems. Where public water and/or sewerage is not to be provided, alternative means of water supply and sewage treatment and disposal shall be shown, both horizontally and vertically. If on-site groundwater wells are proposed, the effect of withdrawal of groundwater may be required by the Board as set forth in this chapter.
- 8 If individual or collective private sewage disposal system(s) is (are) proposed, the location and results of tests to ascertain subsurface soils and groundwater conditions shall be signed and numbered by a licensed site evaluator. If a cluster system or collective private sewage disposal system(s) is (are) proposed, a hydrogeologic investigation shall be submitted meeting the sewage disposal standards as set forth in this chapter. A hydrogeologic investigation may be required by the Board for individual systems as set forth in this chapter.
- **9.** Location, names and present and proposed widths of existing and proposed streets, highways, easements, building lines, alleys, parks and other public open spaces both within and abutting the subdivision. Grades and street profiles of all streets, sidewalks or other public ways proposed by the subdivider shall be shown.
- **10.** Contour lines at intervals of two feet or at such intervals as the Planning Board may require, based on United States Geological Survey datum and referred to mean sea level.
- **11.** A high-intensity soil survey shall be conducted by a certified soil scientist to identify soils within the proposed development in accordance with United States Department of Agriculture Natural Resources Conservation Service National Cooperative Soil Classification. The soil boundaries and names shall be superimposed on a plot plan of the proposed development.
- 12 Deed reference and map of survey of tract boundary made and certified by a registered land surveyor, tied into established reference points. Deed restrictions, if any, shall be described.
- **13.** A surface drainage plan or stormwater management plan, with profiles and cross sections drawn by a professional engineer registered in the State of Maine, showing preliminary design of all facilities and conveyances necessary to meet the stormwater management standards as set forth in this chapter.
- 14. The proposed lot lines with dimensions and suggested locations of buildings.
- **15.** The location of temporary markers adequate to enable the Board to locate readily and appraise the basic layout in the field.
- **16.** All parcels of land proposed to be dedicated to public use and the conditions of such dedication.
- **17.** The location of all natural features or site elements to be preserved.
- **18.** A grading and landscaping plan, including natural features to be preserved.

**19.** Plans shall bear the seals or numbers of the registered professionals responsible for preparing appropriate sections of the plan. Surveys shall be stamped by registered professional engineers, soil surveys shall bear the numbers of a soil scientist, subsurface sewage disposal plans shall bear the number of the professional site evaluator responsible for those evaluations, geological evaluations shall bear a registered geologist's number and architectural work shall bear the architect's seal.

## FINAL PLAN

**C.** The final subdivision plan for a major traditional or clustered subdivision shall consist of an electronic submission and two (2) paper copies of all required application materials. All materials must also be provided in an electronic format.

The final plan shall show:

- **1.** All of the information presented on the preliminary plan and location map and any amendments thereto required by the Board or otherwise added to the plan. Engineering plans submitted shall be final plans on which construction may be based.
- **2.** The name, registration number and seal of the engineer, land surveyor, geologist, soil scientist, architect or planning consultant who prepared the plan.
- **3.** Street names and lines, pedestrian ways, lanes, easements, rights-of-way and areas to be reserved for or dedicated to public use.
- **4.** The length of all straight lines, the deflection angles, radii, length of curves and central angles of all curves, tangent distance and tangent bearings for each street.
- **5.** An actual field survey of the boundary lines of the tract, giving complete descriptive data by bearings and distances, made and certified by a licensed land surveyor. The corners of the tract shall be located on the ground and marked by monuments as herein required and shall be referenced as shown on the plan.
- **6.** Sufficient data acceptable to the municipal officials to determine readily the location, bearing and length of every lot line and boundary line and to reproduce such lines upon the ground. Where practical these should be tied to reference points previously established.
- **7.** The survey of the outside boundaries of the tract and the computation of the lot lines shall be performed to an accuracy of one foot in 5,000 feet. If requested by the Planning Board, the surveyor shall furnish copies of computation sheets for outside boundaries showing.
  - **a.** Sketch of traverse lines.
  - **b.** Closures;
  - c. Adjustments;
  - **d.** Coordinates; and
  - e. Computation of outside boundaries.

- **8.** By proper designation, all public open space for which offers of cession are made by the subdivider and those spaces to which the title is reserved by him.
- 9. Lots and blocks within the subdivision numbered in accordance with local practice.
- 10. Proposed homeowners' covenants and restrictions.
- **11.** Required MDEP stormwater maintenance documents.
- **D.** There shall be submitted to the Board with final plan:
  - **1.** Copies of declarations, agreements or other documents showing the manner in which open space or easements are to be held and maintained.
  - 2. Where conveyance of public open space or easements to the Town is contemplated, a written offer to make such conveyance to the Town and written evidence that the municipal officers are willing to accept such conveyances and are satisfied with the terms and conditions of the proposed conveyance and with the legal sufficiency of the proposed transfer documents. Such written evidence shall not constitute an acceptance by the municipality of any such public open space.

## COMPLETION CHECKLIST FOR MAJOR TRADITIONAL OR CLUSTERED SUBDIVISION SUBMISSION REQUIREMENTS

*Waivers:* Please make a check in the *Waiver Request* column for any requested waivers. Attach a separate sheet citing the Subdivision Ordinance section number, description, and reason for the waiver request.

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request?
General Submissions:			
15 copies of plans and materials. All sheet sized to be 24" x 36"	~		
1"=100' scale for general plan	$\checkmark$		
1"=40' scale for construction of required improvements	V		
Traffic Info?	N/A		
Capacity to Serve letters?	N/A		
Financial and Technical Capacity (Sec.14)	$\checkmark$		
Sewer user permits required? Status?	N/A		
Deed restrictions, if any, describe on separate sheet	N/A		
Cover Sheet:			
Proposed subdivision name	<b>V</b>		

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request
Name & address of record owner, subdivider, and designer of preliminary plan			
Location Map:			
Scale 1''=1000'	<b>V</b>		
Shows area 1000' from property lines			
All existing subdivisions	~		
Approximate tract lines of adjacent parcels			
Approximate tract lines of parcels directly across street	~		
<i>Location</i> of existing & proposed streets, easements, lot lines & bldg. lines of proposed subdivision & adjacent properties.	~		
Existing Conditions Plan:			
Existing buildings	<b>V</b>		
Watercourses	~		
Legend	·		
Wetlands	N/A		
Existing physical features (trees 10" diameter or more. Stone walls	N/A		
Trail System?	N/A		
Subdivision Plan:			
Date of plan submission, true north & graphic scale	~		
Net residential acreage calculations	N/A		
Legend			
Trail (connecting?)	N/A		
<i>Widths</i> of existing/proposed streets, easements & bldg. lines			
Names of existing/ proposed streets, easements & bldg. lines			
Boundaries & designations of zoning districts, parks, public spaces	N/A		
Outline of proposed subdivision w/ street system	~		
Future probable street system of remaining portion of tract.	N/A		

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request
Opportunities for Connecting Road(s) (13.2D)	~		-
Space and Setback of district			
Classification of road	N/A		
Width of road(s)	<b>V</b>		
Drainage type (open, closed, mix)	<b>V</b>		
Type of byway provided (8.4D)	N/A		
Names of adjacent subdivisions	<b>V</b>		
Names of owners of record of adjacent acreage	~		
Any zoning district boundaries affecting subdivision	N/A		
Location & size of existing or proposed sewers, water mains, culverts, hydrants and drains on property	~		
Connections w/existing sewer or water systems	~		
Private water supply shown	N/A		
Private septic shown	N/A		
Hydro-geologic study	N/A		
(option for Board)	N/A		
Test pit locations	N/A		
Well locations	N/A		
Signature & lic. # of site evaluator	N/A		
Existing streets: location, name(s), widths w/in and abutting	~		
Proposed streets: location, name(s), widths w/in and abutting			
The above for any highways, easements, bldg. lines, alleys, parks, other open spaces w/in and abutting	~		
Grades & street profiles of all streets, sidewalks or other public ways proposed	~		
2'contour lines			
High intensity soil survey by cert. soil scientist	N/A		
Soil boundaries & names superimposed on plot plan	N/A		
Deed reference & map of survey of tract boundary by reg. land surveyor tied to established reference points	N/A		

	Check if provided	Waiver Request
Surface drainage or stormwater mgmt plan w/profiles & cross sections by a P.E. showing prelim. design and conveyances	~	
Proposed lot lines w/ dimensions and suggested bldg. locations.	N/A	
Location of temp. markers in field	N/A	
All parcels proposed to be dedicated to public use and conditions of such.	N/A	
Location of all natural features or site elements to be preserved	N/A	
Street lighting details	N/A	
Landscaping and grading plan including natural features to be preserved	N/A	
Survey stamped by P.E.	N/A	
Soil surveys w/# of soil scientist	N/A	
Septic plan w/ # of prof. site evaluator	N/A	
Geological evals w/ reg. geologists number	N/A	
Architect's seal	N/A	
For Rt. One: 75' undisturbed buffer applicable to all buildings, structures, parking areas, drainage facilities and uses.	N/A	
Open Space?	N/A	
Any part of parcel in a shoreland zone?	N/A	
Flood Map Number and rating?	N/A	
Stormwater Report?	<b>V</b>	
Rivers, ponds, wetlands?	N/A	
Historic, archeological features?	N/A	
Solid waste disposal?	N/A	
Required Notes on Plan:		
Fire Department notes	N/A	
Clearing limits note	N/A	
Re: approval limit of 90 days before recording or null p. 10	N/A	
Actual field survey of boundary lines w/ monumentation shown	N/A	 
Assessor's approval of street names and assignment of lot numbers.	N/A	

		Location of information in packet, e.g. plan #, page #	Waiver Request
Designation of all open spaces w/ notes on ownership	N/A		
Copies of declarations, agreements or other documents showing the manner in which open space or easements are to	N/A		
Written offer for any conveyance to the Town of open space or easements along with written evidence that the Council is willing to accept such offer	N/A		
Evidence of Outside Agency Approvals	N/A		

## As per Section 7.2 - REVIEW AND APPROVAL BY OTHER AGENCIES:

**E**. Where review and approval of any subdivisions or site plan by any other governmental agency is required, such approval shall be submitted to the Planning Board in writing prior to the submission of the Final Plan.

Please list below all outside agency approvals that are required for this subdivision.

• Maine Department of Environmental Protection: no amendment needed

Other: (Please List):

## **Section C**

**Right, Title, & Interest** 



Recorded 10/10/2017 e 2:50p.m. Book 34376, Pye 332

## SHORT FORM QUITCLAIM DEED WITH COVENANT

**CUMBERLAND FORESIDE VILLAGE, LLC**, a Maine limited liability company, with a mailing address of 50 Gray Road, Falmouth, ME 04105 (the "Grantor"), FOR CONSIDERATION PAID, grants to **HERITAGE VILLAGE DEVELOPMENT GROUP**, **LLC**, a Maine limited liability company, with a mailing address of 2630 Harbourside Drive, Longboat Key, FL 34228 (the "Grantee"), with QUITCLAIM COVENANT, certain real property, together with any improvements thereon, situated in the Town of Cumberland, County of Cumberland and State of Maine, and more particularly described on Exhibit A attached hereto and made a part hereof.

IN WITNESS WHEREOF, Cumberland Foreside Village, LLC has caused this instrument to be executed by David Chase, its Manager thereunto duly authorized, this 10<sup>th</sup> day of October, 2017.

WITNESS: PITIL IP H. ELEAGON

CUMBERLAND FORESIDE VILLAGE, LLC By: 6 David Chase

Title: Manager

State of Maine County of Cumberland, ss.

October 10, 2017

PERSONALLY APPEARED the above-named David Chase, Manager, of Cumberland Foreside Village, LLC as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said limited liability company.

Befdre me.

Notary Public/Attorney at Law Print Name: PI+1/LIB 14. 6 LEAGON Commission Expires:

### EXHIBIT A

#### **Property Description**

Certain lots or parcels of land, together with the buildings and improvements thereon, situated on the Northerly side of U.S. Route 1, in the Town of Cumberland, County of Cumberland, State of Maine, and being more particularly described as follows:

All remaining land of the Grantor as shown on Fourth Amended Subdivision Plan, Cumberland Foreside Village for Cumberland Foreside Village, LLC by Owen Haskell, Inc. dated January 26, 2007 and recorded at the Cumberland County Registry of Deeds in Plan Book 217, Page 85, as may have been further amended (the "Plan").

The above described real estate includes, but is not limited to, the lots, common areas, and streets not previously conveyed as shown on the Plan.

Excepting from the above described premises the following parcels of land:

- Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Town of Cumberland dated December 29, 2005 and recorded at the Cumberland County Registry of Deeds in Book 23628, Page 18.
- Warranty Deed from Cumberland Foreside Village, LLC to CGM Ventures, LLC dated November 4, 2011 and recorded at the Cumberland County Registry of Deeds in Book 29099, Page 83.
- Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to 68 Route 1, LLC dated July 3, 2014 and recorded at the Cumberland County Registry of Deeds in Book 31615, Page 105.
- Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Integrative Health Center of Maine, LLC dated November 21, 2014 and recorded at the Cumberland County Registry of Deeds in Book 31931, Page 68.
- Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, LLC dated August 13, 2015 and recorded at the Cumberland County Registry of Deeds in Book 32515, Page 311.
- Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, LLC dated December 10, 2015 and recorded at the Cumberland County Registry of Deeds in Book 32787, Page 153.
- Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, LLC dated February 10, 2016 and recorded at the Cumberland County Registry of Deeds in Book 32912, Page 331.
- Quitclaim Deed with Covenant from Cumberland Foreside Village, Inc. to Graiver Homes, LLC dated April 1, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33022, Page 62.
- 9) Warranty Deed from Cumberland Foreside Village LLC to Florence Nightingale dated December 23, 2015 and recorded at the Cumberland County Registry of Deeds in Book 33036, Page 268.

- Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated June 30, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33238, Page 132.
- Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to WG Enterprises, LLC dated July 6, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33255, Page 160.
- 12) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Christopher M. King and Bridget L. Ling dated July 26, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33314, Page 342.
- 13) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated September 1, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33409, Page 223.
- 14) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to C and A Holdings, LLC dated September 9, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33431, Page 42.
- 15) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Marcast, LLC dated September 26, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33479, Page 80.
- 16) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated December 16, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33697, Page 57.
- 17) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated January 16, 2017 and recorded at the Cumberland County Registry of Deeds in Book 33768, Page 69.
- 18) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated March 6, 2017 and recorded at the Cumberland County Registry of Deeds in Book 33865, Page 139.
- 19) Commercial Lot 9 as shown on Fourth Amended Subdivision Plan, Cumberland Foreside Village for Cumberland Foreside Village, LLC by Owen Haskell, Inc. dated January 26, 2007 and recorded at the Cumberland County Registry of Deeds in Plan Book 217, Page 85.

This conveyance is made subject to all restrictions, covenants, conditions, and easements of record that may affect the premises herein conveyed.

For Grantor's source of title see: Deed from Peter D. Kennedy dated December 27, 2005, and recorded at Cumberland County Registry of Deeds in Book 23459, Page 231, as affected by Corrective Deed from Peter D. Kennedy dated September 26, 2006, and recorded at Cumberland County Registry of Deeds in Book 24404, Page 24; Deed from the Town of Cumberland dated January 23, 2006 and recorded at Cumberland County Registry of Deeds in Book 23628, Page 23; Deed from the Dina Duffey dated March 19, 2012 and recorded at Cumberland County Registry of Deeds in Book 29433, Page 72; Deed from the Town of Cumberland dated July 22, 2015 and recorded at Cumberland County Registry of Deeds in Book 32477, Page 266; and Deed from the Florence Nightingale dated December 23, 2015 and recorded at Cumberland County Registry of Deeds in Book 32827, Page 24.

# **Section D**

200 Foot Radius Abutter List





STATE OF MAINE DIV 24 STATE HOUSE STATION AUGUSTA, ME 04333

15 SKYVIEW HOLDINGS, LLC 15 SKYVIEW DR, SUITE 101 CUMBERLAND FSDE, ME 04110

BELTED COW REALTY LLC 42 US ROUTE 1, SUITE 2 CUMBERLAND FSDE, ME 04110

BELL, RONNIE-LYNN 20 NAUTICAL DR CUMBERLAND FSDE, ME 04110

YOUNG, KIMBERLY 25 CLIPPER ST CUMBERLAND FSDE, ME 04110 HARDY, STREET, LLC 70 SUNSET PARK RD ELLSWORTH, ME 04605

LOLA IN PEARLS, LLC 12 RAILROAD ST NEWPORT, ME 04953

CUMBERLAND FORESIDE, VILLAGE HOMEOWNERS ASSOCIATION 190 US RTE 1, PMB 3197 FALMOUTH, ME 04105

MCKENNEY, PETER C 639 GUILD DR. VENICE, FL 34285

PAYNE, ERIC M 23 CLIPPER ST CUMBERLAND FSDE, ME 04110 INTEGRATIVE, HEALTH CENTER OF ME 15 SKYVIEW DR, UNIT 1 CUMBERLAND FSDE, ME 04110

ELIKRIS, REALTY LLC 11 COLEMAN WAY FALMOUTH, ME 04105

IVES, ELIZABETH R 18 NAUTICAL DR CUMBERLAND FSDE, ME 04110

MAGEE, RHION 26 CLIPPER ST CUMBERLAND FSDE, ME 04110

## **Section E**

**Technical Capacity** 



## ACORN ENGINEERING, INC.



## COMPANY PROFILE

Acorn Engineering, Inc. is a Portland-based civil and environmental engineering firm of nine full-time employees and four construction inspectors. Acorn's team has a diverse portfolio providing Maine with quality engineering and environmental services as well as state-wide construction administration on behalf of the Maine Department of Transportation.

A cornerstone of Acorn Engineering is the attention to quality and exceptional level of service on every project, regardless of size. Our engineers and scientists pride themselves on their extensive experience, which is backed by a broad knowledge of civil and environmental engineering practices from smaller residential projects to larger commercial projects that integrate environmental assessment and site redevelopment.

Acorn Engineering has demonstrated the ability to breakdown and synthesize widely disseminated regulations into accepted engineering practices and practical site assessment and development. As a result of Acorn's efforts, the Cumberland County Soil & Water Conservation District recently recognized Acorn as the Contractor of the Year. This was the first award associated with the nationally recognized Long Creek Restoration Project and the first time the Cumberland County Soil & Water Conservation District ever recognized an engineering firm as their Contractor of the Year.

Acorn's expertise covers the areas of: civil/site design, evaluation, development, and permitting; and construction phase services such as construction administration, construction documents, project bidding, and site inspection including erosion and sedimentation control. Acorn's experience also includes the field of environmental engineering and compliance such as: Phase I and Phase II environmental site assessments, soil and groundwater remediation planning and design; Maine's Voluntary Response Action Program (VRAP); and stormwater treatment system design and permitting.

Acorn's engineers have designed, permitted, and overseen construction on numerous singlefamily and multifamily residential projects including traditional subdivision designs featuring on-site sewage/septic disposal and drilled wells. Furthermore, Acorn has demonstrated extensive experience and capabilities with municipalities, the Maine Department of Transportation (MDOT), Maine Department of Environmental Protection (MDEP), soil & water conservation districts, conservation commissions, municipalities, and the private sector on environmental and site development projects as demonstrated by the following:

- Listed on Maine DEP's Pre-Qualified Vendor List for Environmental Consulting Services
- Listed on Maine DOT's Pre-Qualified Consultants for eight service areas (listed under Section I.D)
- Cumberland County Soil & Water Conservation District Contractor of the Year for work on the Long Creek Restoration Project



• Public Works Redevelopment – Meeting House Hill

Over the past two Acorn years, Engineering has worked in close association with the City of South Portland, neighbors, and private clients on the redevelopment of the former Public Works facility. The 6-acre site is nestled in the middle of the Meeting House Hill residential neighborhood and is currently



a mix of storage buildings, fuel fill stations, miscellaneous stockpiles, and pavement. The site will be redeveloped into a mix of multifamily townhomes and single-family dwellings comprising 38 units along with a public park and community gardens.

In addition to the environmental remediation, Voluntary Response Action Program (VRAP), and other environmental considerations given the previous land use, the project is subject to a Maine DEP stormwater management law. The redevelopment design results in a reduction in impervious area of over 50% and reduces land use intensity across the site. Though not required, several stormwater BMP's have been implemented into the site as a best practice, further attenuating and treating stormwater runoff. In addition to the significant redevelopment plan, Acorn has designed an infrastructure plan to separate the storm and sewer mains. This will include installing 400 feet of new storm drain along the existing O'Neil Street right-of-way and 700 feet of new storm drain along the proposed O'Neil Street right-of-way extension. Overall, this effort will reduce the effects of combined sewer overflows (CSO) into Casco Bay which occur due to wet-weather events and the wastewater treatment plant's inability to provide capacity for both storm and sanitary sewer flows.

As part of this project, Acorn held a multitude of meetings with the City including the assistant City manager, the former Mayor, the entire planning division, and the chief engineer of Public Works. Furthermore, Acorn has collaborated with department heads of the Fire, Parks, Public Works, and Water Resource departments to ensure a feasible and ideal project for all parties. As a result, the process was truly a collaborative effort with a number of stakeholders weighing in on the design.



## • Munjoy Heights

Acorn provided civil/site engineering and permitting for the design of Munjoy Heights – a six townhome, 29unit development on the steep slopes of Munjoy Hill in the City of Portland. Acorn designed and developed construction drawings for the sanitary sewers, storm drains, water mains, driveways and pedestrian circulation, retaining wall locations, building locations, and drainage infrastructure to be built in compliance with City standards.



A key component to the project was coordinating with the City on the future combined sewer separation project and the site's overall stormwater management. Additionally, discussions with neighbors and stakeholders were paramount in the project's success.

The innovative urban infill project compliments the Munjoy Hill neighborhood with a communal design and plentiful native landscaping that replaced invasive species which previously dominated the eroding banks prior to the development. The \$22 million project features a courtyard, terraced landscaping, a Portland Trails-maintained path that connects the redevelopment to the existing trail system, and low impact development (LID) techniques that meet MDEP Chapter 500 regulations. The stormwater management includes an underdrained sand filter and chambers that detain and treat stormwater on site in tandem with strategically placed rain gardens.

The project required extensive coordination and collaboration between the client, City of Portland, Portland Trails, the structural engineer, the architect, and the contractor to successfully complete the project with the first "woonerf" in the state and maintaining the existing public walking path through the property.



## • 200 Valley St

Working with Avesta Housing, Acorn Engineering provided civil engineering and permitting for Avesta's 60-unit project in the St. John Valley neighborhood. This urban infill project replaces the existing single-family house and abutting vacant lots into affordable new housing opportunities with two levels of covered parking, amenities, and a rebuilt project frontage with new sidewalks, street trees, and bicycle hitches.

As part of the project, Acorn

developed a transportation and parking analysis to ensure that the provided parking will adequately serve the redevelopment. Furthermore, the design team identified and implemented multiple strategies to encourage residents to efficiently utilize the many modes of transportation available on the Portland peninsula.

## Little Dolphin Drive & Jocelyn Place

In collaboration with the South Portland Housing Authority and Risbara Holdings, Acorn provided civil engineering design and permitting of a multi-use subdivision at the end of Little Dolphin Drive in Scarborough. Proposed uses include a two-story office building and a three-story 60-unit senior housing facility with associated parking and landscaped areas.

In addition to a voluntary neighborhood meeting, the project



went through a 3-step master plan phase with the Town of Scarborough in which the project was collaborated on with Planning Staff, the Planning Board, and neighbors.

The project is subject to Maine DEP and US Army Corps permits. To adequately treat stormwater on the site, Acorn has designed multiple stormwater BMPs meeting Maine DEP Chapter 500 regulations resulting in a low impact design.



## • 89 Anderson Street

In collaboration with Redfern properties and the East Bayside neighborhood, Acorn developed the civil/site engineering design of a mixed use 53-unit redevelopment of an existing underutilized. urban infill lot in the East Bayside neighborhood. Acorn's scope of services included in the initial phase applying for and obtaining а zone change and



conducting Phase I and Phase II Environmental Site Assessments to evaluate potential environmental contamination at the site.

After conducting the environmental remediation efforts, Acorn developed the site layout and design of sanitary sewers, storm drains, water mains, site driveway, retaining wall locations, building locations, parking lot design, building drainage structures, utility connections and landscaping plan (with a landscape architecture subconsultant) to meet the City of Portland Technical Standards. Acorn also integrated sidewalk and improvements associated with the project into the City's Anderson Street ByWay project. Furthermore, the project team worked with a non-profit organization, the Telling Room, to provide public art along the Fox Street streetcape in lieu of traditional fencing.

Overall, the project established an important mixed use building on a prominent corner lot adjacent to Kennedy Park which contains popular recreation space. The building houses a restaurant and the Gear Hub bicycle school on the first floor with residential apartments above which encourages an active street presence with housing, goods, and services that help tie the neighborhood together and keep eyes on the street.



### • 667 Congress Street - The Hiawatha

The \$28 million project included civil/site the engineering design for the 8story, first floor retail and 139unit apartment building on Congress Street in Portland. Vehicle parking is served by two levels with separate access from Vernon and Avon St. The project featured building and site design in an historic district adjacent to Longfellow Square.

Services included, but is not limited to, permitting with the City of Portland, layout and design of sanitary sewers, storm drains, water mains, pedestrian and vehicle

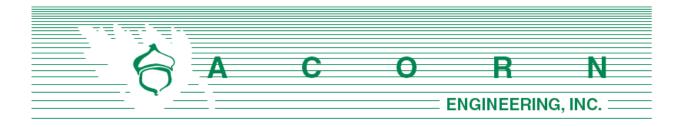


entrances, building locations, parking lot design, and parking garage grading and drainage. Acorn provided significant coordination between the Architect, Structural Engineer, Geotechnical Engineer, Construction Management Company, Owner, and the City.

## **Section** F

Stormwater Management Report



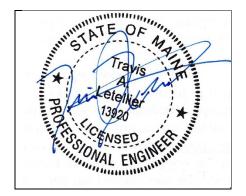


## SKY VIEW DRIVE EXTENSION STORMWATER MANAGEMENT <u>REPORT</u>

Prepared For: Heritage Village Development Group LLC c/o Peter Kennedy 12 Carroll Street, Falmouth, Maine

**Prepared By:** 

Acorn Engineering, Inc. PO Box 3372 Portland, Maine 04104



October 2022

### **INTRODUCTION**

Acorn Engineering, Inc. has been retained by Heritage Village Development Group LLC and its owner Peter Kennedy to develop a plan for the extension of Sky View Drive as outlined on the 5<sup>th</sup> Amended Subdivision Plan, dated October 20, 2022.

### **EXISTING CONDITIONS**

Currently Sky View Drive has been designed and developed to station 5+50 within the existing ROW. A Grassed Underdrained Soil Filter (GUSF) currently accepts stormwater flows from a portion of this road section, detains and treats it before discharging to the Route 1 ROW.

The existing GUSF has an estimated detention/water quality treatment capacity of 2,890 cubic feet and a treatment area of 1,500 square feet.

Back calculating using this information the pond has a treatment capacity of:

2,890 CF water quality volume	= 34,686 square feet of impervious area
1,500 SF treatment area	= 30,000 square feet of impervious area

Using the smaller area, we assume the pond can handle 30,000 square feet of impervious area. In the existing condition, 4,500 square feet of impervious area is directed to this pond.

### PROPOSED DEVELOPMENT

The project includes a 350-foot extension of Sky View Drive from station 5+50 to station 9+00. The road section will include 24 feet of paved drive aisles, curbing, 5-foot grassed esplanade, and a 5-foot-wide paved sidewalk.

The 350-foot extension of road will consist of 10,500 square feet of impervious cover that will be directed to the same GUSF in the Sky View Drive ROW.

#### STORMWATER TREATMENT

With the addition of the proposed impervious area, a total of 15,000 sf of paved surface will be directed to the GUSF within the Sky View Drive ROW. 15,000 sf equals exactly half of the GUSF's capacity and will easily take on the additional stormwater flows generated by the proposed extension.

#### **CONCLUSION**

Sky View Drive has been through many designs in the past two decades. The existing GUSF has been constructed to take stormwater flows from what is currently designed along with

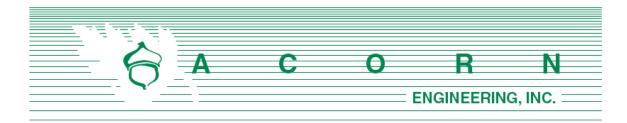
extensions that had been planned in previous iterations of the road and subdivision layout. The pond has adequate capacity to handle the proposed stormwater flows anticipated from the proposed road extension and no additional stormwater BMP's are required.



# **Section** G

## **Erosion & Sedimentation Control Report**



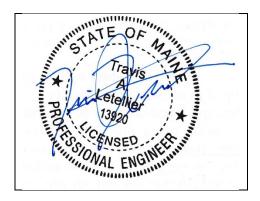


## SKY VIEW DRIVE EXTENSION EROSION & SEDIMENTATION CONTROL REPORT

Prepared For: Heritage Village Development Group LLC c/o Peter Kennedy 12 Carroll Street, Falmouth, Maine

**Prepared By:** 

Acorn Engineering, Inc. 500 Washington Avenue Portland, Maine 04103



October 2022

### **INTRODUCTION**

The following Erosion and Sedimentation Control Report was developed in accordance with the Maine DEP Chapter 500 Stormwater Management Appendix A and B (1), Amended August 12, 2015. This narrative also meets the standards required in the Maine DEP's Erosion & Sediment Control BMP's Manual, revised in 2016.

### 1.0 EXISTING CONDITIONS

The proposed project site is located within the existing Cumberland Foreside Village subdivision.

The project features a 350-foot extension of Sky View Drive along with associated underground utilities.

### 1.1 <u>Existing Soils</u>

Onsite soil information includes the following:

- Soil Conservation Service Medium Intensity Soil Survey for Cumberland County
- > United States Department of Agriculture Web Soil Survey

Given the soils information, listed above, no onsite wastewater is proposed; the applicant does not intend to perform a more intense hydric soil boundary delineation

#### 1.2 Existing Erosion Problems

There are no signs of erosion.

#### 1.3 <u>Critical Areas</u>

There are no critical areas that require special attention during construction.

1.4 <u>Protected Natural Resource</u>

The client is not aware of the presence of any existing significant natural features located on the site as listed in Section 14-526 (b) 1. of the Land Use Code. The project is not located within a watershed classified as an Urban Impaired Stream by the Maine DEP.

1.5 <u>Previous Construction Activity (5 years)</u>

Acorn Engineering, Inc. is not aware of any construction related activities within the project limits within the past 5 years. Historical imagery shows the existence of a warehouse in the proposed footprint until around 2012.



#### 1.6**Timber Harvesting**

Acorn Engineering, Inc. is not aware of any timber harvesting within the past five years.



## 2.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

As part of the site development, the following temporary and permanent erosion and sedimentation control devices shall be implemented. Devices shall be installed as described in this report or within the plan set. See the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices for further reference.

## 2.1 <u>Temporary Erosion Control Measures</u>

The following temporary erosion and sedimentation control measures are planned for the project's construction period:

- 2.1.1 Crushed stone stabilized construction entrances shall be placed at all access points to the project site where there are disturbed areas. The following specifications shall be followed at a minimum:
  - Stone size shall be 2-3 inches, or reclaimed or recycled concrete equivalent.
  - The thickness of the entrance stone layer shall be no less than 6 inches.
  - The entrance shall not be less than 20 feet wide, however not less than the full width of points where ingress or egress occurs. The length shall not be less than 50 feet in length.
  - Geotextile fabric (woven or non-woven) shall be placed over the entire entrance area.
  - The entrance/exit shall be maintained to the extent that it will prevent the tracking of sediment onto public road ways.
- 2.1.2 Siltation fence or erosion control berm shall be installed down gradient of any disturbed areas to trap runoff borne sediments until permanent stabilization is achieved. The silt fence or erosion control berm shall be installed per the details provided in the plan set and inspected before and immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made if there are any signs of erosion or sedimentation below the fence line or berm. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence or berm, the barrier shall be replaced with a stone check dam.
- 2.1.3 Hay mulch including hydro seeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed between April 15<sup>th</sup> and November 1<sup>st</sup> on slopes of less than 15 percent shall be covered by fabric netting and anchored with staples in accordance with the manufacturer's recommendation. Mulch placed between November 1<sup>st</sup> and April 15<sup>th</sup> on slopes equal to or steeper than 8 percent and equal to or flatter than 2:1 shall use mats or fabric netting and anchored with staples in accordance with staples in accordance with the manufacturer's recommendation.
- 2.1.4 At any time of the year, all slopes greater than 3:1 shall be stabilized with Double Net Erosion Control Blanket Bionet SC150BN by North American

Green or Approved Equal, or Erosion Control Mix Slope Protection as detailed within the plans.

- 2.1.5 Sky View Drive shall be swept to control mud and dust from the construction site as necessary. Add additional stone to the stabilized construction entrance to minimize the tracking of material off the site and onto the surrounding roadways.
- 2.1.6 During demolition, clearing and grubbing operations, stone check dams shall be installed at any areas of concentrated flow. The maximum height of the check dam shall not exceed 2 feet. The center of the check dam shall be 6 inches below the outer edges of the dam. The contractor shall mulch the side slopes and install stone check dams for all newly excavated ditch lines within 24 hours of their creation.
- 2.1.7 Silt fence stake spacing shall not exceed 6 feet unless the fence is supported with 14-gauge wire in which case the maximum spacing shall not exceed 10 feet. The silt fence shall be "toed" into the ground.
- 2.1.8 Storm drain inlet protection shall be provided to storm drains using any of the following: hay bale drop inlet structures, silt fence drop inlet sediment filter, gravel and wire mesh drop inlet sediment filter, or curb inlet sediment filter. Barriers shall be inspected after every rainfall event and repaired as necessary. Sediments shall be removed when accumulation has reached <sup>1</sup>/<sub>2</sub> the design height.
- 2.1.9 Dust control shall be accomplished using any of the following: water, calcium chloride, stone, or an approved MDEP product. Dust control shall be applied as needed to accomplish dust control.
- 2.1.10 Temporary loam, seed, and mulching shall be used in areas where no other erosion control measure is used. Application rates for seeding are provided at the end of this report.
- 2.1.11 Stockpiles shall be stabilized within 7 days of formation unless a scheduled rain event occurs prior to the 7-day window, in which case the stockpile shall be stabilized prior to the rain event. Methods of stabilization shall be mulch, erosion control mix, or erosion control blankets/mats. Silt fence or a wood waste compost filter berm shall be placed downhill of any soil stockpile location.
- 2.1.12 For disturbance between November 1 and April 15, please refer to winter stabilization plan in this report and the Maine Erosion and Sediment Control BMP manual for further information.
- 2.1.13 It is of the utmost importance that stormwater runoff and potential sediment from the construction site be diverted around the proposed underdrains until the trench is backfilled.

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## 2.2 <u>Permanent Erosion Control Measures</u>

The following permanent erosion control measures are intended for post disturbance areas of the project.

- 2.2.1 All disturbed areas during construction, not subject to other proposed conditions, shall receive a minimum 4" of loam, limed, and mulched. Erosion control blankets or mats shall be placed over the mulch in areas noted in paragraph 4.1 of this report.
- 2.2.2 All stormwater devices shall be installed, and tributary areas stabilized prior receiving stormwater.
- 2.2.3 Refer to the Maine Erosion and Sediment Control BMP manual for additional information.

## 3.0 DETAILS AND SPECIFICATIONS

3.1 Erosion & Sedimentation Control Details and Specifications are included in the plan set.

## 4.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

Winter Construction consists of earthwork disturbance between the dates of November 1 and April 15. If a construction site is not stabilized with pavement, a road gravel base, 75% mature vegetation cover or riprap by November 15, then the site shall be protected with overwinter stabilization. Any area not stabilized with pavement, vegetation, mulching, erosion control mix, erosion control mats, riprap, or gravel base on a road shall be considered open.

The contractor shall limit the work area to areas that work will occur in during the subsequent 15 days and so that it can be mulched one day prior to a snow event. The contractor shall stabilize work areas prior to opening additional work areas to minimize areas without erosion control measures.

The following measures shall be implemented during winter construction periods:

4.1 <u>Sediment Barriers</u>

During frozen conditions, sediment barriers may consist of erosion control mix berms or any other recognized sediment barriers as frozen soil prevents the proper installation of hay bales or silt fences.

## 4.2 <u>Mulching</u>

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

anchored. Erosion control mix must be applied with a minimum 4-inch thickness. Mulch shall not be spread on top of snow. The snow shall be removed down to a oneinch depth or less prior to application. After each day of final grading, the area shall be properly stabilized with anchored hay or straw or erosion control matting. An area shall be considered to have been stabilized when exposed surfaces have been either mulched or adequately anchored so that ground surface is not visible through the mulch. Between the dates of November 1 and April 15, all mulch shall be anchored by either mulch netting, tracking or wood cellulose fiber. The cover will be considered sufficient when the ground surface is not visible through the mulch. After November 1<sup>st</sup>, mulch and anchoring of all exposed soil shall occur at the end of each final grading workday.

### 4.3 <u>Soil Stockpiling</u>

Stockpiles of soil or subsoil shall be mulched for over winter protection with hay or straw at twice the normal rate or with a four-inch layer of erosion control mix. This shall be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

### 4.4 <u>Seeding</u>

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

Dormant seeding may be placed prior to the placement of mulch or erosion control blankets. If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5 lbs./1,000 s.f. All areas seeded during the winter shall be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 75% catch) shall be revegetated by replacing loam, seed and mulch. If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

## 4.5 Over winter stabilization of disturbed soils

By September 15<sup>th</sup>, all disturbed soils on areas having a slope less than 15% shall be seeded and mulched. If the disturbed areas are not stabilized by this date, then one of the following actions shall be taken to stabilize the soil for late fall and winter:

- <u>Stabilize the soil with temporary vegetation</u> By October 1<sup>st</sup>, seed the disturbed soil with winter rye at a seeding rate of 3lbs per 1,000 s.f., lightly mulch the seeded soil with hay or straw at 75 lbs per 1,000 s.f., and anchor the mulch with plastic netting. Monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed soil before November 1<sup>st</sup>, then mulch the area for over-winter protection.
- <u>Stabilize the soil with sod</u> Stabilize the disturbed soil with properly installed sod by October 1<sup>st</sup>. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.
- <u>Stabilize the soil with mulch</u> By November 15<sup>th</sup>, mulch the disturbed soil by spreading hay or straw at a rate of at least 150 lbs per 1,000 s.f. on the area so that no soil is visible through the mulch. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

### 4.6 <u>Over winter stabilization of disturbed slopes</u>

All stone-covered slopes shall be constructed and stabilized by November 15<sup>th</sup>. All slopes to be vegetated shall be seeded and mulched by September 1<sup>st</sup>. A slope is considered a grade greater than 15%. If a slope to be vegetated is not stabilized by September 1<sup>st</sup>, then one of the following action shall be taken to stabilize the slope for late fall and winter:

- <u>Stabilize the soil with temporary vegetation and erosion control mats</u> By October 1<sup>st</sup> the disturbed slope shall be seeded with winter rye at a seeding rate of 3 lbs per 1,000 s.f. and then install erosion control mats or anchored mulch over the seeding. If the rye fails to grow at least three inches or fails to cover at least 75% of the slope by November 1<sup>st</sup>, then the contractor shall cover the slope with a layer of erosion control mix or with stone riprap.
- <u>Stabilize the soil with sod</u> The disturbed slope shall be stabilized with properly installed sod by October 1<sup>st</sup>. Proper installation includes the contractor pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. The contractor shall not use late-season sod installation to stabilize slopes having a grade greater than 3H:1V or having groundwater seeps on the slope face.

- <u>Stabilize the soil with erosion control mix</u> Erosion control mix shall be properly installed by November 15<sup>th</sup>. The contractor shall not use erosion control mix to stabilize slopes having grades greater than 2H:1V or having groundwater seeps on the slope face.
- <u>Stabilize the soil with stone riprap</u> Place a layer of stone riprap on the slope by November 15<sup>th</sup>. A registered professional engineer shall be hired to determine the stone size needed for stability on the slope and to design a filter layer for underneath the riprap.

## 5.0 INSPECTION AND MAINTENANCE

A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct periodic visual inspections of installed erosion control measures. The frequency of inspection shall occur at least once every two weeks, as well as after a "storm event". A "storm event" shall consist 0.5 inches of rain within a 24-hour period. The following Erosion and Sediment Control - Best Management Practices (BMP's) shall inspected in the manner as described.

### 5.1 <u>Sediment Barriers</u>

Hay bale barriers, silt fences and filter berms shall be inspected and repaired for the following if there are any signs of erosion or sedimentation below them. If there are signs of undercutting at the center or the edges of the barrier, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits should be removed when deposits reach approximately one-half the height of the barrier. Filter berms should be reshaped as needed. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared and seeded.

### 5.2 <u>Stabilized Stone Construction Entrances</u>

The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way. When the control pad becomes ineffective, the stone shall be removed along with the collected soil material and redistributed on site in a stable manner. The entrance should then be reconstructed. The contractor shall sweep or wash pavement at exits, which have experienced mud-tracking on to the pavement or traveled way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment trapping device. All sediment shall be prevented from entering storm drains, ditches, or waterways.

## 6.3 <u>Mulched Areas</u>

All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied. Nets must be inspected after rain events for dislocation or failure. If washouts or breakage occur, re-install the nets as necessary after repairing damage to the slope. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface. Repair as needed.

### 6.4 <u>Dust Control</u>

When temporary dust control measures are used, repetitive treatment shall be applied as needed to accomplish control.

### 6.5 <u>Stormwater Appurtenances</u>

All underdrains, storm drains, and catch basins need to be operating effectively and free of debris.

### 6.6 Erosion and Sedimentation Control Inspections:

Acorn Engineering has personnel qualified to conduct Erosion and Sedimentation Control Inspections. For further information, contact:

Contact: Will Savage, PE Telephone: (207) 775-2655

Qualifications:

- > Maine Professional Engineering License #11419
- Maine DEP Certified in Maintenance & Inspection of Stormwater BMP's Cert #14
- > Certified Erosion, Sediment and Storm Water Inspector (CESSWI) Cert #0293
- > Certified Professional in Erosion and Sediment Control (CPESC) Cert. #4620

The Contractor has sole responsibility for complying with the Erosion and Sedimentation Report/Plan, including control of fugitive dust. The Contractor shall be responsible for any monetary penalties resulting from failure to comply with these standards.

# 6.0 <u>IMPLEMENTATION SCHEDULE</u>

The following implementation sequence is intended to maximize the effectiveness of the above described erosion control measures. Contractors should avoid overexposing disturbed areas and limit the amount of stabilization area.

- 1. Install a stabilized construction entrance in all locations where construction traffic will enter and exit the site.
- 2. Install perimeter silt fence or erosion control berm.
- 3. Install all other erosion control devices as necessary throughout the remainder of this schedule.
- 4. Commence installation of drainage infrastructure.
- 5. Prioritize the downhill side to contain runoff within the site while providing an engineered outlet to the municipal storm drain system within Read Street.
- 6. Commence earthwork operations, associated with the parking lot construction.
- 7. Commence installation of utilities.
- 8. Continue earthwork and grading to subgrade as necessary for construction.
- 9. Complete installation of drainage infrastructure, as well as other utility work.
- 10. Complete remaining earthwork operations.
- 11. Install sub-base and base gravels in paved areas.
- 12. Install paving, curbing and brickwork.
- 13. Loam, lime, fertilize, seed and mulch disturbed areas and complete all landscaping.
- 14. Once the site is stabilized and mulching of landscape areas is complete, remove all temporary erosion control measures.
- 15. Touch up areas without a vigorous catch of grass with loam and seed.
- 16. Complete site signage and striping.
- 17. Execute proper maintenance of all temporary and permanent erosion control measures throughout the project.

The above implementation sequence should be generally followed by the site contractor. However, the contractor may construct several items simultaneously. The contractor shall submit to the owner a schedule of the completion of the work. If the contractor is to commence the construction of more than one item above, they shall limit the amount of exposed areas to those areas in which work is expected to be undertaken during the following 30 days.

The contractor shall re-vegetate disturbed areas as rapidly as possible. All areas shall be permanently stabilized within 7 days of final grading or before a storm event. The contractor shall incorporate planned inlets and drainage systems as early as possible into the construction phase.

# 7.0 <u>CONCLUSION</u>

The above erosion control narrative is intended to minimize the development impact by implementing temporary and permanent erosion control measures. The contractor shall also refer to the Maine Erosion and Sediment Control BMP manual for additional information.

# 8.0 ATTACHMENTS

• Temporary Seeding Plan



## TEMPORARY SEEDING PLAN

## Site Preparation

The seeded areas shall be feasibly graded out to provide the use of equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. If necessary, the site may require additional temporary erosion control measures outlined in the Erosion Control report.

### Seedbed Preparation

Fertilizer shall be applied to the site at a rate of 13.8 pounds per 1,000 square feet. The composition of the fertilizer shall be 10-10-10 (N-P2O5-K2O) or equivalent.

Limestone shall be applied to the site at a rate of 138 pounds per 1,000 square feet.

### Seeding

The composition and amount of temporary seed applied to a site shall be determined by the following table:

Seed	Pounds / 1,000 S.F.	Recommended Seeding Dates
Winter Rye	2.57	Aug-15 to Oct-1
Oats	1.84	Apr-1 to Jul-1
		Aug-15 to Sep-15
Annual Ryegrass	0.92	Apr-1 to Jul-1
Sudangrass	0.92	May-15 to Aug-15
Perennial	0.92	Aug-15 to Sep-15

## Mulching

Mulch shall be applied at a rate of 70 lbs - 90 lbs per 1,000 square feet. The mulch shall be installed at a minimum depth of 4 inches. The seeded area shall be mulched immediately after seed is applied. Mulching during the winter season shall be double the normal amount.

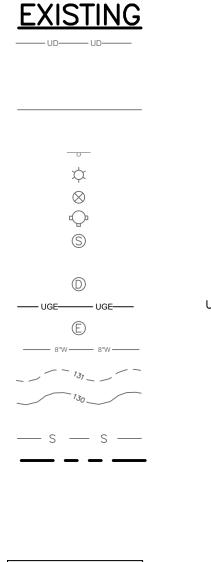
### Conclusion

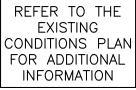
Please refer to the Maine Erosion and Sediment Control BMP manual for additional information pertaining to temporary seeding and mulching.



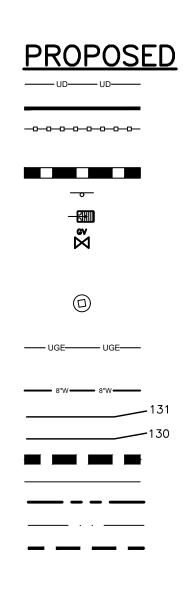
# CUMBERLAND FORESIDE VILLAGE SUBDIVISION HERITAGE VILLAGE DEVELOPMENT GROUP, LLC CUMBERLAND, MAINE

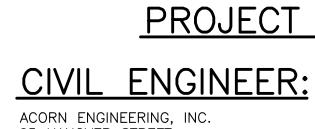
# LEGEND





UNDERDRAIN STRIPING SEDIMENTATION BARRIER EDGE OF EX. PAVEMENT CURB SIGN LAMP OR LIGHT POLE WATER VALVE FIRE HYDRANT SEWER MANHOLE CATCH BASIN DRAIN MANHOLE UNDERGROUND ELECTRIC LINE ELECTRICAL MANHOLE UNDERGROUND WATER LINE MINOR CONTOURS (1 FT) MAJOR CONTOURS (5 FT) STORM DRAIN LINE SEWER LINE PROPERTY LINE SETBACKS GRADE BREAK





65 HANOVER STREET PORTLAND, MAINE 04101 CONTACT: TRAVIS LETELLIER, P.E. (207) 775-2655

# SURVEYOR:

OWEN HASKELL, INC FALMOUTH, MAINE CONTACT: ELLEN C. BREWER, P.L.S. (207) 774-0424

# **DEVELOPER:**

12 CARROLL STREET FALMOUTH, ME 04105 CONTACT: PETER KENNEDY

# <u>INDEX</u>

C - 01	COVER SHEET & LEGEND
EX	5TH AMENDED SUBDIVISION PLAN – BY OWEN HASKELL, INC. DATED 10/20/2022
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C-07	EROSION & SEDIMENTATION CONTROL NOTES & DETAILS

CALL BEFORE YOU DIG 1-888-DIG-SAFE 1-888-344-7233

# PROJECT TEAM



OWEN HASKELL, INC. PROFESSIONAL LAND SURVEYORS

HERITAGE VILLAGE DEVELOPMENT GROUP, LLC.

# UTILITY CONTACTS

# WATER:

PORTLAND WATER DISTRICT 225 DOUGLASS STREET PO BOX 3553 PORTLAND, MAINE 04104 ATTN: MEANS DIVISION (207) 774–5961



# SEWER:

DEPARTMENT OF PUBLIC WORKS (DPW) 250 CANCO ROAD PORTLAND, MAINE 04101 CONTACT: BRAD ROLAND, P.E. (207) 874-8834

# ELECTRIC:

CENTRAL MAINE POWER COMPANY (CMP) 162 CANCO ROAD PORTLAND, MAINE 04103 CONTACT: JAMIE COUGH (207) 828-2882

# **TELEPHONE:**

CONSOLIDATED COMMUNICATIONS (FORMERLY FAIRPOINT) 45 FOREST AVENUE PORTLAND, MAINE 04101 CONTACT: PAT MORRISON (207) 745-9363

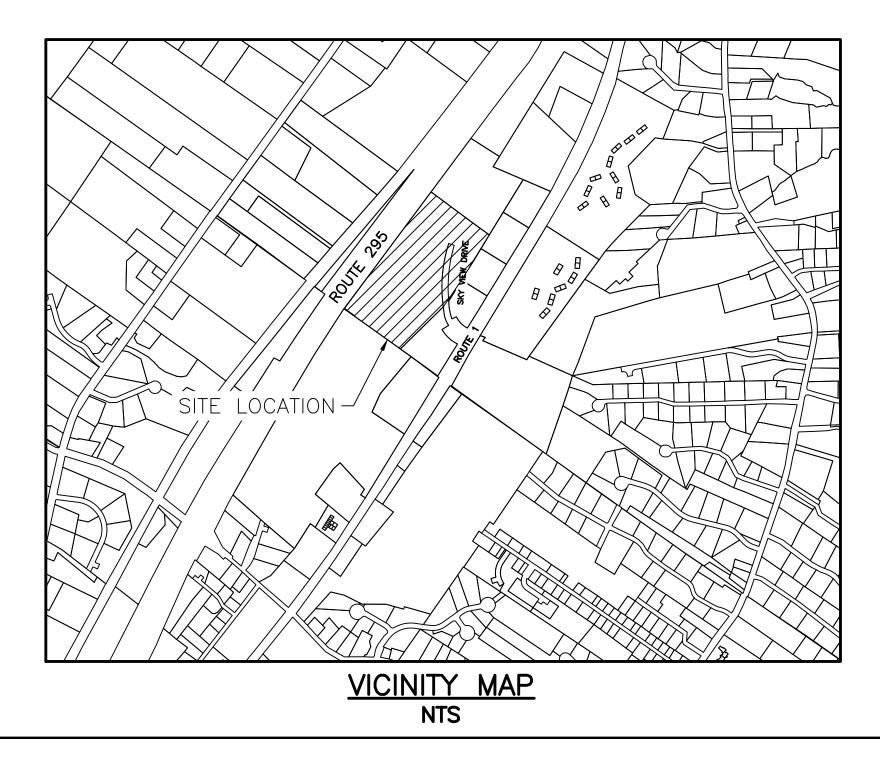
# CABLE:

SPECTRUM CABLE 118 JOHNSON ROAD PORTLAND, MAINE, 04102 CONTACT: MARK PELLETIER (877) 546-0962

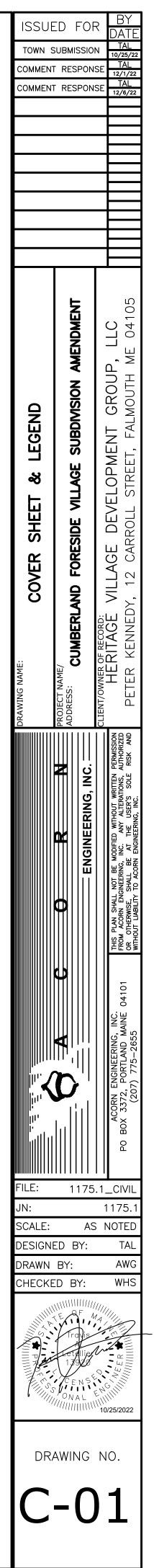


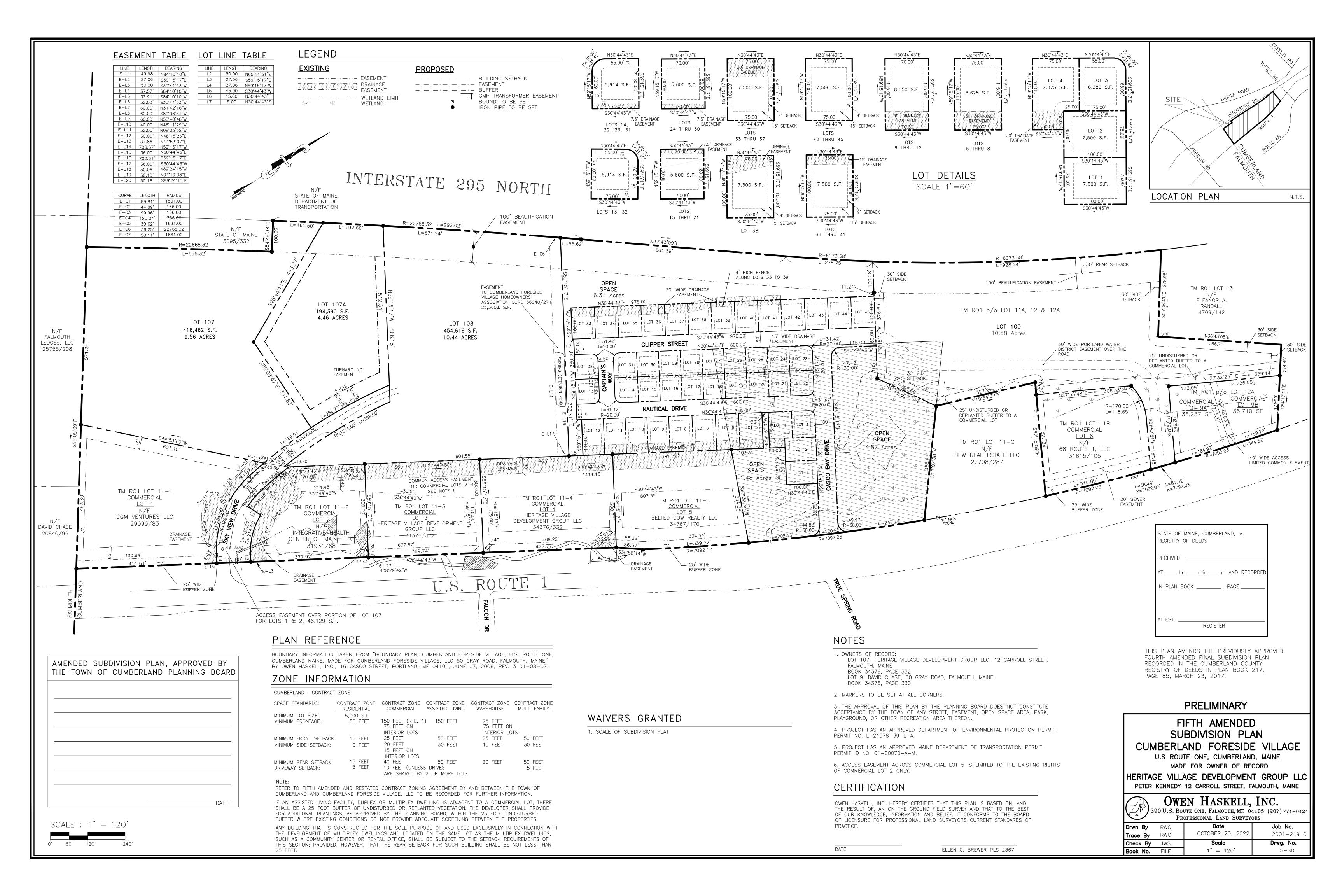


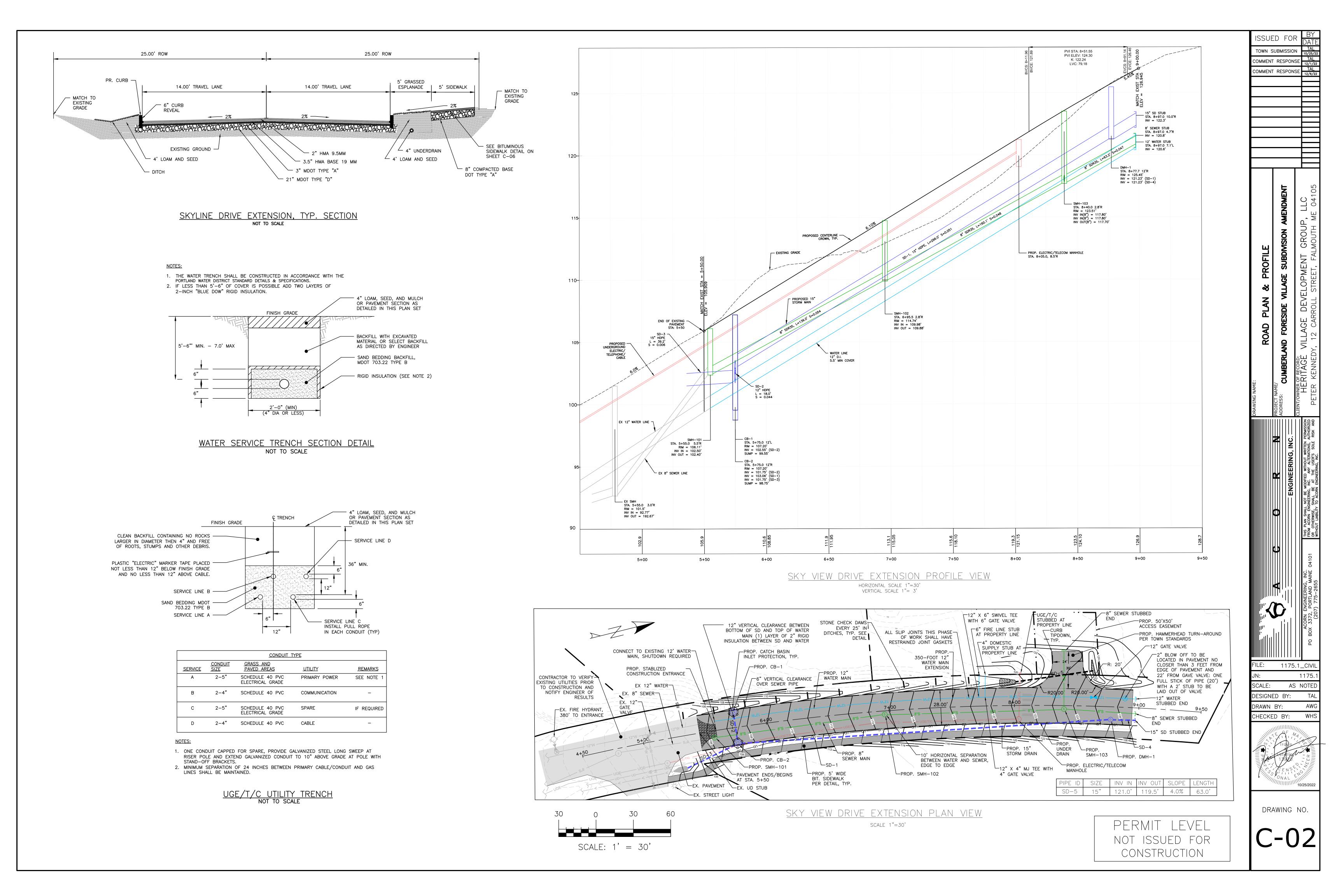
# Spectrum

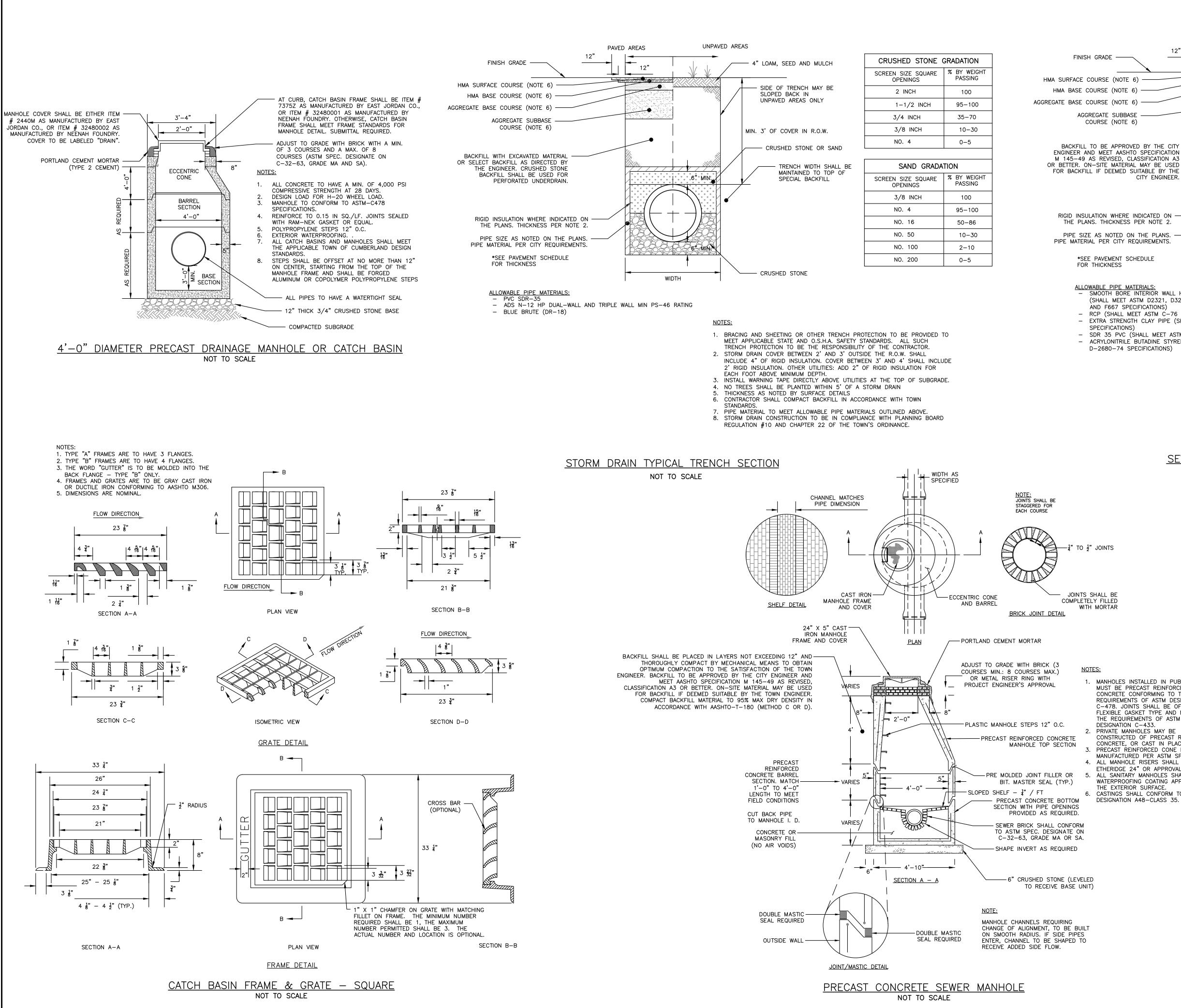


	ABBRE	<u>EVIATIONS</u>	
		AND THEIR CORRESPONDING MEANING. PLEASE GINEER FOR ANY CLARIFICATION	
-	APPROX.	APPROXIMATE BOTTOM OF CURB	-
-	BC BMP	BEST MANAGEMENT PRACTICE	
-	BOT.	BOTTOM CATCH BASIN	-
-	CB CF	CUBIC FOOT	
-	CIP	CAST IN PLACE CENTERLINE	-
-	CL CM	CONSTRUCTION MANAGER	
-	CMP	CENTRAL MAINE POWER CONCRETE	-
-	CONC. CPP	CONCRETE CORRUGATED PLASTIC PIPE	
-	CY		-
-	DIP DIA.	DUCTILE IRON PIPE DIAMETER	
-	DIM.	DIMENSION	-
-	EA. ELEC.	EACH ELECTRICAL	-
	ELEV.	ELEVATION	•
-	EQUIV. EST.	EQUIVALENT	-
-	EEMP.	ENVIRONMENTAL MEDIA MANAGEMENT PLAN	
-	EX.	EXISTING	-
-	FFE FT.	FINISH FLOOR ELEVATION	-
-	GAL.	GALVANIZED	
-	ID	INNER DIAMETER	-
-	IN. INV.	INVERT	
-	L	LENGTH MAXIMUM	-
-	MAX.	MAXIMOM MAINE DEPARTMENT OF TRANSPORTATION	
-	M.E.P	MECHANICAL, ELECTRICAL, PLUMBING	
-	MFG.	DESIGNER MANUFACTURED	
-	MH 	MANHOLE	-
-	0.C.	ON CENTER	
-	OD	OUTSIDE DIAMETER OVERHEAD	-
-	OHE/T/C  PC	ELECTRIC/TELEPHONE/CABLE PRECAST	-
-	PE	PROFESSIONAL ENGINEER	
F	PL PLS	PROPERTY LINE PROFESSIONAL LAND SURVEYOR	-
ŀ	PROP.	PROPOSED	
-	PSI PVC	POUNDS PER SQUARE INCH POLYVINYL CHLORIDE	-
-	PWD	PORTLAND WATER DISTRICT	
-	R	RADIUS ROOF DRAIN	-
-	RD RET.	RETAINING	
	ROW	RIGHT OF WAY SLOPE	
-	S SD	STORM DRAIN	
-	SDR	STANDARD DIMENSION RATIO	-
-	SF SMH	SQUARE FEET SEWER MANHOLE	
	SPEC.		
-	TC TW	TOP OF CURB TOP OF WALL	
	TYP.	TYPICAL	
-	UD UGE	UNDERDRAIN UNDERGROUND ELECTRIC	-
-	VIF	VERIFY IN FIELD	-









SCREEN SIZE SQUARE OPENINGS	% BY WEIGHT PASSING	
2 INCH	100	
1-1/2 INCH	95-100	
3/4 INCH	35–70	
3/8 INCH	10-30	
NO. 4	0-5	
SAND GRADATION		
SCREEN SIZE SQUARE OPENINGS	% BY WEIGHT PASSING	
OPENINGS	PASSING	
OPENINGS 3/8 INCH	PASSING 100	
OPENINGS 3/8 INCH NO. 4	PASSING 100 95–100	
OPENINGS 3/8 INCH NO. 4 NO. 16	PASSING 100 95–100 50–86	
OPENINGS 3/8 INCH NO. 4 NO. 16 NO. 50	PASSING 100 95–100 50–86 10–30	

# HMA SURFACE COURSE (NOTE 6) HMA BASE COURSE (NOTE 6) -AGGREGATE BASE COURSE (NOTE 6) -AGGREGATE SUBBASE

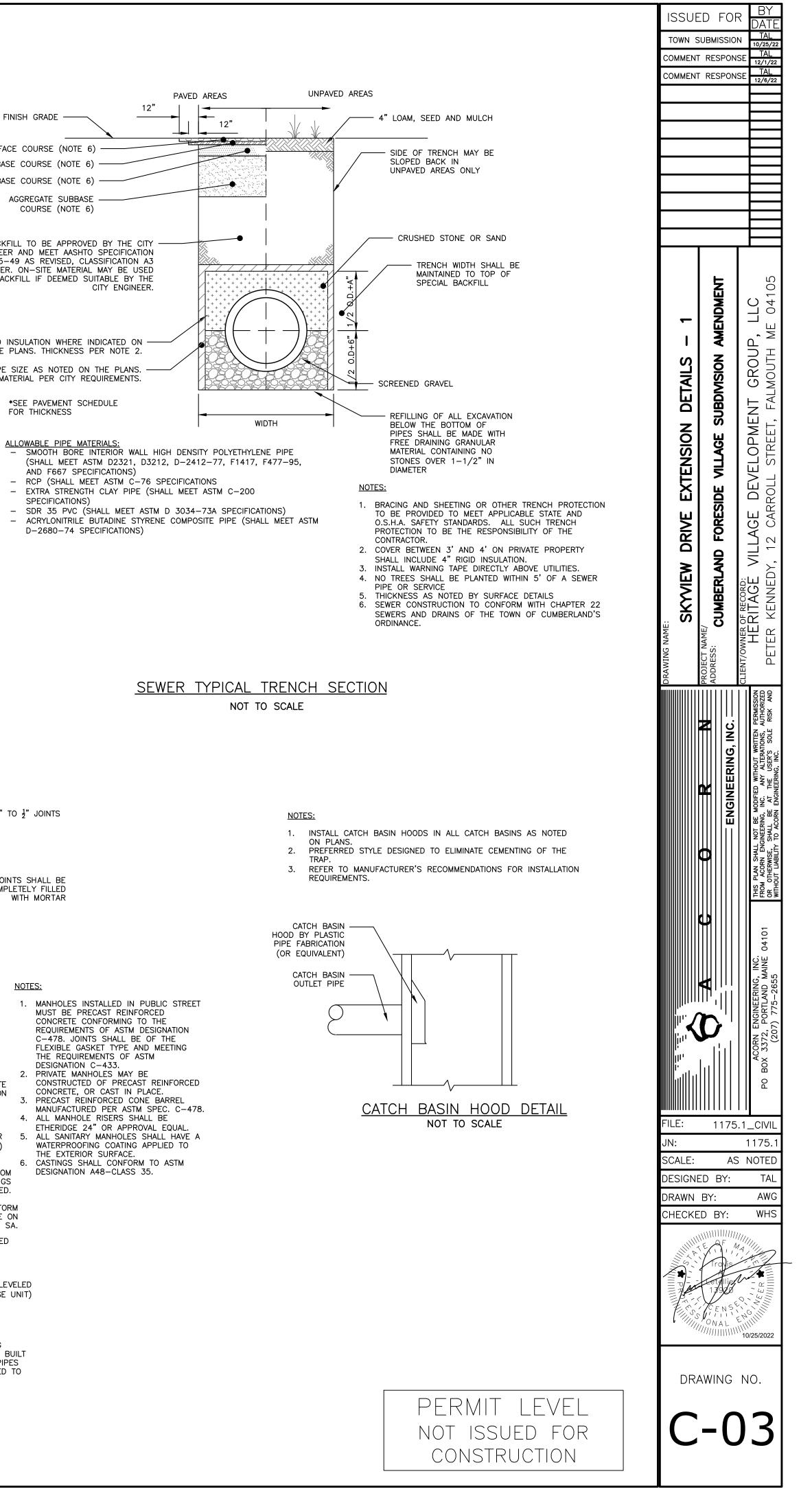
### BACKFILL TO BE APPROVED BY THE CITY -ENGINEER AND MEET AASHTO SPECIFICATION M 145-49 AS REVISED, CLASSIFICATION A3 OR BETTER. ON-SITE MATERIAL MAY BE USED

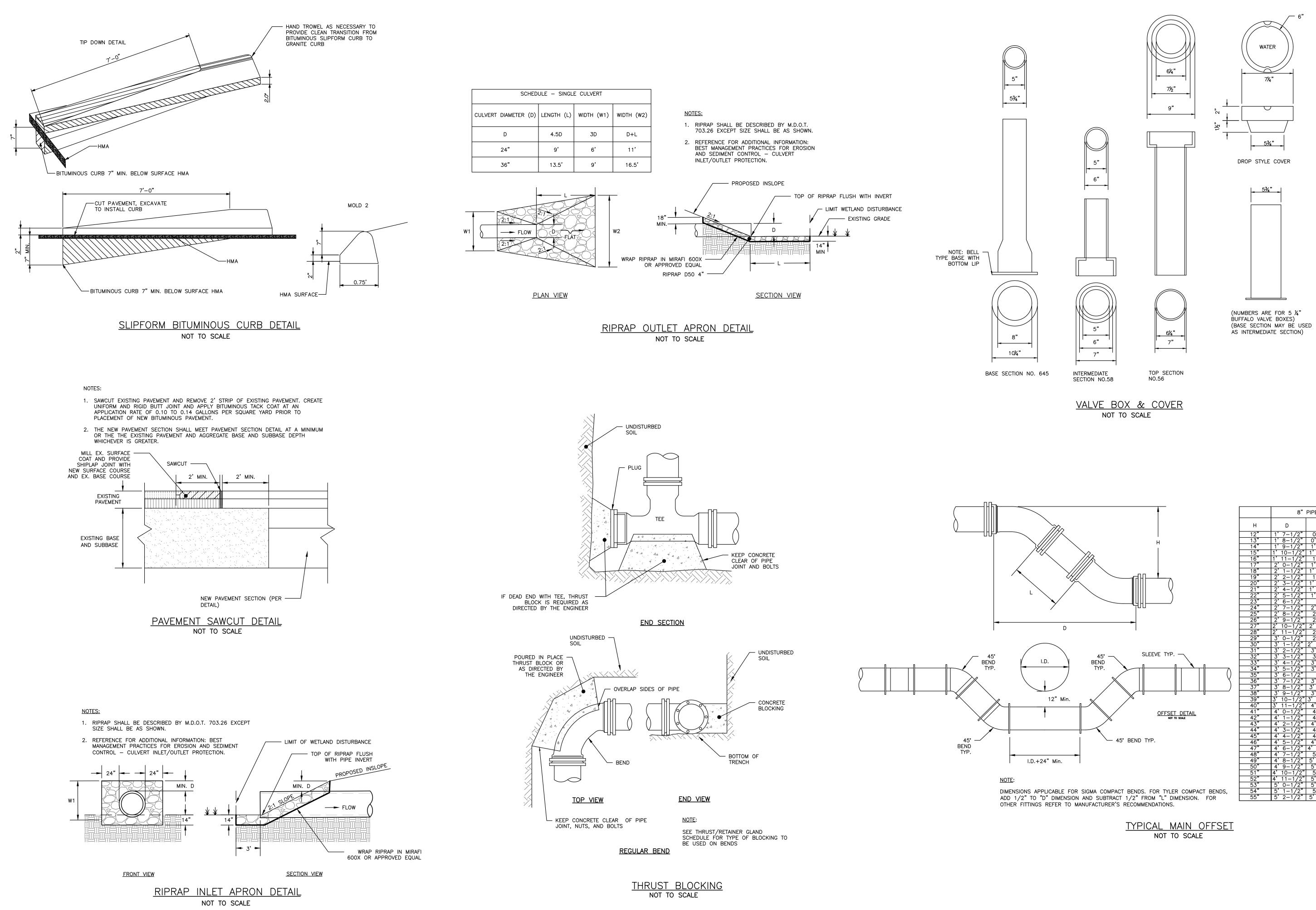
# RIGID INSULATION WHERE INDICATED ON -

## PIPE SIZE AS NOTED ON THE PLANS. ---PIPE MATERIAL PER CITY REQUIREMENTS.

# FOR THICKNESS

- AND F667 SPECIFICATIONS)
- SPECIFICATIONS)
- D-2680-74 SPECIFICATIONS)

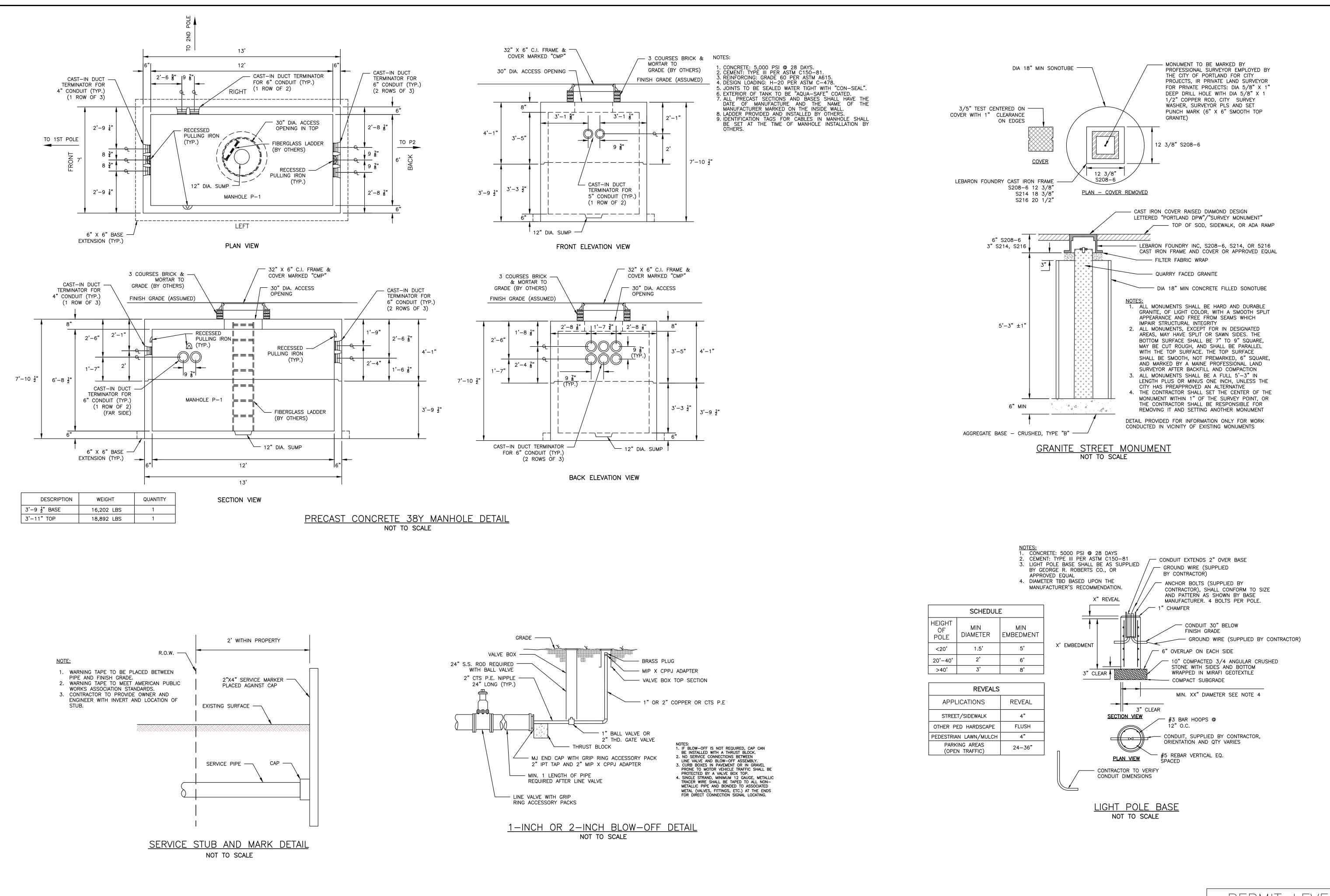




	8" PIPE		
н	D	L	
12"	1'7-1/2"	0'9-1/2"	
13" 14"	1'8-1/2" 1'9-1/2"	0' 10-7/8" 1' 0-5/16"	
14"	1' 9-1/2"	1' 0-5/16"	
15" 16"	1' 10-1/2"	1' 1-11/16"	
16"	1' $11 - 1/2$ "	1' 3-1/8"	
17"	2'0-1/2" 2'1-1/2"	1' 4-9/16"	
18″	$\frac{2}{2'} \frac{1-1}{2''}$	1' 5-15/16"	
19"	2' 2-1/2"	1' 7-3/8"	
20″	2'2-1/2" 2'3-1/2"	1' 8–13/16"	
21" 22"	2' 4 - 1/2"	1' 10 - 3/16"	
22"	2' 4-1/2" 2' 5-1/2"	1' 11-5/8"	
23"	2' 6 - 1/2"	2'1"	
24"	2'6-1/2" 2'7-1/2"	2' 2-7/16"	
25"	2'8-1/2"	2'1" 2'2-7/16" 2'3-7/8"	
26"	2'8-1/2" 2'9-1/2"	2' 5-1/4"	
27"	2' 10-1/2"	2' 3-7/8" 2' 5-1/4" 2' 6-11/16"	
28"	$\begin{array}{c} 2' \ 0-1/2'' \\ 2' \ 1-1/2'' \\ 2' \ 2-1/2'' \\ 2' \ 3-1/2'' \\ 2' \ 3-1/2'' \\ 2' \ 5-1/2'' \\ 2' \ 5-1/2'' \\ 2' \ 5-1/2'' \\ 2' \ 5-1/2'' \\ 2' \ 5-1/2'' \\ 2' \ 5-1/2'' \\ 2' \ 5-1/2'' \\ 2' \ 5-1/2'' \\ 2' \ 5-1/2'' \\ 3' \ 5-1/2'' \\ 3' \ 5-1/2'' \\ 3' \ 3-1/2'' \end{array}$		
29"	3' 0 - 1/2"	2'8-1/8" 2'9-1/2" 2'10-15/16"	
30"	3'0-1/2" 3'1-1/2"	2'10-15/16"	
<u> </u>	3' 2 - 1/2"	3' 0-5/16"	
32"	<u>3'2-1/2"</u> 3'3-1/2"	3' 1-3/4"	
33"	3' 4-1/2"	3' 3-3/16"	
<u> </u>	3' 4-1/2" 3' 5-1/2"	3' 4-9/16"	
35"		3' 6"	
36"	<u>3'6-1/2"</u> 3'7-1/2"	3' 7-7/16"	
37"		3'8_13/16"	
38"		3' 10 - 1/4" 3' 11 - 11/16"	
<u> </u>	3' 9-1/2'' 3' 10-1/2'' 3' 11-1/2'' 4' 0-1/2'' 4' 1 1/2''	3' 11-11/16"	
40"	<u>3' 11-1/2"</u>	4' 1-1/16"	
40 41"	$\frac{3}{4'} \frac{1-1/2}{0-1/2''}$	4' 2-1/2"	
42"	4'0-1/2" 4'1-1/2"	4' 2-1/2" 4' 3-7/8"	
43"	4' 2-1/2"	4' 5-5/16"	
44"	4' 2-1/2" 4' 3-1/2" 4' 4-1/2" 4' 5-1/2" 4' 6-1/2" 4' 7-1/2" 4' 8-1/2"	4' 6-3/4"	
45"	4' 4 - 1/2"	4' 8-1/8"	
45 46"	4' 4-1/2"	4' 9-9/16"	
47"	$4' \ 6-1/2''$	4'9-9/16" 4'10-15/16"	
47" 48"	4' 7-1/2"	5' 0-3/8"	
48 49"	4' 8-1/2"	5' 1-13/16"	
49 50"	4' 9-1/2"	5' 3 - 3/16"	
50 51"	4 9-1/2 4' 10-1/2"	5' 4-5/8"	
50"	4' 9-1/2" 4' 10-1/2" 4' 11-1/2"	5 4-5/8 5'6-1/16"	
52 <b>"</b> 53"	4' 11 - 1/2"		
53 54"	5' 0 - 1/2"		
54" 55"	5' 1-1/2" 5' 2-1/2"	5'8-7/8" 5'10-5/16"	
55	5' 2-1/2"	5'10-5/16"	

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SKYVIEW DRIVE EXTENSION DETAILS -	CUMBERLAND FORESIDE VILLAGE SUBI	CLIENT/OWNER OF RECORD: HERITAGE VILLAGE DEVELOPMENT PETER KENNEDY, 12 CARROLL STREET, FA	
<pre>K</pre>	BERL	ORD: NGE INED	
<del>\</del>	UME	REC REN KEN	
NAME:	AME/ C	HEF HEF	
DRAWING NAME:	PROJECT NAME/ ADDRESS:	NT/OW PET	
DRA	PRO.		
		THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.	
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	$\mathbf{D}^{(1)}$	ACORN ENGINEERING, INC. PO BOX 3372, PORTLAND MAINE 04101 (207) 775–2655	
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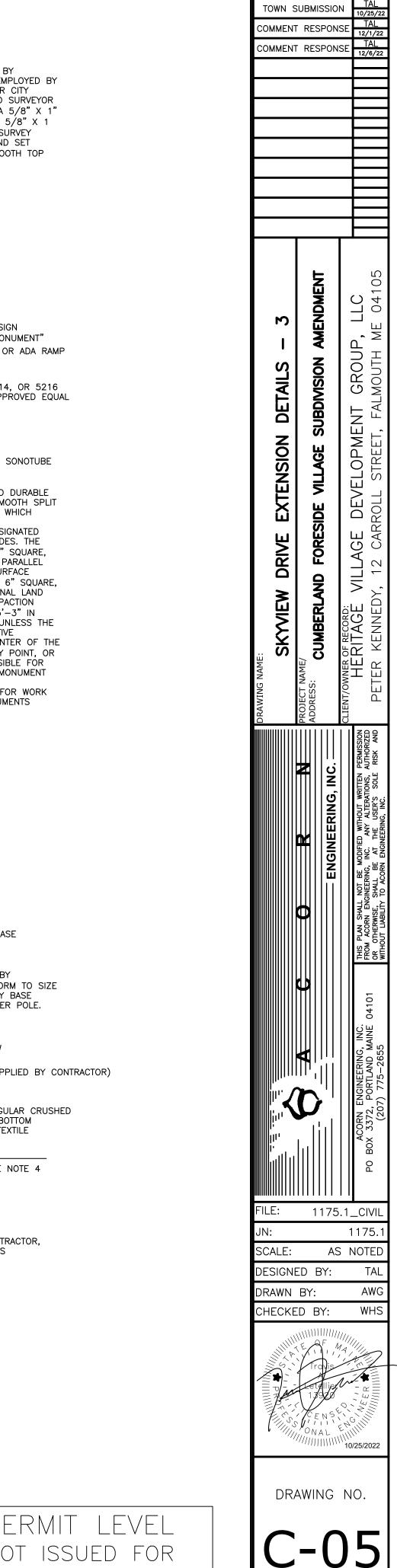
# PERMIT LEVEL NOT ISSUED FOR CONSTRUCTION



SCHEDULE		
HEIGHT OF POLE	MIN DIAMETER	MIN EMBEDM
<20'	1.5'	5'
20'-40'	2'	6'
>40'	3'	8'

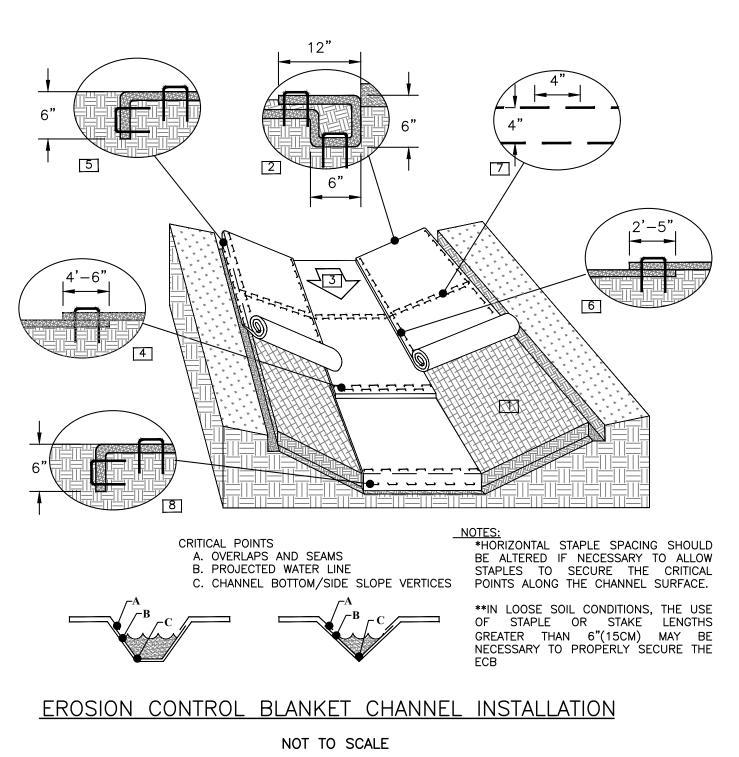
REVEALS		
APPLICATIONS	REVE	
STREET/SIDEWALK	4"	
OTHER PED HARDSCAPE	FLUS	
PEDESTRIAN LAWN/MULCH	4"	
PARKING AREAS (OPEN TRAFFIC)	24–3	
(		





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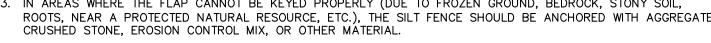


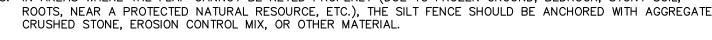
# <u>CHANNEL</u> INSTALLATION DETAIL

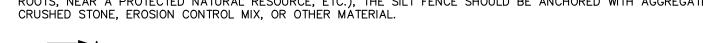
- 1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL BLANKET (ECB), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND
- SFFD. 2.BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE ECB IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH WITH APPROXIMATELY 12"(30CM) OF ECB EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. USE SHOREMAX MAT AT THE CHANNEL/CULVERT OUTLET AS SUPPLEMENTAL SCOUR PROTECTION AS NEEDED. ANCHOR THE ECB WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12"(30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY
- SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12"(30CM) PORTION OF ECB BACK OVER THE SEED AND COMPACTED SOIL. SECURE ECB OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE ECB.
- 3.ROLL CENTER ECB IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. ECB WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL ECB MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN
- APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. 4.PLACE CONSECUTIVE ECB END-OVER-END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW
- OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE ECB. THE TOP LAYER SHALL GO OVER THE DOWNSTREAM LAYER. 5.FULL LENGTH EDGE OF ECB AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF
- STAPLES/STAKES APPROXIMATELY 12"(30CM) APART IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. 6. ADJACENT ECB MUST BE OVERLAPPED
- APPROXIMATELY 2"-5" (5-12.5CM) (DEPENDING ON ECB TYPE) AND STAPLED. 7.IN HIGH FLOW CHANNEL APPLICATIONS A STAPLE
- CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 –12M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4"(10CM) APART AND 4"(10CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL. 8. THE TERMINAL END OF THE ECB MUST BE
- ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

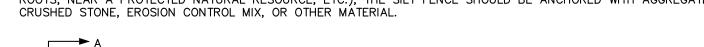
# NOTES:

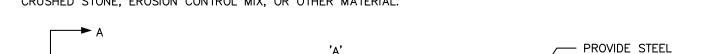
- 1. THE FENCE SHOULD BE ANCHORED TO RESIST PULL-OUT, AND BE STRETCHED TIGHTLY BETWEEN STAKES TO PREVENT SAGGING.
- 2. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHOULD BE SPLICED BY WRAPPING END STAKES TOGETHER.
- 3. IN AREAS WHERE THE FLAP CANNOT BE KEYED PROPERLY (DUE TO FROZEN GROUND, BEDROCK, STONY SOIL, ROOTS, NEAR A PROTECTED NATURAL RESOURCE, ETC.), THE SILT FENCE SHOULD BE ANCHORED WITH AGGREGATE, CRUSHED STONE, EROSION CONTROL MIX, OR OTHER MATERIAL.

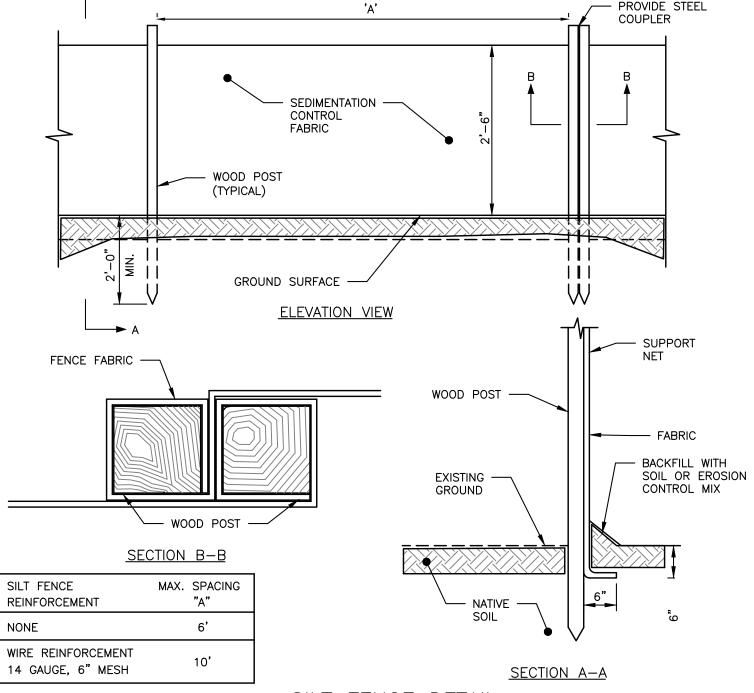




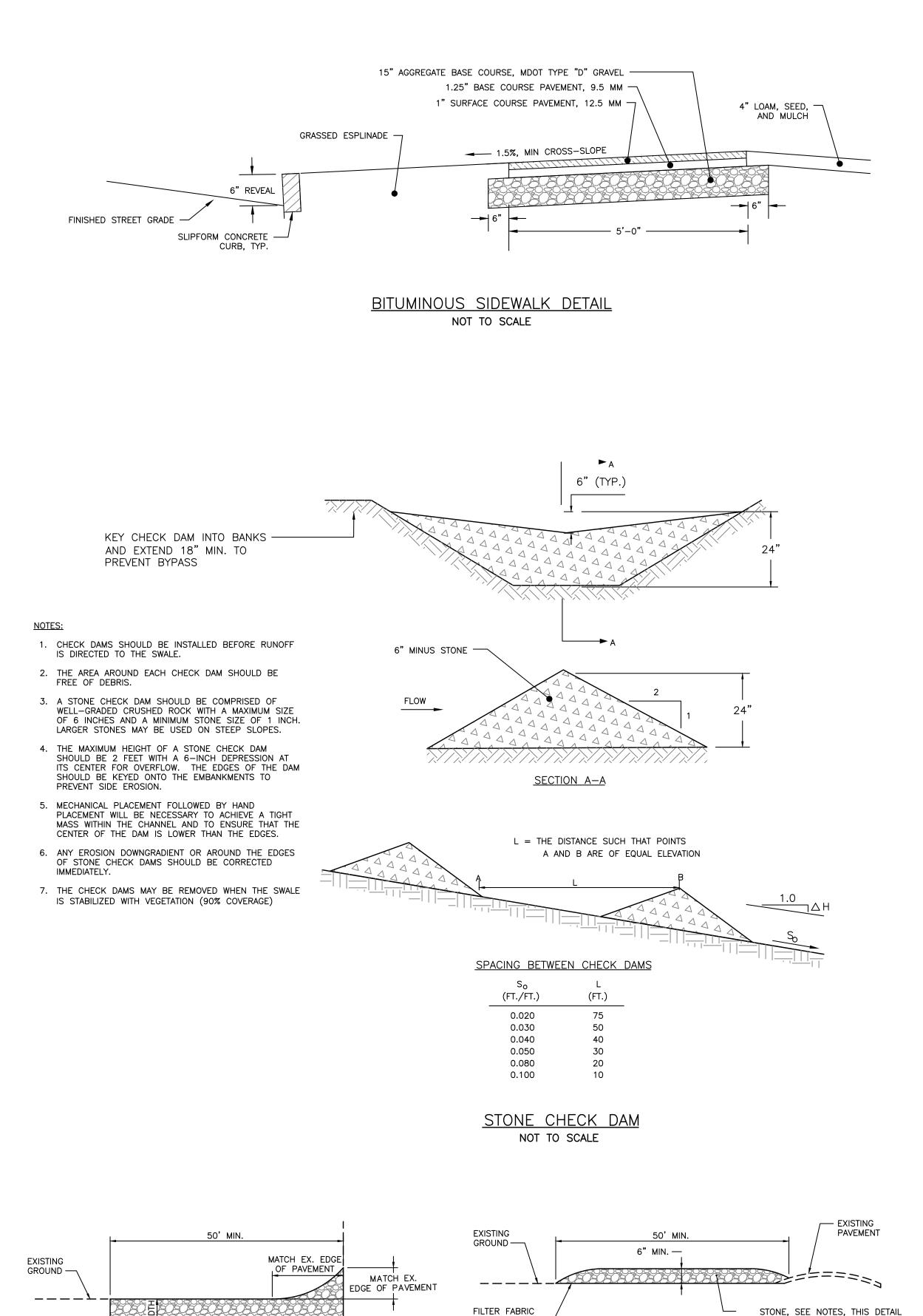












STABILIZED CONSTRUCTION ENTRANCE

MIRAFI 600X

OR EQUAL —

NOTES:

STONE, SEE NOTES, THIS DETAIL

SECTION

CONSTRUCTION ENTRANCE SHALL BE GRADED TO NOT ALLOW ANY STORMWATER TO BE CONVEYED

OFF SITE. IN SITUATIONS WHERE THIS IS NOT POSSIBLE, ANY STORMWATER CONVEYED OFFSITE

4. WHEN NECESSARY, ON-SITE VEHICLES SHALL HAVE THEIR WHEELS CLEANED PRIOR TO LEAVING

5. CONSTRUCTION ENTRANCE SHALL BE GRADED IN A MANNER THAT PREVENTS TRACKING OF

1. CONTRACTOR SHALL ADD STONE TO ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES

SHALL BE TREATED OR RETAINED IN A MANNER APPROVED BY ENGINEER.

STONE SHALL BE 2"-3" COARSE AGGREGATE

SEDIMENTS ONTO PUBLIC RIGHT-OF-WAY

NOT TO SCALE

MATCH EX. EDGE OF PAVEMENT

MATCH EX. EDGE

OF PAVEMENT

<u>PLAN VIEW</u>

ISSUED         FOR         Date           TOWN SUBMISSION         TAL           10/25/22         TAL           COMMENT RESPONSE         TAL           12/1/22         TAL           COMMENT RESPONSE         TAL           12/6/22         TAL           12/6/23         TAL           12/6/24         TAL           12/6/25         TAL           13/6         TAL		
DRAWING MILE EXTENSION AMENDMENT SCAFE INC. DECTINANT	1175.1 NOTED TAL AWG WHS	

PER	MIT	LE	VEL
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CON	NSTR	UCT	ION

# 1.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

AS PART OF THE SITE DEVELOPMENT, THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IMPLEMENTED. DEVICES SHALL BE INSTALLED AS DESCRIBED IN THIS REPORT OR WITHIN THE PLAN SET. SEE THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES FOR FURTHER REFERENCE. 1.1 TEMPORARY EROSION CONTROL MEASURES THE FOLLOWING TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE PLANNED FOR THE PROJECT'S CONSTRUCTION PERIOD: 1.1.1 CRUSHED STONE STABILIZED CONSTRUCTION ENTRANCES SHALL BE PLACED AT ALL ACCESS POINTS TO THE PROJECT SITE WHERE THERE ARE DISTURBED AREAS. THE FOLLOWING SPECIFICATIONS SHALL BE FOLLOWED AT A MINIMUM: • STONE SIZE SHALL BE 2-3 INCHES, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. • THE THICKNESS OF THE ENTRANCE STONE LAYER SHALL BE NO LESS THAN 6 INCHES. • THE ENTRANCE SHALL NOT BE LESS THAN 20 FEET WIDE, HOWEVER NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS. THE LENGTH SHALL NOT BE LESS THAN 50 FEET IN LENGTH. GEOTEXTILE FABRIC (WOVEN OR NON-WOVEN) SHALL BE PLACED OVER THE ENTIRE ENTRANCE AREA • THE ENTRANCE/EXIT SHALL BE MAINTAINED TO THE EXTENT THAT IT WILL PREVENT THE TRACKING OF SEDIMENT ONTO PUBLIC ROAD WAYS 1.1.2 SILTATION FENCE OR EROSION CONTROL BERM SHALL BE INSTALLED DOWN GRADIENT OF ANY DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL PERMANENT STABILIZATION IS ACHIEVED. THE SILT FENCE OR EROSION CONTROL BERM SHALL BE INSTALLED PER THE DETAILS PROVIDED IN THE PLAN SET AND INSPECTED BEFORE AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE LINE OR BERM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE OR BERM, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM. 1.1.3 HAY MULCH INCLUDING HYDRO SEEDING IS INTENDED TO PROVIDE COVER FOR DENUDED OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED. MULCH PLACED BETWEEN APRIL 15TH AND NOVEMBER 1ST ON SLOPES OF LESS THAN 15 PERCENT SHALL BE COVERED BY FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. MULCH PLACED BETWEEN NOVEMBER 1ST AND APRIL 15TH ON SLOPES EQUAL TO OR STEEPER THAN 8 PERCENT AND EQUAL TO OR FLATTER THAN 2:1 SHALL USE MATS OR FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S

### RECOMMENDATION. 1.1.4 AT ANY TIME OF THE YEAR, ALL SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH DOUBLE NET EROSION CONTROL BLANKET BIONET SC150BN BY NORTH AMERICAN GREEN OR APPROVED EQUAL, OR EROSION CONTROL MIX SLOPE PROTECTION AS DETAILED WITHIN THE PLANS. 1.1.5 SKY VIEW DRIVE SHALL BE SWEPT TO CONTROL MUD AND DUST FROM THE CONSTRUCTION SITE AS NECESSARY. ADD ADDITIONAL STONE TO THE STABILIZED

- CONSTRUCTION ENTRANCE TO MINIMIZE THE TRACKING OF MATERIAL OFF THE SITE AND ONTO THE SURROUNDING ROADWAYS. 1.1.6 DURING DEMOLITION, CLEARING AND GRUBBING OPERATIONS, STONE CHECK DAMS SHALL BE INSTALLED AT ANY AREAS OF CONCENTRATED FLOW. THE MAXIMUM HEIGHT OF THE CHECK DAM SHALL NOT EXCEED 2 FEET. THE CENTER OF THE CHECK DAM SHALL BE 6 INCHES BELOW THE OUTER EDGES OF THE DAM. THE CONTRACTOR SHALL MULCH THE SIDE SLOPES AND INSTALL STONE CHECK DAMS FOR ALL NEWLY EXCAVATED DITCH LINES WITHIN 24 HOURS OF THEIR CREATION. SILT FENCE STAKE SPACING SHALL NOT EXCEED 6 FEET UNLESS THE FENCE IS SUPPORTED WITH 14 GAUGE WIRE IN WHICH CASE THE MAXIMUM SPACING SHALL NOT
- EXCEED 10 FEET. THE SILT FENCE SHALL BE "TOED" INTO THE GROUND.
  1.1.8 STORMDRAIN INLET PROTECTION SHALL BE PROVIDED TO STORMDRAINS THROUGH THE USE OF ANY OF THE FOLLOWING: HAY BALE DROP INLET STRUCTURES, SILT FENCE DROP INLET SEDIMENT FILTER, GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER, OR CURB INLET SEDIMENT FILTER. BARRIERS SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT AND REPAIRED AS NECESSARY. SEDIMENTS SHALL BE REMOVED WHEN ACCUMULATION HAS REACHED ½ THE DESIGN HEIGHT.
  1.1.9 DUST CONTROL SHALL BE ACCOMPLISHED BY THE USE OF ANY OF THE FOLLOWING: WATER, CALCIUM CHLORIDE, STONE, OR AN APPROVED MDEP PRODUCT. DUST CONTROL SHALL BE ADDUED AS NECESSARY.
- CONTROL SHALL BE APPLIED AS NEEDED TO ACCOMPLISH DUST CONTROL. 1.1.10 TEMPORARY LOAM, SEED, AND MULCHING SHALL BE USED IN AREAS WHERE NO OTHER EROSION CONTROL MEASURE IS USED. APPLICATION RATES FOR SEEDING ARE PROVIDED AT THE END OF THIS REPORT. 1.1.11 STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF FORMATION UNLESS A SCHEDULED RAIN EVENT OCCURS PRIOR TO THE 7 DAY WINDOW, IN WHICH CASE THE STOCKPILES SHALL BE STABILIZED DRIOD TO THE DAYL DISTURDED OF STREAM OF STABILIZED WITHIN 7 DAYS OF FORMATION UNLESS A SCHEDULED RAIN EVENT OCCURS PRIOR TO THE 7 DAY WINDOW, IN WHICH CASE THE STOCKPILE SHALL BE STABILIZED DRIOD TO THE DAYL DISTURDED OF STREAM OF STREA
- STOCKPILE SHALL BE STABILIZED PRIOR TO THE RAIN EVENT. METHODS OF STABILIZATION SHALL BE MULCH, EROSION CONTROL MIX, OR EROSION CONTROL BLANKETS/MATS. SILT FENCE OR A WOOD WASTE COMPOST FILTER BERM SHALL BE PLACED DOWNHILL OF ANY SOIL STOCKPILE LOCATION. 1.1.12 FOR DISTURBANCE BETWEEN NOVEMBER 1 AND APRIL 15, PLEASE REFER TO WINTER STABILIZATION PLAN IN THIS REPORT AND THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR FURTHER INFORMATION.
- 1.1.13 IT IS OF THE UTMOST IMPORTANCE THAT STORMWATER RUNOFF AND POTENTIAL SEDIMENT FROM THE CONSTRUCTION SITE BE DIVERTED AROUND THE PROPOSED UNDERDRAINS UNTIL THE TRENCH IS BACKFILLED.

# 1.2 <u>PERMANENT EROSION CONTROL MEASURES</u>

- THE FOLLOWING PERMANENT EROSION CONTROL MEASURES ARE INTENDED FOR POST DISTURBANCE AREAS OF THE PROJECT.
- 1.2.1 ALL DISTURBED AREAS DURING CONSTRUCTION, NOT SUBJECT TO OTHER PROPOSED CONDITIONS, SHALL RECEIVE A MINIMUM 4" OF LOAM AND SHALL BE LIMED, AND MULCHED.
  1.2.2 EROSION CONTROL BLANKETS OR MATS SHALL BE PLACED OVER THE MULCH IN AREAS NOTED IN PARAGRAPH 4.2 OF THIS REPORT.

### 1.2.2 ENGLIGH OUTCOL DEGREES ON MALE STALL BE FLACED OVER THE MOLOH IN AREAS NOTED IN PARAGRAPH 4.2 OF THIS 1.2.3 ALL STORMWATER DEVICES SHALL BE INSTALLED AND TRIBUTARY AREAS STABILIZED PRIOR RECEIVING STORMWATER. 1.2.4 REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

- .0 EROSION AND SEDIMENTATION CONTROL PLAN
- 2.1 THE EROSION AND SEDIMENTATION CONTROL PLAN IS INCLUDED WITHIN THE PLAN SET.

# 3.0 DETAILS AND SPECIFICATIONS

3.1 EROSION CONTROL DETAILS AND SPECIFICATIONS ARE INCLUDED IN THE PLAN SET.

# 4.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

WINTER CONSTRUCTION CONSISTS OF EARTHWORK DISTURBANCE BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15. IF A CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15, THEN THE SITE SHALL BE PROTECTED WITH OVER-WINTER STABILIZATION. ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MIX, EROSION CONTROL MATS, RIPRAP, OR GRAVEL BASE ON A ROAD SHALL BE CONSIDERED OPEN.

THE CONTRACTOR SHALL LIMIT THE WORK AREA TO AREAS THAT WORK WILL OCCUR IN DURING THE SUBSEQUENT 15 DAYS AND SO THAT IT CAN BE MULCHED ONE DAY PRIOR TO A SNOW EVENT. THE CONTRACTOR SHALL STABILIZE WORK AREAS PRIOR TO OPENING ADDITIONAL WORK AREAS TO MINIMIZE AREAS WITHOUT EROSION CONTROL MEASURES. THE FOLLOWING MEASURES SHALL BE IMPLEMENTED DURING WINTER CONSTRUCTION PERIODS:

# 4.1 <u>SEDIMENT BARRIERS</u>

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.

# 4.2 <u>MULCHING</u>

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75–LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCH THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW SHALL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, TRACKING OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCHING AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

# 4.3 <u>SOIL STOCKPILING</u>

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.

# 4.4 <u>SEEDING</u>

BETWEEN THE DATES OF OCTOBER 15TH AND APRIL 1ST, LOAM OR SEED SHALL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS NOT BEEN LOAMED, FINAL GRADING WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.

DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH OR EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS/1,000 S.F. ALL AREAS SEEDED DURING THE WINTER SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

# 4.5 OVER WINTER STABILIZATION OF DISTURBED SOILS

BY SEPTEMBER 15TH, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% SHALL BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS SHALL BE TAKEN TO STABILIZE THE SOIL FOR LATE FALL AND WINTER:

- <u>STABILIZE THE SOIL WITH TEMPORARY VEGETATION</u> BY OCTOBER 1ST, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3LBS PER 1,000 S.F., LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 LBS PER 1,000 S.F., AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1ST, THEN MULCH THE AREA FOR OVER-WINTER PROTECTION.
- <u>STABILIZE THE SOIL WITH SOD</u> STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
- <u>STABILIZE THE SOIL WITH MULCH</u> BY NOVEMBER 15TH, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 LBS PER 1,000 S.F. ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

# 4.6 OVER WINTER STABILIZATION OF DISTURBED SLOPES

ALL STONE-COVERED SLOPES SHALL BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15TH. ALL SLOPES TO BE VEGETATED SHALL BE SEEDED AND MULCHED BY SEPTEMBER 1ST. A SLOPE IS CONSIDERED A GRADE GREATER THAN 15%. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1ST, THEN ONE OF THE FOLLOWING ACTION SHALL BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER:

- <u>STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS</u> BY OCTOBER 1ST THE DISTURBED SLOPE SHALL BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 LBS PER 1,000 S.F. AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1ST, THEN THE CONTRACTOR SHALL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP.
- <u>STABILIZE THE SOIL WITH SOD</u> THE DISTURBED SLOPE SHALL BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR SHALL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 3H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- <u>STABILIZE THE SOIL WITH EROSION CONTROL MIX</u> EROSION CONTROL MIX SHALL BE PROPERLY INSTALLED BY NOVEMBER 15TH. THE CONTRACTOR SHALL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAN 2H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- <u>STABILIZE THE SOIL WITH STONE RIPRAP</u> PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15TH. A REGISTERED PROFESSIONAL ENGINEER SHALL BE HIRED TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

# 5.0 INSPECTION AND MAINTENANCE

A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT PERIODIC VISUAL INSPECTIONS OF INSTALLED EROSION CONTROL MEASURES. THE FREQUENCY OF INSPECTION SHALL OCCUR AT LEAST ONCE EVERY TWO WEEKS, AS WELL AS AFTER A "STORM EVENT". A "STORM EVENT" SHALL CONSIST 0.5 INCHES OF RAIN WITHIN A 24 HOUR PERIOD. THE FOLLOWING EROSION AND SEDIMENT CONTROL – BEST MANAGEMENT PRACTICES (BMP'S) SHALL INSPECTED IN THE MANNER AS DESCRIBED. 5.1 SEDIMENT BARRIERS

HAY BALE BARRIERS, SILT FENCES AND FILTER BERMS SHALL BE INSPECTED AND REPAIRED FOR THE FOLLOWING IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE—HALF THE HEIGHT OF THE BARRIER. FILTER BERMS SHOULD BE RESHAPED AS NEEDED. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

# 5.2 STABILIZED STONE CONSTRUCTION ENTRANCES

THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL AND REDISTRIBUTED ON SITE IN A STABLE MANNER. THE ENTRANCE SHOULD THEN BE RECONSTRUCTED. THE CONTRACTOR SHALL SWEEP OR WASH PAVEMENT AT EXITS, WHICH HAVE EXPERIENCED MUD-TRACKING ON TO THE PAVEMENT OR TRAVELED WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

5.3 <u>MULCHED AREAS</u>

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, RE-INSTALL THE NETS AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE. REPAIR AS NEEDED.

# 5.4 DUST CONTROL

WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT SHALL BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.

# 5.5 STORMWATER APPURTENANCES

ALL UNDERDRAINS, STORM DRAINS, AND CATCH BASINS NEED TO BE OPERATING EFFECTIVELY AND FREE OF DEBRIS.

5.6 EROSION AND SEDIMENTATION CONTROL INSPECTIONS:

ACORN ENGINEERING HAS PERSONNEL QUALIFIED TO CONDUCT EROSION AND SEDIMENTATION CONTROL INSPECTIONS. FOR FURTHER INFORMATION CONTACT:

## CONTACT: WILL SAVAGE, PE TELEPHONE: (207) 775–2655

QUALIFICATIONS

- > MAINE PROFESSIONAL ENGINEERING LICENSE #11419
- > MAINE DEP CERTIFIED IN MAINTENANCE & INSPECTION OF STORMWATER BMP'S CERT #14 > CERTIFIED EROSION, SEDIMENT AND STORM WATER INSPECTOR (CESSWI) CERT #0293
- > CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) CERT. #4620

THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR COMPLYING WITH THE EROSION AND SEDIMENTATION REPORT/PLAN, INCLUDING CONTROL OF FUGITIVE DUST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONETARY PENALTIES RESULTING FROM FAILURE TO COMPLY WITH THESE STANDARDS.

# 6.0 IMPLEMENTATION SCHEDULE

THE FOLLOWING IMPLEMENTATION SEQUENCE IS INTENDED TO MAXIMIZE THE EFFECTIVENESS OF THE ABOVE DESCRIBED EROSION CONTROL MEASURES. CONTRACTORS SHOULD AVOID OVEREXPOSING DISTURBED AREAS AND LIMIT THE AMOUNT OF STABILIZATION AREA.

1. INSTALL A STABILIZED CONSTRUCTION ENTRANCE IN ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL ENTER AND EXIT THE SITE.

- 2. INSTALL PERIMETER SILT FENCE OR EROSION CONTROL BERM. 3. INSTALL ALL OTHER EROSION CONTROL DEVICES AS NECESSARY THROUGHOUT THE REMAINDER OF THIS SCHEDULE.
- COMMENCE INSTALLATION OF DRAINAGE INFRASTRUCTURE.
   PRIORITIZE THE DOWNHILL SIDE TO CONTAIN RUNOFF WITHIN THE SITE WHILE PROVIDING AN ENGINEERED OUTLET WITH SILTATION BARRIER TO THE MUNICIPAL STORMWATER SYSTEM WITHIN SKY VIEW DRIVE.
- COMMENCE EARTHWORK OPERATIONS, WALL AND FOUNDATION INSTALLATION.
   COMMENCE INSTALLATION OF UTILITIES.
- 8. CONTINUE EARTHWORK AND GRADING TO SUBGRADE AS NECESSARY FOR CONSTRUCTION. 9. COMPLETE INSTALLATION OF DRAINAGE INFRASTRUCTURE, AS WELL AS OTHER UTILITY WORK.
- 10. COMPLETE REMAINING EARTHWORK OPERATIONS. 11. INSTALL SUB-BASE AND BASE GRAVELS IN PAVED AREAS.
- 12. INSTALL PAVING, CURBING AND BRICKWORK.
- LOAM, LIME, FERTILIZE, SEED AND MULCH DISTURBED AREAS AND COMPLETE ALL LANDSCAPING.
   ONCE THE SITE IS STABILIZED, 90% CATCH OF GRASS HAS BEEN OBTAINED, OR MULCHING OF LANDSCAPE AREAS IS COMPLETE REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
- 15. TOUCH UP AREAS WITHOUT A VIGOROUS CATCH OF GRASS WITH LOAM AND SEED. 16. COMPLETE SITE SIGNAGE AND STRIPING.

17. EXECUTE PROPER MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.

THE ABOVE IMPLEMENTATION SEQUENCE SHOULD BE GENERALLY FOLLOWED BY THE SITE CONTRACTOR. HOWEVER, THE CONTRACTOR MAY CONSTRUCT SEVERAL ITEMS SIMULTANEOUSLY. THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SCHEDULE OF THE COMPLETION OF THE WORK. IF THE CONTRACTOR IS TO COMMENCE THE CONSTRUCTION OF MORE THAN ONE ITEM ABOVE, THEY SHALL LIMIT THE AMOUNT OF EXPOSED AREAS TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE FOLLOWING 30 DAYS.

THE CONTRACTOR SHALL RE-VEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE A STORM EVENT. THE CONTRACTOR SHALL INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEMS AS EARLY AS POSSIBLE INTO THE CONSTRUCTION PHASE.

# 7.0 SEEDING PLAN

# 7.1 SITE PREPARATION

THE SEEDED AREAS SHALL BE FEASIBLY GRADED OUT TO PROVIDE THE USE OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. IF NECESSARY, THE SITE MAY REQUIRE ADDITIONAL TEMPORARY EROSION CONTROL MEASURES OUTLINED IN THE EROSION CONTROL REPORT. 7.2 SEEDBED PREPARATION

FERTILIZER SHALL BE APPLIED TO THE SITE AT A RATE OF 13.8 POUNDS PER 1,000 SQUARE FEET. THE COMPOSITION OF THE FERTILIZER SHALL BE 10-10-10 (N-P205-K20) OR EQUIVALENT.

LIMESTONE SHALL BE APPLIED TO THE SITE AT A RATE OF 138 POUNDS PER 1,000 SQUARE FEET.

# 7.3 SEEDING

THE COMPOSITION AND AMOUNT OF TEMPORARY SEED APPLIED TO A SITE SHALL BE DETERMINED BY THE FOLLOWING TABLE:

TEMPORARY SEED APPLICATION RATES			
SEED	LBS / ACRE	LBS / 1,000 SF	RECOMMENDED SEEDING DATES
WINTER RYE	112	2.6	8/15 TO 10/1
OATS	80	1.8	4/1 TO 7/1 8/15 TO 9/15
ANNUAL RYEGRASS	40	0.9	4/1 TO 7/1
SUDANGRASS	40	0.9	5/15 TO 8/15
PERENNIAL	40	0.9	8/15 TO 9/15
TOTAL	312	7.1	

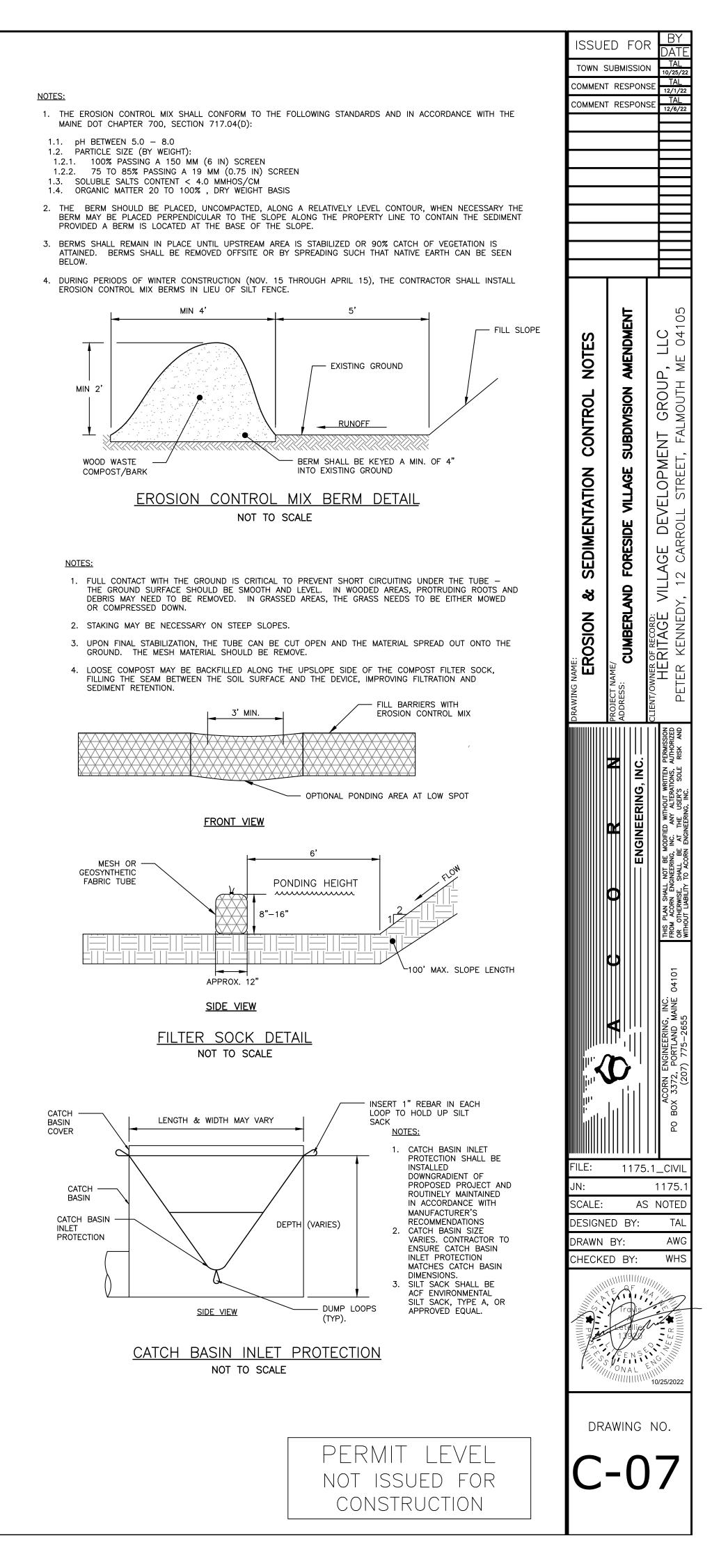
PERMANENT SEED	APPLICATION RATES
SEED	LBS / ACRE
KENTUCKY BLUEGRASS	20.00
CREEPING RED FESCUE	20.00
PERENNIAL RYEGRASS	4.80
TOTAL	44.8 LBS/ACRE

# 7.4 MULCHING

MULCH SHALL BE HARDWOOD AND APPLIED AT A RATE OF 70 LBS – 90 LBS PER 1,000 SQUARE FEET. THE MULCH SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4 INCHES. THE SEEDED AREA SHALL BE MULCHED IMMEDIATELY AFTER SEED IS APPLIED. MULCHING DURING THE WINTER SEASON SHALL BE DOUBLE THE NORMAL AMOUNT. REFER TO DETAIL FOR MORE INFORMATION.

# 8.0 <u>CONCLUSION</u>

THE ABOVE EROSION CONTROL NARRATIVE IS INTENDED TO MINIMIZE THE DEVELOPMENT IMPACT BY IMPLEMENTING TEMPORARY AND PERMANENT EROSION CONTROL MEASURES. THE CONTRACTOR SHALL ALSO REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.



# Notice of Decision

Date: November 16, 2022

To: Travis Letellier, P.E. Acorn Engineering, Inc. P. O. Box 3372 Portland, ME 04104

From: Carla Nixon, Town Planner

**Re:** Cumberland Foreside Village Subdivision Amendment for a 350 foot extension of Sky View Dr. and to split an existing lot, Tax Assessor Map R01, Lot 11-7 into two lots. Applicant/Owner: Peter Kennedy, Heritage Village Development Group, LLC. Representative: Travis Letellier, P.E., Acorn Engineering, Inc.

This is to advise you that on Tuesday, November 15, 2022, the Cumberland Planning Board conducted a public hearing to receive comments regarding the application for the Cumberland Foreside Village Subdivision amendment for a 350 foot extension of Sky View Dr. and to split an existing lot, Tax Assessor Map R01, Lot 11-7, into two lots and voted unanimously to approve the amendment to the subdivision plan subject to the expiration of approval, the standard condition of approval and eight conditions of approval.

Findings of Fact: See attached.

Waivers Granted: None.

Waivers Denied: None.

**EXPIRATION OF APPROVAL:** Construction of the improvements covered by any site plan approval must be substantially commenced with 12 months of the date upon which the approval was granted. If construction has not been substantially commenced within 12 months of the date upon which approval was granted, the approval shall be null and void. If construction has not been substantially completed within 24 months of the date upon which approval was granted or within a time period as specified by the Planning Board, the approval shall be null and void. The applicant may request an extension of the period. Such request must be made in writing and must be made to the Planning Board. The Planning Board may grant up to two one-year extensions to the period if the approved plan conforms to the ordinances in effect at the time the extension is granted and any and all federal and state approvals and permits are current.

**STANDARD CONDITION OF APPROVAL:** This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted by the applicant. Any variation from the plans, proposals and supporting documents, except de minimis changes as so determined by the Town Planner which do not affect approval standards, is subject to review and approval of the Planning Board prior to implementation.

# **Conditions of Approval:**

- **1.** A preconstruction conference is required prior to the start of construction.
- **2.** Project costs and evidence of finance capacity shall be submitted to the Town Planner prior to the preconstruction conference.

- **3.** All review comments by the Town Engineer shall be addressed prior to the preconstruction conference.
- **4.** A performance guarantee in an amount and form acceptable to the Town Manager will be required prior to the preconstruction conference.
- **5.** All clearing limits shall be flagged and approved by the Town Engineer prior to the preconstruction conference.
- 6. A blasting permit, if required, shall be obtained from the Code Enforcement Officer.
- **7.** All legal and technical review fees shall be paid to the Town prior to the preconstruction conference.
- **8.** An electronic copy of the as-built plans shall be submitted to the Town Planner prior to the release of any remaining inspection fees.

Cumberland Planning Board

Jason Record, Chair

**Findings of Fact - Chapter 250 - Subdivision of Land:** The purpose of these standards shall be to assure the comfort, convenience, safety, health and welfare of the people, to protect the environment and to promote the development of an economically sound and stable community. To this end, in approving subdivisions within the Town of Cumberland, Maine, the Board shall consider the following criteria and before granting approval shall determine that the proposed subdivision:

**1.** <u>Pollution</u>. The proposed subdivision will not result in undue water or air pollution. In making this determination, it shall at least consider:

A. The elevation of the land above sea level and its relation to the flood plains;

- B. The nature of soils and subsoil and their ability to adequately support waste disposal;
- **C.** The slope of the land and its effect on effluents;

D. The availability of streams for disposal of effluents; and

E. The applicable state and local health and water resource rules and regulations;

The proposed amendment for a road extension and lot split will not result in undue water or air pollution. Based on the information provided, the Board finds that the standards of this section have been met.

<u>2.</u> <u>Sufficient Water.</u> The proposed subdivision has sufficient water available for the reasonable foreseeable needs of the subdivision; *A water supply is not needed. Based on the information provided, The Board finds that the standards of this section have been met.* 

<u>3.</u> <u>Municipal Water Supply.</u> The proposed subdivision will not cause an unreasonable burden on an existing water supply, if one is to be used; *The subdivision will not utilize public water.* Based on the information provided, the Board finds the standards of this section have been met.

<u>4.</u> <u>Erosion.</u> The proposed subdivision will not cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results; *An erosion and sedimentation control plan that includes housekeeping procedures for maintenance has been submitted and the plan has been reviewed and approved by the Town Engineer. Based on the information provided, the Board finds that the standards of this section have been met.* 

<u>5.</u> <u>Traffic.</u> The proposed subdivision will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed; *The proposed amendment for a road extension and lot split will not result in road* 

congestion. Based on the information provided, the Board finds that the standards of this section have been met.

<u>6.</u> <u>Sewage disposal.</u> The proposed subdivision will provide for adequate sewage waste disposal and will not cause an unreasonable burden on municipal services, if they are utilized; *There is no need for sewage waste disposal. Based on the information provided, the Board finds that the standards of this section have been met.* 

<u>7.</u> <u>Municipal solid waste disposal.</u> The proposed subdivision will not cause an unreasonable burden on the municipality's ability to dispose of solid waste, if municipal services are to be utilized; *There is no need for solid waste disposal. Based on the information provided, the Board finds that the standards of this section have been met.* 

<u>8. Aesthetic, cultural and natural values.</u> The proposed subdivision will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline; Letters are on file from State agencies indicating that the proposed subdivision will have no adverse impact on any of the above features. The Board finds that the standards of this section have been met.

<u>9.</u> <u>Conformity with local ordinances and plans.</u> The proposed subdivision conforms to a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan or land use plan, if any. In making this determination, the municipal reviewing authority may interpret these ordinances and plans; *The plans have been reviewed and approved by the Town Planner, the Town Engineer and Town department heads. The Board finds that the standards of this section have been met.* 

**10.** Financial and technical capacity. The subdivider has adequate financial and technical capacity to meet the standards of this section;

Financial Capacity: Project cost and financial capacity are required for final review. Technical Capacity is evidenced by the use of professional technical consultants. Project costs and financial capacity are pending. With a proposed condition of approval, the Board finds that the standards of this section have been met for preliminary approval.

**<u>11.</u>** Surface waters; outstanding river segments. Whenever situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond or river as defined in Title 38 chapter 3, subchapter I, article 2-B, the proposed subdivision will not adversely affect the quality of that body of water or unreasonably affect the shoreline of the body of water;

The proposed amendment for a road extension and lot split are not within the watershed of any pond or lake. Based on the information provided, the Board finds that the standards of this section have been met.

<u>12.</u> <u>Ground water.</u> The proposed subdivision will not alone, or in conjunction with, existing activities, adversely affect the quality or quantity of ground water; *The proposed amendment for a road extension and lot split will not adversely affect the quality or quantity of ground water. Based on the information provided, the Board finds that the standards of this section have been met.* 

**13.** Flood areas. Based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, and information presented by the applicant whether the subdivision is in a flood-prone area. If the subdivision, or any part of it, is in such an area, the subdivider shall determine the 100-year flood elevation and flood hazard boundaries within the subdivision. The proposed subdivision plan must include a condition of plan approval requiring that principal structures in the subdivision will be constructed with their lowest floor, including the basement, at least one foot above the 100-year flood elevation; *The development is not located within a 100 year flood plain as shown on the FEMA Flood Insurance Rate Map. Based on the information provided, the Board finds that the standards of this section have been met.* 

**<u>14.</u>** Stormwater. The proposed subdivision will provide for adequate storm water management;

A stormwater Management Report dated October, 2022 was included in the application. The 350' extension of road will consist of 10,500 sf of paved surface. The existing Grassed Underdrained Soil Filter (GUSF) and detention pond have been constructed to take stormwater flows generated by the proposed road extension. With a proposed condition of approval, the Board finds that the standards of this section have been met for preliminary approval.

**15.** <u>Freshwater wetlands.</u> All potential freshwater wetlands, as defined in 30-A M.R.S.A. §4401 (2-A), within the proposed subdivision have been identified on any maps submitted as part of the application, regardless of the size of these wetlands. Any mapping of freshwater wetlands may be done with the help of the local soil and water conservation district. *There are no wetlands on the site. Based on the information provided, the Board finds that the standards of this section have been met.* 

<u>16. River, stream or brook.</u> Any river, stream, or brook within or abutting the proposed subdivision has been identified on any map submitted as a part of the application. For purposes of this section, "river, stream or brook" has the same meaning as in Title 38, Section 480-B, Subsection 9. [Amended; Effective. 11/27/89] *There are no streams on the site. Based on the information provided, the Board finds that the standards of this section have been met.*