## West Shore Landing Apartments Final Development Review Application

## Submitted To: City of Auburn

Prepared For: West Shore Landing, LLC 155 Center Street, Bldg. G, Box 6 Auburn, ME 04210

#### **Prepared By:**



**January 30th, 2020** 



January 30, 2020

Evan G. Cyr City of Auburn Planning Board 60 Court St. Auburn, ME 04210

RE: Development Review Application, West Shore Landing Apartments (North River Rd.)

Tax Map 27, Lot 101

#### Dear Evan & Board Members:

On behalf of our Client, Tim Millett of West Shore Landing, LLC, please accept the following documents and supporting material to be reviewed and approved by the Board as a completed application. These are in response to requests and concerns expressed by abutters and board members at the previous Public Hearing of January 14, 2020 that resulted in a Preliminary Plan approval of the project.

The proposal is for the construction of three, twelve-unit apartment buildings on the parcel of land owned by the applicant. The parcel is located on the easterly side of North River Road, just southerly of the intersection with Northern Avenue and adjacent to the Androscoggin River. The parcel is located in the General Business/Multifamily Suburban District and is partially located in the floodplain and shoreland zone associated with the river.

The proposed buildings will be served by public utilities, including water, sewer and power. All parking will be provided by off-street (on-site) parking.

SurveyWorks, Inc. has been retained by West Shore Landing, LLC to act as their agent and to provide all necessary information and documentation required for review and approval of this application by the Board. We look forward to the opportunity to present this application and supporting material to you at the next scheduled meeting.

Sincerely yours,

Senior Project Manager SurveyWorks, Inc.

#### **Table of Contents**

- 1. Development Review Application,
  - a. Application
  - b. Checklist
  - c. Conformance to Sec. 60-1359 Subdivision Guidelines
  - d. Waiver Requests
  - e. Open Space Recommendation Letter
- 2. Evidence of Right, Title & Interest, Letter of Financial Capacity & Estimated Cost
- 3. Character of the Neighborhood Narrative & Supporting Documents
- 4. Threatened & Endangered Species
  - a. Consistency Lettter, Northern Long-Eared Bats
  - b. No Take Contention, Small Whorled Pogonia
  - c. No Take Contention, Atlantic Salmon
- 5. Pictures
- 6. Stormwater Report
- 7. Plan Set
  - a. Existing Conditions
  - b. Subdivision Plan
  - c. Site Plan
  - d. Grading & Drainage Plan
  - e. Erosion Control Plan & Details
  - f. Utility Plan
  - g. Lighting Plan
  - h. Landscape Plan
  - i. Details
  - j. Stormwater Plan & Details



Email: jim@surveyworksinc.com

## **Development Review Application**

City of Auburn Planning and Permitting Department
City of Lewiston Department of Planning and Code Enforcement



PROJECT NAME: West	Shore Landing Apartments
PROPOSED DEVELOPMENT	ADDRESS: North River Rd.
PARCEL ID#: 271-101	
REVIEW TYPE: Site Plan   Subdivision	Site Plan Amendment □ Subdivision Amendment □
PROJECT DESCRIPTION: Applicat	nt Proposes to construct three twelve-unit apartment buildings and associated
<u>·                                      </u>	s, & other site improvements on the subject parcel. The subject parcel is located in the
General Business (GB) District and	is partially located in the floodplain immediately adjacent to the Andros. River.
CONTACT INFORMATION:	
Applicant West Shore Landin	<u> </u>
Name: Tim Millett	Name: Same as Applicant
Address: 155 Center St. Bldg.	G. Box 6 Address:
Zip Code Auburn, ME 04210	Zip Code
Work #: (207) 783-6339	Work #:
Cell #: (207) 754-6332	Cell #:
Fax #:	Fax #:
Home #:	Home #:
Email: tamillett@gmail.com	Email:
Project Representative SurveyWorks, Inc.	Other professional representatives for the project (surveyors, engineers, etc.),
Name: Jimmy C. Courbron, PLS	Name: Dirigo Architectural Eng. (Zach Quinn)
Address: 7 Cobblestone Dr. Suite 4	Address: 7 Cobblestone Dr. Suite 2
Zip Code Turner, ME 04282	Zip Code Turner, ME 04282
Work #: (207) 200-1678	Work #: (207) 225-3040 (ext. 3)
Cell #: (207) 212-4478	Cell #: (207) 751-1046
Fax #:	Fax #:
Home #:	Home #:

Email:

zquinn@dirigoae.com

### **PROJECT DATA**

The following information is required where applicable, in order complete the application

	The following information is required when	e applicable, in order co	implete the application
<b>IMPERVIO</b>	US SURFACE AREA/RATIO		
Existing Total In	mpervious Area	6,000	sq. ft.
Proposed Total 1		23,324	sq. ft.
	Impervious Area	36,811	sq. ft.
	vious Net Change	36,811	sq. ft.
Impervious surfa	ace ratio existing	6.0	% of lot area
Impervious surfa	ace ratio proposed	37.2	% of lot area
<b>BUILDING</b>	AREA/LOT		
<b>COVERAGE</b>	<u> </u>	0	
Existing Building	g Footprint	0	sq. ft.
Proposed Buildin		13,486	sq. ft.
Proposed Buildin	ng Footprint Net change	13,486 13,486	sq. ft.
Existing Total B	uilding Floor Area	N/A	sq. ft.
	Building Floor Area	N/A	sq. ft.
Proposed Buildin	ng Floor Area Net Change	Yes	sq. ft
New Building		0%	(yes or no)
Building Area/L	ot coverage existing	<del></del>	% of lot area
Building Area/L	ot coverage proposed	13.6	% of lot area
ZONING		GB, Floodplain, Shoreland	
Existing		N/A (same)	<del></del>
Proposed, if app	licable		
LAND USE			
Existing		undeveloped	
Proposed		Residential / multi-family	
	IAL, IF APPLICABLE		<u>—</u>
	r of Residential Units	0	
	per of Residential Units	36	<del></del>
	posed Number of Lots	1	<del></del>
PARKING S	•	<u>·</u>	
		0	
	r of Parking Spaces	51	<del></del>
	per of Parking Spaces	3	<del></del>
	dicapped Parking Spaces	54	<del></del>
Proposed Total 1	Parking Spaces	<del> </del>	<del></del>
<b>ESTIMATE</b>	D COST OF PROJECT	\$4,213,000	
DELECATE	ED REVIEW AUTHORITY CHECKLIS	2'T'	
	OCATION OF DEVELOPMENT AND STORE		<u>NT</u>
	Impervious Area	6,000	sq. ft.
	d Disturbed Area	65,525	sq. ft.
	d Impervious Area	38,176	sq. ft.
	he proposed disturbance is greater than one acre	, then the applicant shall a	pply for a Maine Construction
	neral Permit (MCGP) with MDEP.		
	he proposed impervious area is greater than one		
	16/05, then the applicant shall apply for a MDEI	P Stormwater Managemen	t Permit, Chapter 500, with the
City			
	otal impervious area (including structures, paven		
	es, then the applicant shall apply for a Site Locat		
	es then the application shall be made to MDEP i		
	he development is a subdivision of more than 20		
	ly for a Site Location of Development Permit with		00 acres then the application
sha	ll be made to MDEP unless determined otherwis	se.	
The Vision	IC ESTIMATE		
	IC ESTIMATE  The estimated in the peak hour-existing	N/A	passanger car aquivalents (DCE)
	ly 1, 1997)	<u> </u>	passenger car equivalents (PCE)
(Since Jul	1, 1////		
Total tus	ffic estimated in the peek hour proposed (Since July)	1 1007) N/A	passanger car equivalents (PCE)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) N/A passenger car equivalents (PCE)

If the proposed increase in traffic exceeds 100 one-way trips in the peak hour then a traffic movement permit will be required.

2. Parcel Area: 2.27 acr		7+/- square feet(sf).	
Regulations	Required/Allowed	<u>Provided</u>	
Min Lot Area	30,000 sf	/ 98,917	
Street Frontage	300'	/ 533.99	
Min Front Yard	25'	/ >25'	
Min Rear Yard	25'	/ >25'	
Min Side Yard	25'	/ >25'	
Max. Building Height	35'	/ 34.0'	
Use Designation	Multi Famil	y / Multi Family	
Parking Requirement	4 space/ per	square feet of floor area	լ (1.5 spaces per unit)
Total Parking:	1.5 x 32 = 54	/ 55 (Proposed)	
Overlay zoning districts(if any):	Flood Plain	/ Shoreland	/
Urban impaired stream watershed?	YES/NO If yes, wa	atershed name No	
1	, , ,		

#### DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submissions shall include fifteen (15) complete packets containing the following materials:

- Full size plans containing the information found in the attached sample plan checklist.
- 2. Application form that is completed and signed.
- 3. Cover letter stating the nature of the project.
- 4. All written submittals including evidence of right, title and interest.
- 5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

#### Refer to the application checklist for a detailed list of submittal requirements.

L/A's development review process and requirements have been made similar for convenience and to encourage development. Each Citys ordinances are available online at their prospective websites:

<u>Auburn:</u> www.auburnmaine.org under City Departments/ Planning and Permitting/Land Use Division/<u>Zoning Ordinance</u> <u>Lewiston:</u> http://www.ci.lewiston.me.us/clerk/ordinances.htm Refer to Appendix A of the Code of Ordinances

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, I certify that the City's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for development review <u>only</u>; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant:	Date:
	January 30, 2020



### **Development Review Checklist**



City of Auburn Planning and Permitting Department
City of Lewiston Department of Planning and Code Enforcement

## THE FOLLOWING INFORMATION IS REQUIRED WHERE APPLICABLE TO BE SUBMITTED FOR AN APPLICATION TO BE COMPLETE

PROJECT NAME:	West Shore Landing Apartme	ents	
•	PMENT ADDRESS and PARCEL #:_	North River Rd.	271-101

Required Information		Check Submitted		Applicable Ordinance	
Site Plan		Applicant	Staff	Lewiston	Auburn
	Owner's Names/Address	<i>.,</i> ✓			
	Names of Development	<b>✓</b>			
	Professionally Prepared Plan	<b>✓</b>			
	Tax Map or Street/Parcel Number	<b>✓</b>			
	Zoning of Property	<b>✓</b>			
	Distance to Property Lines	<b>✓</b>			
	Boundaries of Abutting land	<b>✓</b>			
	Show Setbacks, Yards and Buffers	<b>✓</b>			
	Airport Area of Influence (Auburn only)	N/A			
	Parking Space Calcs	<b>✓</b>			
See Waiver Request	Drive Openings/Locations	<b>✓</b>			
	Subdivision Restrictions	Per Zone			
	Proposed Use	<b>✓</b>			
See Order of Conditions	PB/BOA/Other Restrictions	<b>✓</b>			
	Fire Department Review	<b>✓</b>			
	Open Space/Lot Coverage	<b>✓</b>			
	Lot Layout (Lewiston only)	N/A			
	Existing Building (s)				
	Existing Streets, etc.				
	Existing Driveways, etc.				
	Proposed Building(s)				
	Proposed Driveways				
Landscape Plan					
	Greenspace Requirements	<b>✓</b>			
	Setbacks to Parking	<b>✓</b>			
	Buffer Requirements	<b>✓</b>			
	Street Tree Requirements	<b>✓</b>			
	Screened Dumpsters	<b>/</b>			
	Additional Design Guidelines				
	Planting Schedule	<b>✓</b>			

Required Information		Check Submitted		Applicable Ordinance	
Site Plan		Applicant	Staff	Lewiston	Auburn
Stormwater & Erosion Control Plan					
1 1011	Compliance w/ chapter 500	<b>/</b>			
	Show Existing Surface Drainage	\ \ \			
See grading plan for contours	Direction of Flow	N/A			
See grading plan for contours		\ \ \ \			
	Location of Catch Basins, etc.	<del>                                     </del>			
	Drainage Calculations				
	Erosion Control Measures	V			
See Order of Conditions	Maine Construction General Permit	T.B.D.			
	Bonding and Inspection Fees	N/A			
	Post-Construction Stormwater Plan	<b>/</b>			
	Inspection/monitoring requirements	<b>✓</b>			
	Third Party Inspections (Lewiston only)	N/A			
Lighting Plan		<b>✓</b>			
	Full cut-off fixtures	<b>✓</b>			
	Meets Parking Lot Requirements	<b>/</b>			
Traffic Information					
	Access Management	<b>/</b>			
	Signage	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
	PCE - Trips in Peak Hour	· /			
	Vehicular Movements	<u> </u>			
	Safety Concerns	<u> </u>			
	Pedestrian Circulation	N/A			
	Police Traffic	N/A			
Under 100 trips @ peak hour	Engineering Traffic	N/A			
Utility Plan	Lingineering Trainic	14/74			
Othicy Flan	Water				
	Water	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
	Adequacy of Water Supply	V			
6" water main exists adjacent	Water main extension agreement	N/A			
	Sewer	<u> </u>			
	Available city capacity	<b>/</b>			
	Electric	<b>✓</b>			
Looking into bringing service on site.	Natural Gas	T.B.D.			
	Cable/Phone	<b>✓</b>			
Natural Resources					
	Shoreland Zone	<b>✓</b>			
	Flood Plain	<b>✓</b>			
	Wetlands or Streams	<b>✓</b>			
	Urban Impaired Stream	N/A			
	Phosphorus Check	N/A			
	Aquifer/Groundwater Protection	N/A			
	Applicable State Permits				

Required Information		Check Submitted		Applicable Ordinance	
Site Plan		Applicant	Staff	Lewiston	Auburn
	No Name Pond Watershed (Lewiston only)	N/A			
	Lake Auburn Watershed (Auburn only)	N/A			
	Taylor Pond Watershed (Auburn only)	N/A			
Right Title or Interest	Verify	\/ \/			
	Document Existing Easements, Covenants, etc.	<b>V</b>			
Technical & Financial Capacity		<b>✓</b>			
	Cost Est./Financial Capacity Performance Guarantee	N/A			
State Subdivision Law					
	Verify/Check	<b>/</b>			
	Covenants/Deed Restrictions	<b>/</b>			
	Offers of Conveyance to City Association Documents	N/A			
	Location of Proposed Streets & Sidewalks	N/A			
	Proposed Lot Lines, etc.	<b>✓</b>			
	Data to Determine Lots, etc.	<b>✓</b>			
	Subdivision Lots/Blocks	N/A			
See offer for fee in leiu of land ded.	Specified Dedication of Land	<b>✓</b>			
Additional Subdivision Standards					
	Single-Family Cluster (Lewiston only)	N/A			
	Multi-Unit Residential Development (Lewiston only)	N/A			
	Mobile Home Parks	N/A			
	Private Commercial or Industrial Subdivisions (Lewiston only)	N/A			
	PUD (Auburn only)	N/A			
A JPEG or PDF of the proposed site plan		<b>✓</b>			
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving		<b>✓</b>			

<u>Sec. 60-1359. – Subdivision Guidelines.</u> When reviewing any subdivision for approval, the planning board shall consider the following criteria, and before granting either approval or denial, shall determine that the proposed subdivision:

- (1) Will not result in undue water, air or noise pollution. In making this determination it shall at least consider:
  - (1) The elevation of land above sea level and its relation to the floodplains, the nature of soils and subsoils and their ability to adequately support waste disposal;

    The proposed development will be elevated at least one foot above the base flood elevation of 177.25 (NAVD88). The buildings will be serviced by public sewer by way of a private pump station and force main. Please see the Geotechnical Report from Summit Geoengineering Services, Inc. for more information regarding soils (to be provided prior to public hearing).
  - (2) The slope of the land and its effect on effluents;

    The proposed development will be serviced by public sewer by way of a private pump station and force main
  - (3) The availability of streams for disposal of effluents;

    The proposed development will be serviced by public sewer by way of a private pump station and force main
  - (4) The applicable state and local health and water resources regulations, including stormwater management requirements in accordance with section 60-1301(14);
    The proposed project was designed to meet Maine DEP Chapter 500 requirements for stormwater treatment using approved BMP measures. Treatment will be provided for stormwater runoff from 95% of the proposed impervious areas and 80% of the proposed developed areas. Stormwater treatment will be provided by two underdrained soil filters and roof drip edge filters at each of the three buildings. Please see the project's Stormwater Management Report prepared by Terradyn Consultants, LLC.
- (2) Has sufficient water available for the reasonably foreseeable needs of the subdivision;

  The proposed project will be serviced by public water service; a 6" water main exists within North River Road.
- (3) Will not cause an unreasonable burden on an existing water supply, if one is to be utilized;
  Per Auburn Water & Sewer, "the District has sufficient capacity to serve this proposed development with both domestic water and fire protection." See Planning Department Staff Memo dated November 12, 2019
- (4) Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;
  - A full stormwater report and erosion control plan for the project has been developed. Stormwater will be treated on site with the use of two underdrained soil filters and roof drip edge filters, all elevated above the base flood elevation.
- (5) Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to use of the highways or public roads existing or proposed;
  - Data from turning movement counts for North River Rd at the intersection with Center Street from 2018, as provided by AVCOG, was reviewed for this project. Maine DOT lists the traffic count on North River Rd. from Center St. to Cross St. as having a 2017 AADT of 1,420 and from Cross St. to Northern Ave. as having a 2017 AADT of 879. Based on the AVCOG study, the peak hour of traffic coming off of North River Rd onto Center St. is at 12PM to 1PM with 107 vehicles. We believe that the proposed 32 units would not substantially change the traffic load at this intersection. For example, of the 54 parking spaces dedicated to these 36 units, if 35 of the

vehicles occupying these spaces left the premises between 7AM and 8PM, turned left onto North River Road and continued to the Center St. intersection, then 35 turning movements could be added to the AVCOG hourly total for this timeframe of 71, creating a new hourly total of 106, which does not exceed the peak hour. Additionally, it can be assumed that some of these vehicles will turn right onto Cross St to head North on Center Street. It is unlikely that more than 35 vehicles will leave the premises within the same hour, or that a residential use will substantially contribute to the lunchtime peak hour turning movements for either intersection. The project will not exceed or approach an increase of 100 one-way trips in a peak hour.

(6) Will provide for adequate sewage waste disposal;

The proposed development will be serviced by public sewer by way of a private pump station and force main

(7) Will not cause an unreasonable burden on the ability of a municipality to dispose of solid waste and sewage if municipal services are to be utilized;

Per the Auburn Water and Sewer District, "the District has sufficient capacity to serve this proposed development but will not accept ownership of the proposed gravity line, pump station or force main." The developer accepts ownership and maintenance responsibility of that section of utilities, including gravity line, pump station and force main, to connect to public sewer. See Order of Conditions #5 of Subdivision Plan.

(8) Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas;

The proposed use is in line with existing uses within the surrounding neighborhood. The proposed development will not impact wetlands on site and all site disturbances will be set back a minimum of twenty-five feet from the top of bank of the adjacent river. The project area is not located within a historic district, nor are there any existing historic uses or structures located on or adjacent to the project area. Please see attached Incidental Take Letter regarding the northern long-eared bat as well as letters regarding how the project will have no impact on Altantic Salmon and Small Whorled Pogonia.

(9) Is in conformance with a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan, or land use plan, if any;

The project as proposed conforms to State and local subdivision standards. Please refer to the provided Subdivision Plan. The project will conform to the City's Comprehensive Plan.

(10)Is funded by a subdivider which has adequate financial and technical capacity to meet the standards of this section;

The developer has adequate financial and technical capacity to meet the standards. Please see the attached Letter of Financial Capacity from First National Bank.

(11)Will not adversely affect the character of the surrounding neighborhood and will not tend to depreciate the value of property adjoining the neighboring property under application;

The proposed development will not adversely affect the character of the surrounding neighborhood, nor depreciate the value of the property adjoining. Please see the attached narrative and supporting documents illustrating the current character of the neighborhood.

(12)Has provisions for on-site landscaping that are adequate to screen neighboring properties from unsightly features of the development;

Please see the attached landscaping plan. Landscaping is proposed throughout the subject parcel, including a landscaped buffer between the development and the road. The apartment buildings across the street are elevated well above the subject parcel. The abutting property to

the south is occupied by a well-maintained commercial building and the abutting property to the North is vacant and is elevated below the subject parcel. As such, we believe that the proposed development provides for adequate screening to neighboring properties and that the proposed development itself will be an attractive feature of the neighborhood.

- (13)Will not create a fire hazard and has provided adequate access to the site for emergency vehicles;

  Easy access to the site will be provided to emergency vehicles by way of two, two-way driveway entrances that are connected within the development. Please see the attached Waiver requests regarding width of curb cuts as well as a letter from the fire inspector.
- (14) Will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater;

The proposed residential use is not indicative of one that would adversely affect the quality or quantity of groundwater. The subject parcel is not located within a groundwater protection district. Stormwater from impervious surfaces will be treated prior to ground infiltration.

(15)Does not have long-term cumulative effects of the proposed subdivision will that unreasonably increase a great pond phosphorus concentration during the construction phase and life of the proposed subdivision.

The subject parcel is not located within a great pond watershed. Erosion control BMP's will be implemented to prevent silts from entering the river during construction.

#### <u>Sec. 60-899. – Review of Subdivisions and Development Proposals (Floodplain).</u>

The Planning Board shall, when reviewing subdivisions and other proposed developments that require review under other federal law, state law or local ordinances or regulations and all projects on five or more disturbed acres, or in the case of manufactured home parks divided into two or more lots, assure that:

- (1) All such proposals are consistent with the need to minimize flood damage.

  The proposed development will be elevated a minimum of one-foot above the base flood elevation.
- (2) All public utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damages.
  All public utilities that enter the site are above the base flood elevation. The proposed private sanitary pump station and force main will be a closed, watertight system. The access hatch to the pump station will be elevated above the base flood elevation.
- (3) Adequate drainage is provided so as to reduce exposure to flood hazards.

  Site conditions allow for easy drainage of the site. Please refer to the stormwater plan for additional details.
- (4) All proposals include base flood elevations, flood boundaries, and, in riverine floodplain, floodway data. These determinations shall be based on engineering practices recognized by the Federal Emergency Management Agency.
  Floodway and resultant floodplain are shown on the subdivision plan and site plan. An Order of Conditions requiring that the applicant receive a Letter of Map Revision based on Fill (LOMR-F) from FEMA be obtained prior to issuance of a building permit has been added to the subdivision plan.
- (5) Any proposed development plan must include a condition of plan approval requiring that structures on any lot in the development having any portion of its land within a special flood hazard area, are to be constructed in accordance with section 60-897 of this division. Such requirement will be included in any deed, lease, purchase and sale agreement, or document

transferring or expressing an intent to transfer any interest in real estate or structure, including but not limited to a time-share interest. The condition shall clearly articulate that the municipality may enforce any violation of the construction requirement and that fact shall also be included in the deed or any other document previously described. The construction requirement shall also be clearly stated on any map, plat or plan to be signed by the planning board or local reviewing authority as part of the approval process.

Please see the order of conditions on the subdivision plan.



January 30, 2020

Evan G. Cyr City of Auburn Planning Board 60 Court St. Auburn, ME 04210

RE: Waiver Requests, West Shore Landing Apartments (North River Rd.)
Tax Map 27, Lot 101

Dear Evan & Board Members:

On behalf of our Client, Tim Millett of West Shore Landing, LLC, a waiver to §15 of the City of Auburn's Code of Ordinance, Article V, Sec. 60-607: Off-Street Parking and Loading to allow for two, twenty-four foot wide curb cuts to access the subject parcel. Specifically, this section states:

Where two or more driveways or curb-cuts are constructed, the curb cuts shall not exceed 20 feet in width.

We are also seeking a waiver to Sec. 60-801 to allow for two, two-way access points onto a single roadway.

It is our belief that the additional driveway width and entrance allows for greater emergency vehicle turning radii and circulation at this site. Furthermore, we contend that this site could easily be subdivided in such a manor to create three driveway entrances spaced 150' apart.

Please see the attached email dated November 21, 2019 from David O'Connell, Fire Prevention Officer, Auburn Fire Dept. for the Inspector's approval of the entrances as proposed.

Thank you for your attention to this matter.

Sincerely yours,

Senior Project Manager SurveyWorks, Inc.

#### **Jimmy Courbron**

From:

David O'Connell <doconnell@auburnmaine.gov>

Sent:

Thursday, November 21, 2019 3:17 PM

To:

Jimmy Courbron

Cc:

Megan Norwood

Subject:

RE: River's Edge Apartments (North River Road)

Mr. Courbron,

After reviewing the provided documentation, I do not have any reservations with your clients request for the 24' curb cuts. If you refer to NFPA 1 (Edition 2018) you will find that there is a minimum 20' fire department access road(s) requirement (NFPA 1: 18.2.3.5.1.1), as well as a minimum curb cut extending at least 2' beyond each edge of the access road (NFPA 1: 18.2.3.5.3.3). With these to code requirements I feel you would meet the 24' opens that you are requesting. Please let me know if you require anything further.

\*\*\*Note- NFPA 1: 18.2.3.1.2 Fire department access roads shall consist of roadways, fire lanes, parking lot lanes, or a combination thereof.

Thank you,

#### David N O'Connell CEO CFI-I C-ECT MIAAI

Fire Prevention Officer, Auburn Fire Dept., City of Auburn 550 Minot Ave | Auburn, Maine 04210 | 207.333.6633 X6

The City of Auburn is subject to statutes relating to public records.

E-mail sent or received by City employees are subject to these laws.

Senders and receivers of City e-mail should presume that messages are subject to release.

From: Jimmy Courbron <jim@surveyworksinc.com>

Sent: Thursday, November 21, 2019 9:59 AM

To: David O'Connell <a href="mailto:doconnell@auburnmaine.gov">doc: Megan Norwood <mnorwood@auburnmaine.gov</a> Subject: FW: River's Edge Apartments (North River Road)

Mr, O'Connell,

Please see attached. Let me know if I can provide you any more information. Thank you for your time.

Regards,

Jimmy Courbron, PLS

From: Jimmy Courbron

Sent: Thursday, November 7, 2019 2:12 PM

To: doconnell@auburnmaine.gov

Cc: Eric Cousens < <a href="mailto:ECousens@auburnmaine.gov">ECousens@auburnmaine.gov</a> Subject: River's Edge Apartments (North River Road)

Mr. O'Connell,



## City of Auburn, Maine

Recreation & Sports Facilities

Marc Gosselin, Director

Sabrina Best, Deputy Director

48 Pettengill Park Road | Auburn, Maine 04210

www.auburnmaine.gov | 207.333.6601

To: Planning Board

CC: Sabrina Best, Recreation Director

Date: January 10, 2020

RE: Recommendation for the North River Road Development

The Auburn Parks and Recreation Advisory Board examined the North River Road subdivision proposal as it relates to open space requirements of the Open Space Ordinance. The Board unanimously recommend to the Planning Board that the North River Road subdivision payment of \$34,000 in lieu of recreation/open space be accepted as proposed by the developer, with the agreement that the private trail on site be available for a future easement to connect to existing trails/walking paths along the River.

The board has recognized the need for open space and recreational opportunities for the future residents of this project to include, but not limited to; safe walking areas, trails, open space, playgrounds, and connection to existing trail/walking paths such as the Riverwalk. The board has found this parcel to be an isolated lot with limited direct access to recreation/open space amenities. The closest location for future tenants to find these amenities would be a small private trail on site, Chestnut and Union Street Park, North River Road Boat Launch, Municipal Beach, and Pettengill Park. The board finds existing recreation space inadequate due to proximity and access concerns. Taking these items into consideration the board would recommend the in-lieu funding be used as follows:

- A. Connect existing walking trails or paths to/towards the North River Road subdivision property via the Riverwalk.
- B. Improve or create a park within proximity of the North River Road subdivision property.

The board recommends that in 2022, if option A has not been accomplished or is no longer a viable option to transition to option B.

Thank You,

Dana Staples
Parks and Recreation Advisory Board Chair



December 2, 2019

Megan Norwood City Planner II 60 Court St. Auburn, ME 04210

RE: River's Edge Apartments Offer of Fee-in-Lieu of land dedication

#### Dear Megan:

On behalf of our Client, Tim Millett of River's Edge Apartments, LLC, we would like to offer to the City and to the Parks and Recreation Committee a fee in lieu of land dedication in an amount of \$34,000.00, to be used as the Committee sees fit. This is an amount exactly equivalent to the price paid per acre for the subject parcel - for four acres minus the open space/green space already reserved within the proposed project. In addition to the proposed 1.43 acres of open space dedicated within the project area, we will also commit to building and maintaining a private foot path from the apartment buildings to the river's edge and along the existing woods road within the subject parcel.

Attached is a quick sketch depicting the proposed open space within the project area as well as the private foot path.

We believe that this offer is in compliance with the open space standards of Section 60-1367 of the City's Subdivision Ordinance. Thank you for your assistance with this matter. Let me know if I can provide you or the Committee with any more information.

Sincerely yours,

Senior Project Manager SurveyWorks, Inc.

#### LIMITED LIABILITY COMPANY

#### STATE OF MAINE

#### CERTIFICATE OF AMENDMENT

(for a Maine LLC)

River's Edge Apartments, LLC
(Name of Limited Liability Company)

Filing Fee \$50.00	_
File No. 20196817DC Pages 3 Fee Paid \$ 50	ı
DCN 2193402270004 LNMEFILED	
Julie L. Hypna Deputy Secretary of State	_
A True Copy When Attested By Signature  Deputy Secretary of State	

Pursuant to 31 MRSA §1532, the undersigned limited liability company executes and delivers for filing this certificate of amendment:

FIRST:

The name of the limited liability company has been changed to (if no change, so indicate)

West Shore Landing, LLC

(A limited liability company name must contain the words "limited liability company" or "limited company" or the abbreviation "L.L.C.," "LLC," "L.C." or "LC" or, in the case of a low-profit limited liability company, "L3C" or "I3c." - see 31 MRSA 1508)

SECOND:

The date of filing of the initial certificate of formation: May 13, 2019

(date)

THIRD:

Designation as a low profit LLC (Check only if applicable):

- This is a low-profit limited liability company pursuant to 31 MRSA §1611 meeting all qualifications set forth here:
  - A. The company intends to qualify as a low-profit limited liability company;
  - B. The company must at all times significantly further the accomplishment of one or more of the charitable or educational purposes within the meaning of Section 170(c)(2)(B) of the Internal Revenue Code of 1986, as it may be amended, revised or succeeded, and must list the specific charitable or educational purposes the company will further;
  - C. No significant purpose of the company is the production of income or the appreciation of property. The fact that a person produces significant income or capital appreciation is not, in the absence of other factors, conclusive evidence of a significant purpose involving the production of income or the appreciation of property; and
  - D. No purpose of the company is to accomplish one or more political or legislative purpose within the meaning of Section 170(c)(2)(D) of the Internal Revenue Code of 1986, or its successor.

FOURTH:	Desig	nation as a professional limited liability company (Cl	heck only if applicable)
		This is a professional limited liability company* the following professional services:	formed pursuant to 13 MRSA Chapter 22-A to provide
	<del></del>		
		(type of profession	nal services)
, FIFTH:	Comp	lete-only if there is a change to the registered agent in	aformation.
	The R	egistered Agent is a: (select either a Commercial or	Noncommercial Registered Agent)
		Commercial Registered Agent	CRA Public Number:
		(Name of commercial	registered agent)
		Noncommercial Registered Agent	
		(Name of noncomme	rcial registered agent)
		(physical location, not P.O. Box	- street, city, state and zip code)
		(mailing address if	different from above)
SIXTH:		nt to 5 MRSA §§105.2 or 108.3, the registered agen limited liability company.	t listed above has consented to serve as the registered agen
SEVENTH:		changes this certificate of amendment makes to the coortinity of t	ertificate of formation as most recently amended or restated

**Authorized person(s)		
_	_	

Dated December 4, 2019

(Type or print name and capacity)

(Signature)

(Type or print name and capacity)

The execution of this certificate constitutes an oath or affirmation under the penalties of false swearing under 17-A MRSA §453.

Please remit your payment made payable to the Maine Secretary of State.

Submit completed form to:

Secretary of State

Division of Corporations, UCC and Commissions

101 State House Station Augusta, ME 04333-0101

Telephone Inquiries: (207) 624-7752

Email Inquiries: CEC.Corporations@Maine.gov

<sup>\*</sup>Examples of professional service limited liability companies are accountants, attorneys, chiropractors, dentists, registered nurses and veterinarians. (This is not an inclusive list – see 13 MRSA §723.7)

<sup>\*\*</sup>Pursuant to 31 MRSA §1676.1, this Certificate of Amendment MUST be signed by a person authorized by the limited liability company.

1001940058252  $N \circ T$  WARRANTY DEED  $N \circ T$ 

Know All Men By These Presents That EDWARD CIL HOMMEDIEU AND JULIE F. L'HOMMEDIEU, of 79 Loring Avenue, City of Auburn, County of Androscoggin, State of Maine, for consideration paid, grant to RIVER'S EDGE APARTMENTS, LLC, a Maine limited liability company with a mailing address of 155 Cenner Street, Bldg G, Box 6, Auburn, Maine 04210, with WARRANTY COVENANTS, a certain parcel of real property, located in Auburn, County of Androscoggin, State of Maine, being more particularly described as follows:

Beginning on the southeasterly side of the North River Road at the northwest corner of land conveyed by Howard Raithel to Maine Die Co., Inc. by deed dated October 6, 1978 and recorded in the Androscoggin Registry of Deeds in Book 1371, Page 18; thence running northerly along the easterly line of said North River Road Two Hundred Twenty-Three (223) feet, more or less, to an angle in said Road; thence northeasterly by an angle to the left eleven degrees fifteen minutes (11°15') Four Hundred One and Six-Tenths (401.6) feet to the southwesterly line of land formerly of the Union Water Power Company and now of the Central Maine Power Company; thence running southeasterly on the Central Maine Power Company land One Hundred Eight-Seven and Seven-Tenths (187.7) feet to the northerly bank of the Androscoggin River; thence westerly along the River to the east corner of land conveyed by said Raithel to saie Maine Die; thence running westerly along the northerly line of said Maine Die Company Two Hundred (200) feet, more or less, to the point of beginning.

Being the same premises conveyed to Edward C. L'Hommedieu and Julie F. L'Hommedieu by deed of Jonathan M. Frieze dated February 28, 2012 and recorded in the Androscoggin County Registry of Deeds in Book 8346, Page 286 and by deed of Jonathan M. Frieze as personal representative recorded in Book 8346, Page 288.

WITNESS our hands and seals this 21	_ day of May, 2019.
Witness O	Edward C. L'Hommedieu
a Ca Sasta	Sulie of Alongsee
Witness	Gulie F. L'Hommedieu

STATE OF MAINE COUNTY OF ANDROSCOGGIN, SS.

Personally appeared before me this <u>Al</u> da L'Hommedieu and Julie F. L'Hommedieu and a	y of May, 2019, the above-named Edward C.
L'Hommedieu and Julie F. L'Hommedieu and a their free act and deed.	Mulika
C.\Users\jf\\Documents\Misc jf\\Properties\\Wartanogleet\range\Riverslogx\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Notary Public/Maine Attorney-at-Law Print/type name: See See Wh. Hence My commission expires:

Maine Real Estate Transfer Tax Paid TINA M. CHOUINARD, REGISTER ANDROSCOGGIN COUNTY MAINE E-RECORDED

#### RDB CONSTRUCTION

## SCHEDULE OF VALUES

NAME: Rivers Edge Apts LLC	4/22/2019
ADDRESS: No River Road - Auburn	
DESCRIPTION	COST
GENERAL CONDITIONS SOFT COST	\$ 168,450.00
CLEANING CONTRACT	\$ 6,000.00
COMMON LABORER	\$ 6,000.00
SITEWORK	\$ 456,111.00
SIGNAGE	\$ 2,625.00
BOLLARDS	\$ 750.00
LIGHT POLE BASES	\$ 5,250.00
FOUNDATION AND CONCRETE	\$ 90,000.00
LANDSCAPING	\$ 11,020.24
FENCING	\$ 1,875.00
SECURITY FENCING - TEMP FENCING	\$ 1,500.00
BUILDING MATERIALS	\$ 600,000.00
MILLWORK - CABINETS & FINISHES	\$ 126,000.00
FINISH CARPENTRY	\$ 90,000.00
ROUGH CARPENTRY - FRAMING & DECKS	\$ 240,000.00
SIDING MATERIAL AND LABOR	\$ 72,000.00
ROOFING	\$ 21,000.00
PLUMBING / HEAT / AC / VENTS	\$ 600,000.00
ELECTRICAL	\$ 351,000.00
SPRINKLER SYSTEMS	\$ 84,000.00
INSULATION	\$ 78,000.00
DRYWALL	\$ 270,000.00
PAINTING	\$ 114,000.00
APPLIANCES	\$ 81,000.00
FLOORING	\$ 158,400.00
CLOSETS	\$ 5,400.00
LAND	\$ 275,000.00
TRANSFORMER PADS	\$ 4,500.00

#### RDB CONSTRUCTION

SUBTOTAL	\$ 3,919,881.24
PROFIT & OVERHEAD	\$ 293,991.09
TOTAL	\$ 4,213,872.33

ADDITIONAL COSTS - INFLATION & SOFTCOSTS TO CARRY



223 Main Street P.O. Box 940 Damariscotta, ME 04543 Phone: 207.563.3195 Ext: 2030 Fax: 207.563.3356 Email: todd.savage@thefirst.com

October 2, 2019

City of Auburn 60 Court Street Auburn, Maine 04210

Re: Timothy A. Millett / Rivers Edge Apartments LLC

To Whom It May Concern:

Please accept this letter as confirmation that Timothy A. Millett / Rivers Edge Apartments LLC has the financial ability to proceed with his proposed Thirty Six (36) unit apartment project located on a Three (3) acre piece of property on North River Road in Auburn, Maine. First National Bank is excited to work with them on this project.

Sincerely,

Todd L. Savage

Senior Vice President

Regional Business Relationship Officer

## Character of the Neighborhood

At the preliminary approval meeting, we heard clear concerns about the potential impacts on the neighborhood that could result from the development of this project. We agree that the formerly wooded and undeveloped lot's appearance will change substantially, but our design strives to incorporates the residential riverside fabric of the area with our multi-family buildings. These residences incorporate architectural features concurrent with area homes, including traditional



colonial lines common with the New England architectural vernacular. Landscaping with indigenous species and maximizing the greenspace opportunities on this site are also part of our plans, and our design intent is to very much mimic the current look and feel of the North River Road community.

The contention is that the neighborhood in which the subject parcel resides is predominately a single-family dwelling, residential neighborhood and that the proposed use would adversely affect the character of said neighborhood.

The City does not have a definition for a neighborhood, nor does it have a map delineating the various neighborhoods within its limits. What the City does have, however, are well defined zoning districts and a comprehensive plan that "creates a framework for managing the City's future development," (1).

The subject parcel lies within the General Business District (GB1). The GB1 District is "intended to include commercial uses serving both the city and the region, together with normal accessory uses compatible with a cohesive and attractive shopping and office area,"(2) and allows for, among other uses, residential dwelling uses permitted in the Multifamily Suburban District (MFS). The MFS District is "intended to stabilize and protect medium to high density residential areas by providing for a varied denser urban pattern made suitable to the needs of the population by encouraging a range of dwelling types. The next closest zoning district to the subject parcel is also a Multi-Family Suburban District. Based on the current zoning districts, it appears that the subject parcel lies within a transitional commercial to residential neighborhood that promotes high-density residential development.

The City's Comprehensive Plan has targeted this area as an area where the City wants growth and development to occur(1) and has placed it within the Limited Business Development (LBD) District. The LBD District, though a predominately commercial use-promoting district, recognizes that the district is "often located adjacent to existing residential neighborhoods or residentially zoned areas," (1) and as such, allows for high-density residential development.

Both the current zoning districts and the future districts defined in the City's Comprehensive Plan were developed with input from Auburn residents on how they want their community to "look like, feel like, and be like" (1).

- 1) City of Auburn Comprehensive Plan: 2010 Update
- 2) City of Auburn Zoning Ordinance, Effective February 22, 2011

## Character of the Neighborhood

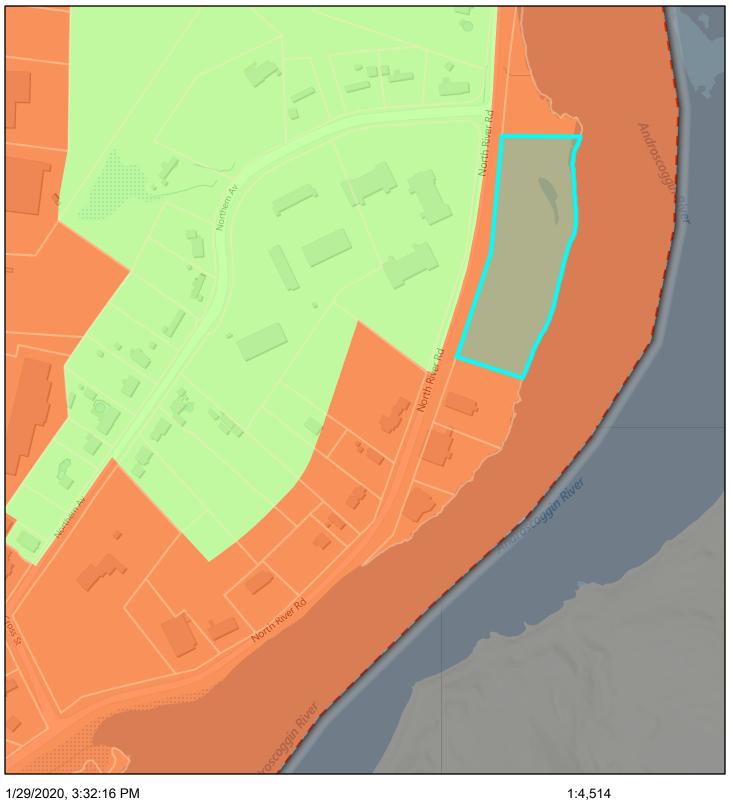
Attached hereto are various maps and exhibits intended to help demonstrate what the current character of the neighborhood is in which the subject parcel is located and where its limits may be. The first map depicts the zoning districts mentioned above. The following three maps and spread sheets list all parcels within 1000 feet, 500 feet and 100 feet of the locus parcel. The spread sheets include the current owners, current uses and number of units within each parcel. The parcels are color-coded on the spread sheets, with yellow representing single-family, traditional-built homes, gray representing mobile or modular homes, green representing multi-family uses, and red representing commercial uses.

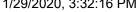
As one can see from this first spread sheet, the greater neighborhood surrounding the subject parcel is clearly a mixed-use neighborhood that is commanded by residential uses. Of these residential uses, single-family dwellings seem to dominate. This is skewed, however, as the true number of units representing the multi-family use far exceed both single family (which include traditional homes, mobile homes and duplexes) and commercial uses combined. This is depicted on the attached bar graph. As the neighborhood is confined closer to the site, as represented in the next two spread sheets and maps, the makeup of the neighborhood only becomes more multi-family dense.

The last plan depicts how these uses are spatially represented and scaled within the neighborhood. It demonstrates how a multi-family development within the subject parcel would fit right at home within its surrounding neighborhood. Aside from the technical compliance enumerated above, we also feel this development aligns with the other apartment buildings and multi-family dwellings located on the next street over that have been part of this riverside neighborhood for many years.

- 1) City of Auburn Comprehensive Plan: 2010 Update
- 2) City of Auburn Zoning Ordinance, Effective February 22, 2011

## Zoning Map



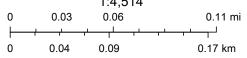


Parcels 2019

Zoning

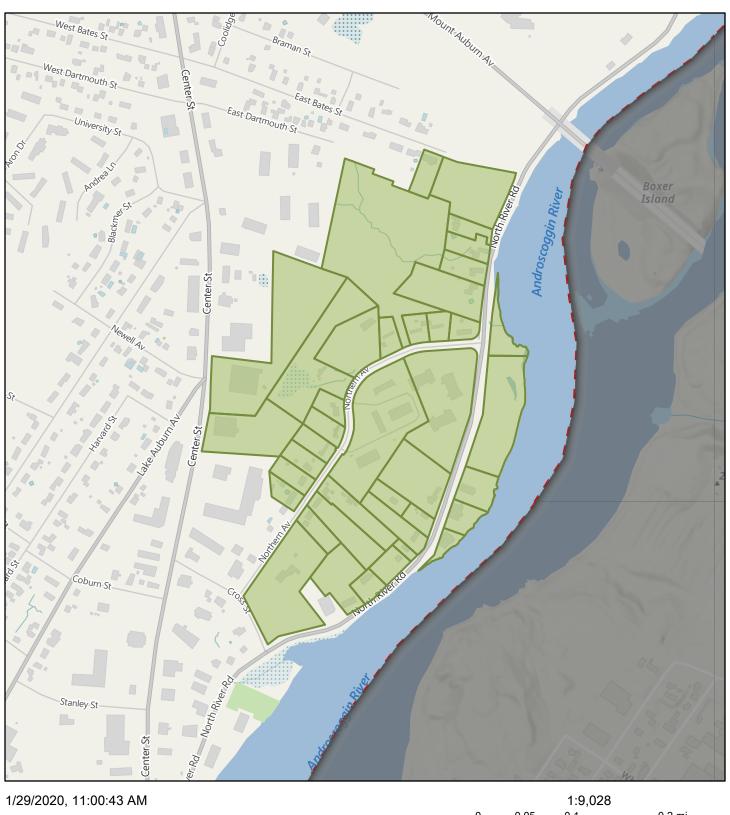
GB - General Business

MFS - Multi-Family Suburban



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, @ OpenStreetMap contributors, and

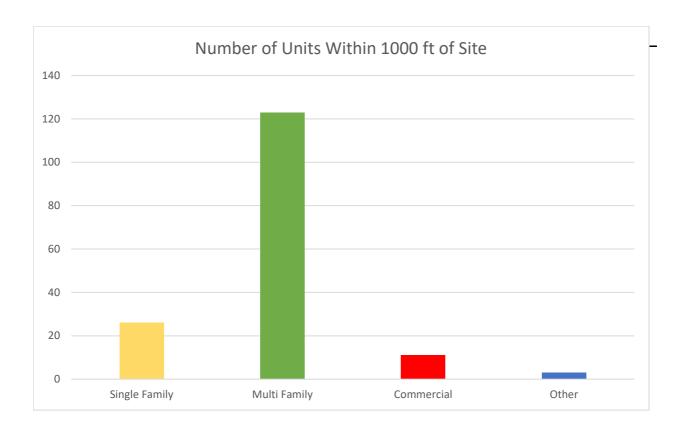
## Parcels within 1000 ft.



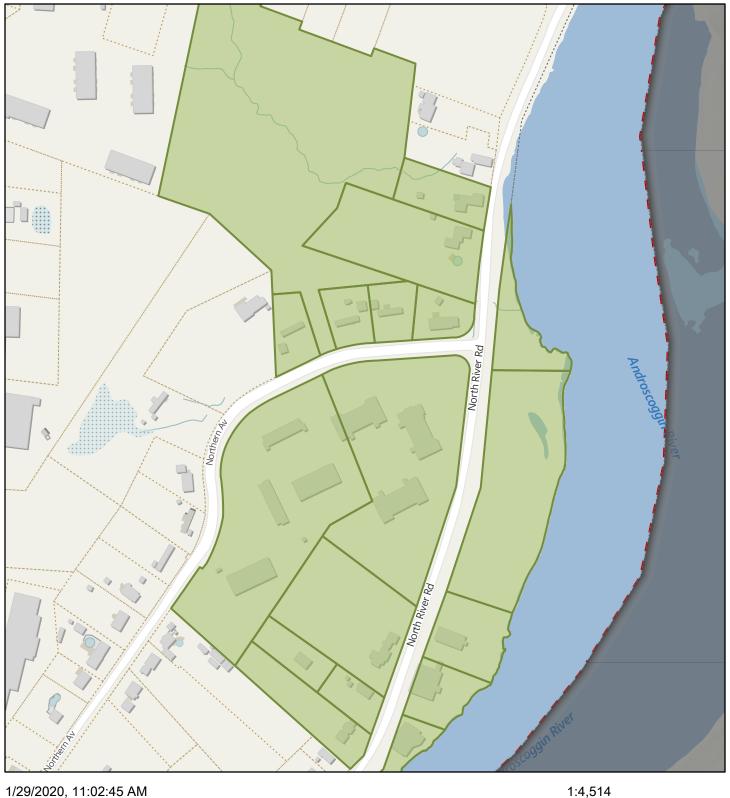


Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and

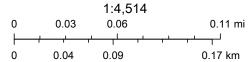
Parcel ID	Location	Owner1	Gross Building Area	Building Type	Rental/Living Units	Zone	Use	Note
271-071	305 CENTER ST	TIMM HOLDINGS LLC	44964	DISCOUNT	0	GB	Commercial	
261-038	206 NORTH RIVER RD	KENNEDY ERIN M	2160	CAPE	1	R3	Single Family	
271-075	82 NORTHERN AVE	CHESLEY ROBERT M	2122	МОНО		R3	Single Family	
261-027	63 NORTHERN AVE	HEBERT MARCEL	3608	CAPE	1	R3	Single Family	
261-036	200 NORTH RIVER RD	RAYMOND SARAH	3665	CAPE	1	GB	Single Family	
271-101	NORTH RIVER RD	LHOMMEDIEU EDWARD C	0		0	GB	Vacant	
271-083	164 NORTHERN AVE	COOPER RICHARD	4856	МОНО	1	R3	Single Family	
271-085	9 NORTHERN AVENUE HTS	ANDROSCOGGIN VILLAGE II LIMITE	79740	MULTI-CONV	70	GB	Multi Family	
271-073	66 NORTHERN AVE	BISHOP JOHN M	2299	CAPE	0	R3	Single Family	
261-029	47 NORTHERN AVE	NEWMAN JERI L	2320	RAN	1	R3	Single Family	
271-076	92 NORTHERN AVE	KILLEBREW KATHY-ANN	2584	МОНО	1	R3	Single Family	
261-037	210 NORTH RIVER RD	BOUCHARD RANDY	2096	CAPE	0	GB	Single Family	
261-025	50 NORTHERN AVE	HARTFORD JUDITH J	4476	CAPE	1	R3	Single Family	
271-080-001	140 NORTHERN AVE	AUBURN CITY OF	0		0	MI	Vacant	
261-026	58 NORTHERN AVE	HARTFORD GEORGE F	2719	МОНО	1	R3	Single Family	
271-084	51 NORTHERN AVENUE HTS	MORSE RENTAL PROPERTIES LLC	100240	MULTI-CONV	48	GB	Multi Family	
281-080-009	129 EAST BATES ST	STARBIRD CHUCK R	0		0	R3	Single Family	
261-039	222 NORTH RIVER RD	HENRY SHEILA HEIRS OF	5773	MULT	0	GB	Duplex	Vacant
271-074	72 NORTHERN AVE	EDWARDS MATTHEW D	2276	МОНО	0	R3	Single Family	
271-086	318 NORTH RIVER RD	HASKELL FREDERICK J	5165	CAPE	1	R3	Single Family	
271-082	154 NORTHERN AVE	SIMION BRIAN J	2060	МОНО	1	R3	Single Family	
271-088	334 NORTH RIVER RD	RITCHIE BRUCE A	2373	CAPE	1	R3	Single Family	
261-034	180 NORTH RIVER RD	YOUNG MICHAEL S	2085	COLONIAL	1	GB	Single Family	
261-028	55 NORTHERN AVE	BARTLEY THOMAS A	3052	CAPE	1	R3	Single Family	
271-081	144 NORTHERN AVE	SAUCIER DAVID G	1888	МОНО	0	R3	Single Family	
271-100	NORTH RIVER RD	AUBURN CITY OF	0		(	) GB	Vacant	
271-088-001	342 NORTH RIVER RD	RITCHIE BRIAN	4270	SPLIT ENTRY	1	R3	Single Family	
261-033	166 NORTH RIVER RD	GIBSON GEORGE D	5760	GARAGE	0	GB	Commercial	
271-087	326 NORTH RIVER RD	SAUCIER YVAN R	4095	CAPE	1	R3	Single Family	
271-079	134 NORTHERN AVE	GOUPIL ROGER	1896	МОНО	1	R3	Single Family	
271-091	121 EAST BATES ST	CARON GERARD	4576	RAN	1	R3	Single Family	
261-030	7 NORTHERN AVE	NASON ANDREW	14868	MULTI-CONV	5	GB	Multi Family	
271-078	124 NORTHERN AVE	MURPHY HOMES, INC JOHN F	5146	GROUP RES	1	R3	Commercial	
261-040	235 NORTH RIVER RD	PRO TECH PROPERTIES LLC	6400	WORKSHOP	0	GB	Commercial	
271-072	279 CENTER ST	TRE LLC	24800	RESTAURANT	0	GB	Commercial	
261-035	194 NORTH RIVER RD	MENKES CRAIG F	1692	CAPE	1	GB	Single Family	
261-041	215 NORTH RIVER RD	D & J ENTERPRISES LLC	11252	WAREHOUSE	0	GB	Commercial	
271-077	112 NORTHERN AVE	POUSSARD LINDA A	2108	МОНО	1	R3	Single Family	
261-032	156 NORTH RIVER RD	AUDIO SYSTEMS INC	6497	R/M SHOP	0	GB	Commercial	
261-042	207 NORTH RIVER RD	JOHNSON DAVID A	8527	OFFICE	0	GB	Commercial	



## Parcels within 500 ft.



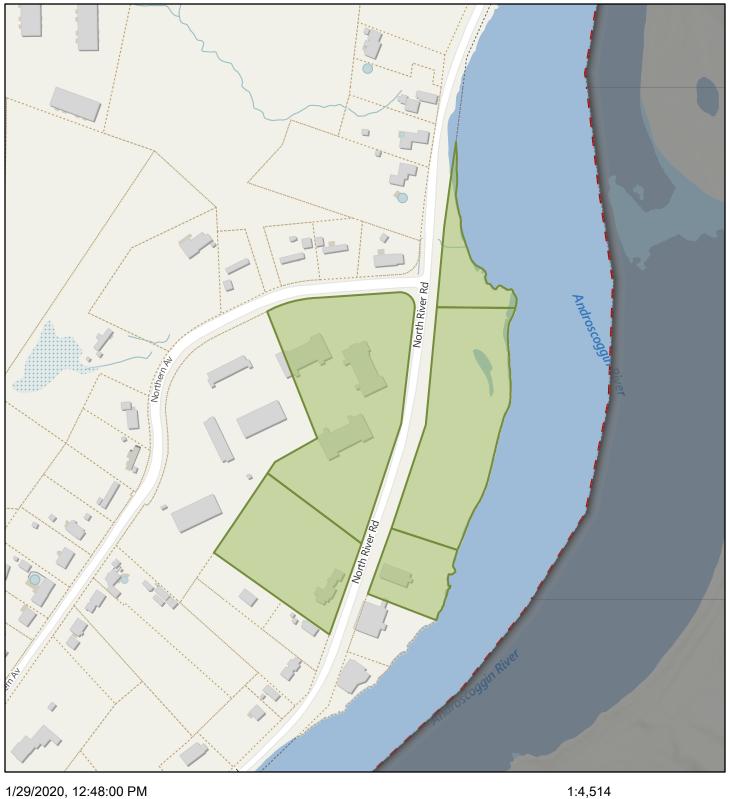


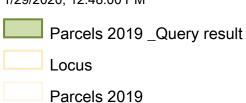


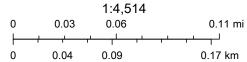
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and

Parcel ID	Location	Owner1	Gross Building Area	Building Type	Zone	Use
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261-036	200 NORTH RIVER RD	RAYMOND SARAH	3665	CAPE	GB	Single Family
271-101	NORTH RIVER RD	LHOMMEDIEU EDWARD C	0		GB	Vacant
271-083	164 NORTHERN AVE	COOPER RICHARD	4856	МОНО	R3	Single Family
271-085	9 NORTHERN AVENUE HTS	ANDROSCOGGIN VILLAGE II LIMITE	79740	MULTI-CONV	GB	Multi-Family
261-037	210 NORTH RIVER RD	BOUCHARD RANDY	2096	CAPE	GB	Single Family
271-080-001	140 NORTHERN AVE	AUBURN CITY OF	0		MI	Vacant
271-084	51 NORTHERN AVENUE HTS	MORSE RENTAL PROPERTIES LLC	100240	MULTI-CONV	GB	Multi-Family
261-039	222 NORTH RIVER RD	HENRY SHEILA HEIRS OF	5773	MULT	GB	Duplex
271-086	318 NORTH RIVER RD	HASKELL FREDERICK J	5165	CAPE	R3	Single Family
271-082	154 NORTHERN AVE	SIMION BRIAN J	2060	МОНО	R3	Single Family
271-081	144 NORTHERN AVE	SAUCIER DAVID G	1888	МОНО	R3	Single Family
271-100	NORTH RIVER RD	AUBURN CITY OF	0		GB	Vacant
271-087	326 NORTH RIVER RD	SAUCIER YVAN R	4095	CAPE	R3	Single Family
271-079	134 NORTHERN AVE	GOUPIL ROGER	1896	МОНО	R3	Single Family
261-040	235 NORTH RIVER RD	PRO TECH PROPERTIES LLC	6400	WORKSHOP	GB	Commercial
261-041	215 NORTH RIVER RD	D & J ENTERPRISES LLC	11252	WAREHOUSE	GB	Commercial
261-042	207 NORTH RIVER RD	JOHNSON DAVID A	8527	OFFICE	GB	Commercial

## Parcels within 100 ft.







Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and

Parcel ID	<u>Location</u>	<u>Owner1</u>	<b>Gross Building Area</b>	<b>Building Type</b>	<u>Zone</u>	<u>Use</u>	<u>Note</u>
271-101	NORTH RIVER RD	LHOMMEDIEU EDWARD C	0		GB	Vacant	
271-084	51 NORTHERN AVENUE HTS	MORSE RENTAL PROPERTIES LLC	100240	MULTI-CONV	GB	Multi-family	
261-039	222 NORTH RIVER RD	HENRY SHEILA HEIRS OF	5773	MULT	GB	Duplex	(currently vacant)
271-100	NORTH RIVER RD	AUBURN CITY OF	0		GB	Vacant	
261-040	235 NORTH RIVER RD	PRO TECH PROPERTIES LLC	6400	WORKSHOP	GB	Commercial	





### United States Department of the Interior

#### FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office P. O. Box A East Orland, ME 04431

Phone: (207) 469-7300 Fax: (207) 902-1588 http://www.fws.gov/mainefieldoffice/index.html



IPaC Record Locator: 758-16401329 April 30, 2019

Subject: Consistency letter for the 'Lot 101 North River Road, Auburn, ME' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR

§17.40(o).

#### Dear Jimmy Courbron:

The U.S. Fish and Wildlife Service (Service) received on April 30, 2019 your effects determination for the 'Lot 101 North River Road, Auburn, ME' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take" of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Atlantic Salmon, Salmo salar (Endangered)
- Small Whorled Pogonia, *Isotria medeoloides* (Threatened)

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

[1] Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].



October 3, 2019

Evan G. Cyr City of Auburn Planning Board 60 Court St. Auburn, ME 04210

RE: River's Edge Apartments (North River Rd.) - Tax Map 27, Lot 101 - Small Whorled Pogonia

#### Dear Evan & Board Members:

As you are aware, our client, River's Edge Apartments, LLC, is seeking approval from the City of Auburn to develop a portion of the parcel referenced above. Due to a portion of the proposed fill site being at an elevation below the Base Flood Elevation of 176.8 feet (NAVD88) per the most recent FEMA issued Flood Insurance Rate Map for the area, our client is required by FEMA to demonstrate compliance with ESA. This letter will serve to demonstrate compliance with one of the species of concern, Small Whorled Pogonia, that was listed on an IPaC report of the site. The IPaC report as well as a site plan depicting the bounds of the property and the proposed work are attached hereto.

The habitat requirements for Small Whorled Pogonia are very specific. The small whorled pogonia occurs on upland sites of mixed-deciduous or mixed-deciduous/coniferous forests that are generally in second or third-growth successional stages. Characteristics common to most I. medeoloides sites include sparse to moderate ground cover in the species' microhabitat, a relatively open understory canopy, and proximity to features that create long-persisting breaks in the forest canopy. Soils at most sites are highly acidic and nutrient poor, with moderately high soil moisture values. Light availability could be a limiting factor for this species. (From U.S. Fish and Wildlife Service Recovery Plan, 1992)

The North River Road site is an east-northeast sloping site. The westerly third of the lot that borders the road has been cleared for power lines and is a mix of grasses and invasive species such as multi-floral rose and Japanese knotweed. The remaining upland portion of the site is predominantly mixed deciduous/coniferous growth that has a thick understory in the areas that haven't been plagued by ATV activity and illegal campsites. Soils in the upland portion of the site are a mix of fill material and ablation till. The remaining northeasterly third of the parcel is wetlands.

As such, it is highly unlikely that Small Whorled Pogonia is present within the limits of the site, and SurveyWorks, Inc. further contends that the Lot 101 North River Road project will have "no effect" on the species or its habitat.

SurveyWorks, Inc. has also spoken with Mark McCollough, Ph.D., Endangered Species Specialist for US Fish and Wildlife Services' Maine division, regarding the Small Whorled Pogonia. Dr. McCollough has also contended that the plant species is likely not present at this site.

Sincerely yours,

Senior Project Manager SurveyWorks, Inc.



October 3, 2019

Evan G. Cyr City of Auburn Planning Board 60 Court St. Auburn, ME 04210

RE: River's Edge Apartments (North River Rd.) - Tax Map 27, Lot 101 – Atlantic Salmon

#### Dear Evan & Board Members:

As you are aware, our client, River's Edge Apartments, LLC, is seeking approval from the City of Auburn to Develop a portion of the parcel referenced above. Due to a portion of the proposed fill site being at an elevation below the Base Flood Elevation of 176.8' (NAVD88) per the most recent FEMA issued Flood Insurance Rate Map for the area, our client is required by FEMA to demonstrate compliance with ESA. This letter will serve to demonstrate compliance with one of the species of concern, Atlantic Salmon, that was listed on an IPaC report of the site. The IPaC report as well as a site plan depicting the bounds of the property and the proposed work are attached hereto.

Atlantic Salmon, though not currently present above Lewiston Falls Dam, historically ran up the section of the Androscoggin River to which Tax Map 271 Lot 101 is adjacent.

As indicated on the attached site plan, the limits of this project are set back a minimum of twenty-five feet from the riverbank and will not encroach upon the waters of the Androscoggin River. Furthermore, the proposed installation and proper maintenance of a siltation barrier around the project site will ensure that no silts from the project will enter the river.

As such, SurveyWorks, Inc. contends that the Lot 101 North River Road project will have "no effect" on the species or its habitat.

Sincerely yours,

Jimmy Courbron, PLS Senior Project Manager SurveyWorks, Inc.





Looking North from South end of site

# Looking South from middle of site



South end of site looking East from N. River Rd.

# South end of site



Looking northeast from South end of site





Looking southeast from middle of site

# Looking East from middle of site





Looking northeast from middle of site





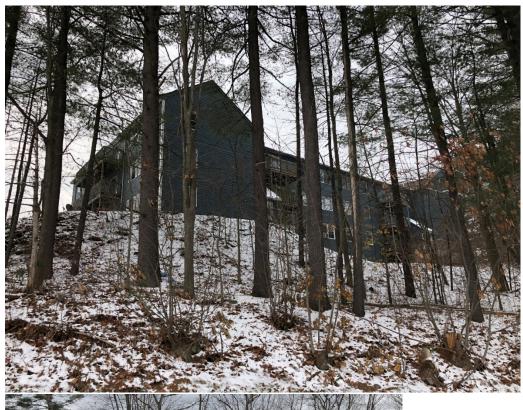


Looking east from N. River Rd. towards northeast corner of site

# Looking northeast to north side of site and future boat launch area









Looking East, view of proposed lower (northerly) entrance from street

## Looking South from Northerly end of site





### Northern Ave. Intersection









### Gracelawn Apartments under construction







# STORMWATER MANAGEMENT REPORT

River's Edge Apartments
Auburn, Maine

Survey Works, Inc have retained Terradyn Consultants, LLC to prepare the site stormwater management plan for a proposed site plan to construct three apartment buildings on the easterly side of North River Road, just south of the intersection with Northern Avenue and adjacent to the Androscoggin River. Survey Works, Inc is completing the site plans and application materials on behalf of the applicant, River's edge Apartments, LLC. The applicant is proposing to construct three approximately 4,500 SF apartment buildings served by public utilities, paved parking areas, and stormwater management infrastructure on the western portion of the site along North River Road. The proposed development will be located outside of the 25' setback from the riverbank and designed to be above the 100-year flood elevation. This summary describes the effect that the development is expected to have on stormwater runoff from the site and on downstream properties and waterbodies.

Development Summary		
Site Area	98,917 SF	
Existing Developed	6,000 SF	
Proposed Developed	65,525 SF	
Proposed Impervious	38,176 SF	

#### **EXISTING PROJECT SITE**

The project site, identified as lot 101 on Tax Map 271, is 2.27 acres in size and is located on the eastern side of North River Road in Auburn, Maine. The site is located in the City of Auburn General Business District and within the Flood Plain and Shoreland overlay zone. Residential and commercial uses surround the site. Overhead electric utilities and public water exist in North River Road.

The parcel is undeveloped forestland with wetlands mapped along the Androscoggin River. An existing gravel road/path enters the site from North River Road on the northern portion of the site and runs along the river. The existing developed area, which is considered impervious, is approximately 6,000 SF. Wetlands were mapped by Joseph Noel of South Berwick, ME in August 2019. The wetland delineation is included in Attachment 1. There is also a FEMA Flood Way defined along the Androscoggin River, and a FEMA defined base flood elevation of 176.8'. The FEMA Firm for this site is included in Attachment 2. The applicant previously submitted a Flood

Hazard Development Application for work within the flood zone, which was included with Survey Work's preliminary submission to the City. Work associated with the project will maintain a 25' setback from the riverbank. The site generally slopes from west to east towards the river. Runoff from the existing site drains directly to the Androscoggin River.

The Natural Resource Conservation Service (NRCS) identifies onsite soils as Adams loamy sand and Winooski silt loam. An excerpt of the NRCS Medium Intensity Soils Map is provided in Attachment 3.

#### PROPOSED PROJECT

The proposed project includes construction of three approximately 4,500 SF apartment buildings, parking areas, utilities and stormwater management infrastructure. The proposed developed area is approximately 65,525 SF, and the proposed impervious area is approximately 38,176 SF. The developed area will be above the 100-year flood elevation and setback at least 25' from the riverbank. The project is required to meet the City of Auburn Code of Ordinance Chapter 18 Article III Post Construction Stormwater Management requirements.

The stormwater management system for this project is designed to treat stormwater to Maine DEP Chapter 500 Basic and General Standards. Stormwater runoff from at least 95% of the impervious area and 80% of the developed area on site will be treated in approved BMPs. The site is directly tributary to the Androscoggin River, so the Flooding Standard is not applicable.

#### METHODOLOGY OF ANALYSIS - STORMWATER QUANTITY

A hydrologic analysis of the designed BMPs was conducted based upon the methodology contained in the USDA Soil Conservation Service's Technical Releases No. 20 and 55 (SCS TR-20 and TR-55). For Androscoggin County, Maine, a 24-hour SCS Type III storm distribution was used for the analysis using the following storm frequencies and rainfall amounts, per Maine DEP Chapter 500:

Storm Event	24-Hour Rainfall
2–Year Storm	3.0 inches
10–Year Storm	4.3 inches
25–Year Storm	5.4 inches

Land use, cover, delineation of watershed subcatchments, hydraulic flow paths, and hydrologic soil group (HSG) types were obtained using the following data:

1. Lewiston, Maine USGS 7.5 minute quadrangle maps.



- 2. NRCS Medium Intensity Soils Survey.
- 3. Aerial topographic survey with 2-foot contour intervals, made available by the State of Maine.
- 4. Boundary & Topographic Survey, prepared by Survey Works, Inc.
- 5. Field reconnaissance by Terradyn Consultants.

Runoff curve numbers, time of concentration, and travel time data were established based on methods outlined in the USDA TR-55 manual. A minimum time of concentration of 5 minutes was used in the models.

#### POST-DEVELOPMENT CONDITIONS

The proposed (post-development) condition includes the developed lot with approximately 38,176 SF of impervious area and 65,525 SF of developed area. Other areas of the site that will be disturbed as part of the project will be re-vegetated to a meadow condition mowed less than twice per year, so are not considered developed. Stormwater management is provided for stormwater runoff from the parking areas, buildings, and portions of the lawn through two underdrained soil filters (UDSF) and roof dripedge filter strips along each of the three buildings.

This project is tributarty to the Androscoggin River so an analysis of peak flows leaving the site and a comparison to pre-development flow rates is not necessary. However, we did study the watersheds tributary to each of the two UDSFs to ensure the treatment measures are sized appropriately and will release stormwater in such a way to minimize erosion and sedimentation impacts.

A Post-development Treatment Map, showing treatment measures and their tributary sub-watersheds is provided in Attachment 4. The Post-development HydroCAD model of the two UDSFs is attached in Attachment 5.

Peak rates of runoff from the two UDSFs, computed for the proposed condition are as follows:

Post-Development Peak Rates of Runoff			
Peak Discharge (cfs)			
	2-Year	10-Year	25-Year
UDSF 1	0.03	0.14	0.97
UDSF 2	0.03	0.78	2.08



The Underdrained Soil Filters were also analyzed in the 100-year storm with the tailwater set at the base flood (100-year flood) elevation of 176.8'. This analysis was done to ensure the UDSFs will function in a flood event without overtopping the berms. These calculations are also included in Attachment 6.

#### STORMWATER QUALITY

The proposed project was designed to meet Maine DEP Chapter 500 requirements for stormwater treatment using approved BMP measures. Treatment must be provided for stormwater runoff from 95% of the proposed impervious areas and 80% of the proposed developed areas. Stormwater treatment will be provided by two underdrained soil filters and roof drip edge filters at each of the three buildings. The proposed project provides the following treatment percentages:

Treatment Calculations		
Proposed Developed Area	65,525 SF	
Proposed Impervious Area	38,176 SF	
Treatment Provided:		
Drip Edge Filters (total)		
Developed Treated	15,405 SF	
Impervious Treated	13,485 SF	
UDSF #1		
Developed Treated	14,720 SF	
Impervious Treated	9,377 SF	
UDSF #2		
Developed Treated	22,300 SF	
Impervious Treated	14,500 SF	
Treatment Amounts		
Total Developed Treated	52,425 SF	
% Developed Treated (80% required)	80%	
Total Impervious Treated	37,362 SF	
% Impervious Treated (95% required)	98%	

These treatment percentages are achieved by the following treatment measures:

#### **Roof Dripline Filters:**

The proposed building roof on each building pitches to all four sides, and the stormwater runoff from the majority of each roof will be captured in a roof dripline filter along the edge of the building. The roof dripline filter sizing calculations can be found in Attachment 6.



#### **UDSFs:**

The paved parking, walkways, and lawn areas were designed to direct stormwater toward two underdrained soil filters. Stormwater will flow overland and through closed drainage systems in the parking areas to the two UDSFs. The southern portion of the site will direct stormwater to UDSF #1, and the northern portion of the site will direct stormwater to UDSF #2. Design calculations for the UDSFs are included in Attachment 6. Each UDSF design calculation section attached include the following items:

- 1. BMP design calculations sheet
- 2. UDSF Peak Elevation Hydrograph & Pond Summary (from HydroCAD)
- 3. UDSF Hydrograph table (indicating drawdown time, from HydroCAD)
- 4. UDSF Summary in 100-year storm with 176.80 tailwater set (from HydroCAD)

#### UDSF #1 summary:

- 1.5" orifice applied to underdrain outlet
- Pond drains in approximately 36 hours
- Peak elevation in 25-year storm = 179.58'
- Peak elevation in 100-year storm with tailwater set (flooding) = 179.65'
- Berm elevation = 181.00'
- Pond drains in 24-48 hours and overflow structure can convey stormwater in normal conditions and flooding conditions without overtopping the berm

#### UDSF #2 summary:

- 1.5" orifice applied to underdrain outlet
- Pond drains in approximately 37 hours
- Peak elevation in 25-year storm = 178.64'
- Peak elevation in 100-year storm with tailwater set (flooding) = 178.69'
- Berm elevation = 180.00'
- Pond drains in 24-48 hours and overflow structure can convey stormwater in normal conditions and flooding conditions without overtopping the berm

#### **EROSION & SEDIMENTATION CONTROL**

A site-specific Erosion and Sediment Control Plan has been developed for the project with the goal of reducing erosion and sedimentation during and after construction. The plan utilizes perimeter sediment control during construction and rapid stabilization of denuded areas to reduce erosion and sedimentation. The Plan narrative and details are located directly on the project drawings (plan sheet SW-3) for convenient reference during construction.

The proposed project includes grading the site and raising the elevation of a portion of the development area to be above the 100-year flood elevation. This will result in the construction of a steep slope between the buildings and the river. This slope shall be constructed with



permanent erosion control mesh and re-vegetated with a meadow seed mix. This slope will be maintained as a meadow area, not lawn, and shall be mowed less than 2 times per year. A detail for the construction of this slope is provided on plan sheet SW-1.

#### INSPECTION & MAINTENANCE PLAN

Stormwater management and treatment measures require regular inspection and maintenance to maintain their effectiveness. A site-specific Inspection & Maintenance Plan of Stormwater Management Facilities for River's Edge Apartments is included in Attachment 7.

#### CONCLUSION

The proposed project will result in approximately 38,176 SF of impervious area and 65,525 SF of developed area on the site. Runoff patterns will remain similar to existing conditions and Stormwater BMPs will be constructed to provide water quality treatment and control peak flows leaving the developed area in order to protect downstream properties and waterbodies from the effects of increased development. Based on the results of this evaluation, the proposed project is note expected to cause flooding, erosion or other significant adverse effects downstream of the site. Proper implementation of the Erosion & Sedimentation Control Plan developed for the project is expected to ensure that the project will not cause flooding and/or erosion on or downstream of the project site.

#### Prepared By:

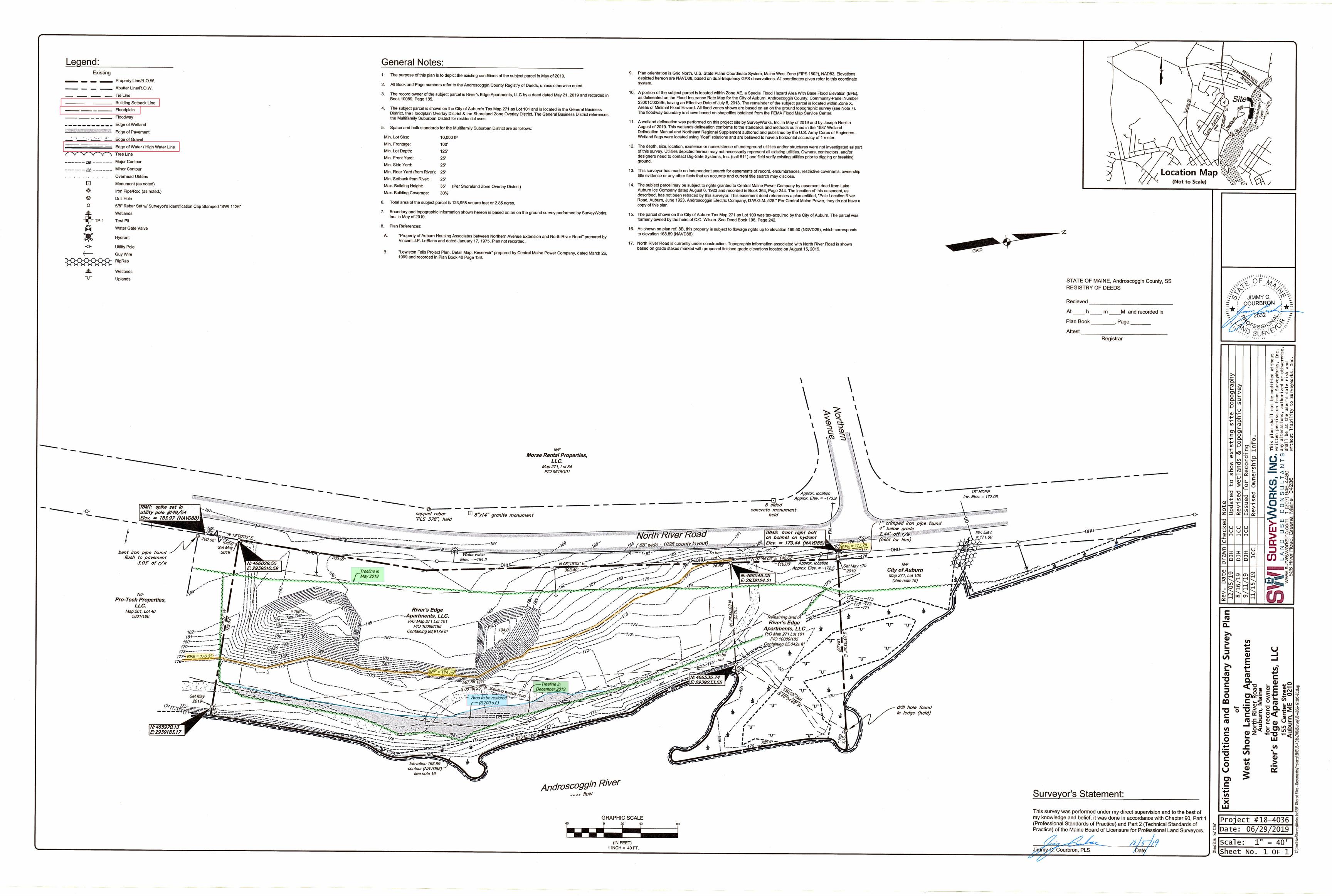
#### **Terradyn Consultants LLC**

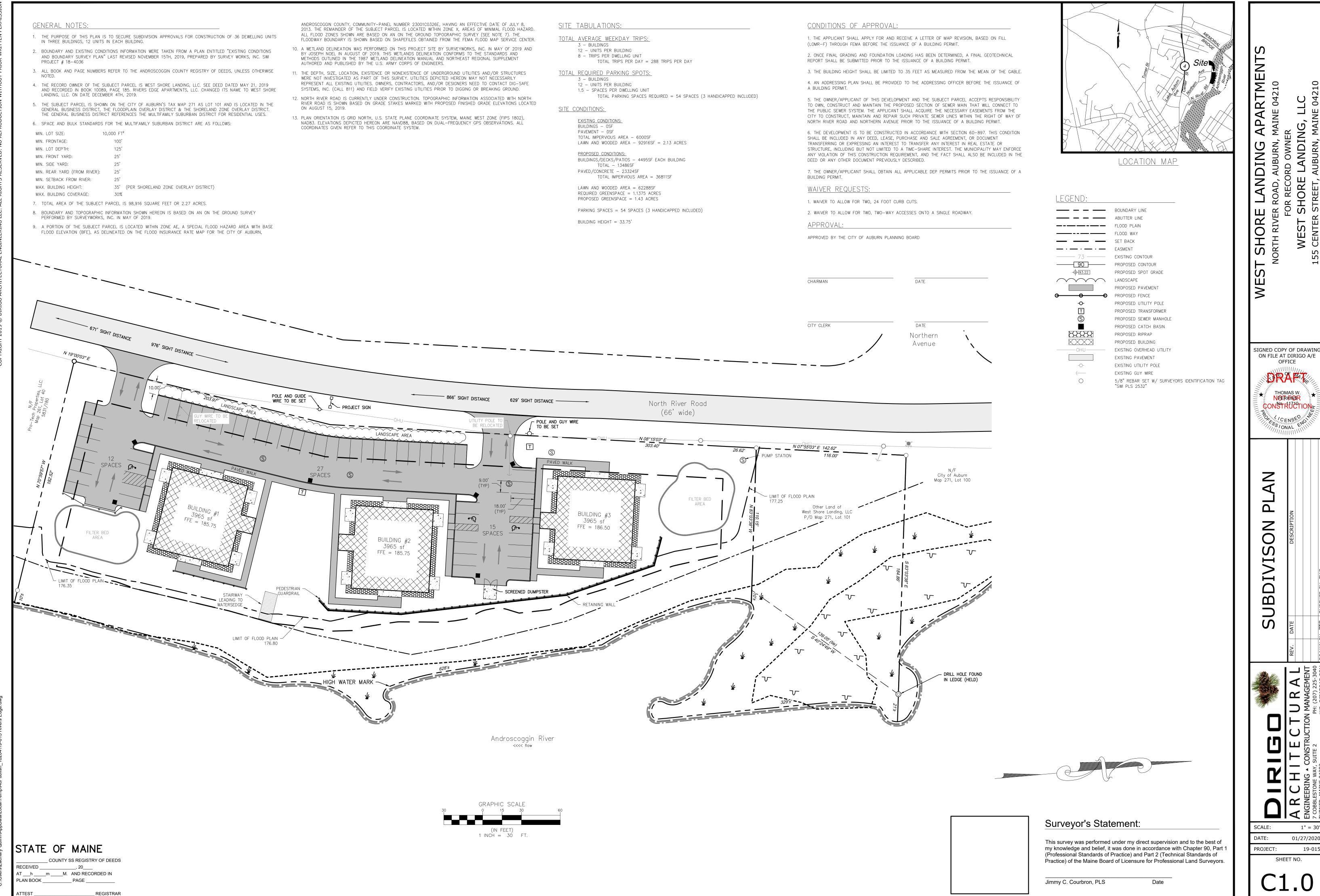
#### **Attachments**

- 1 Wetland Delineation
- 2 FEMA FIRM Map
- 3 Soils Report from NRCS
- 4 Post-Development Stormwater Treatment Plan
- 5 Post-Development HydroCAD Model for UDSFs
- 6 BMP Sizing Calculations
- 7 Inspection & Maintenance Plan of Stormwater Management Facilities







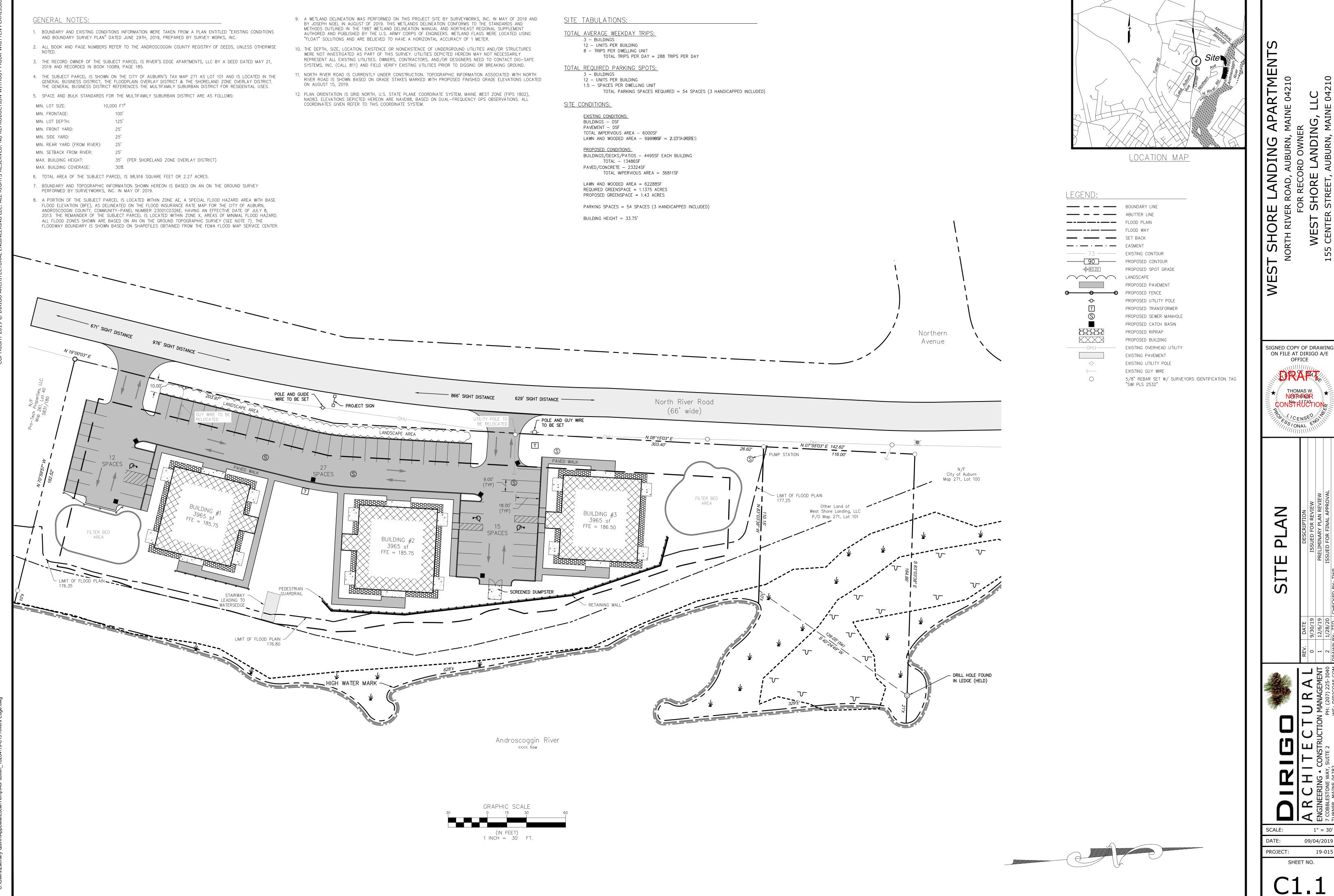


OFFICE

THOMAS W. NØERKFINGSR

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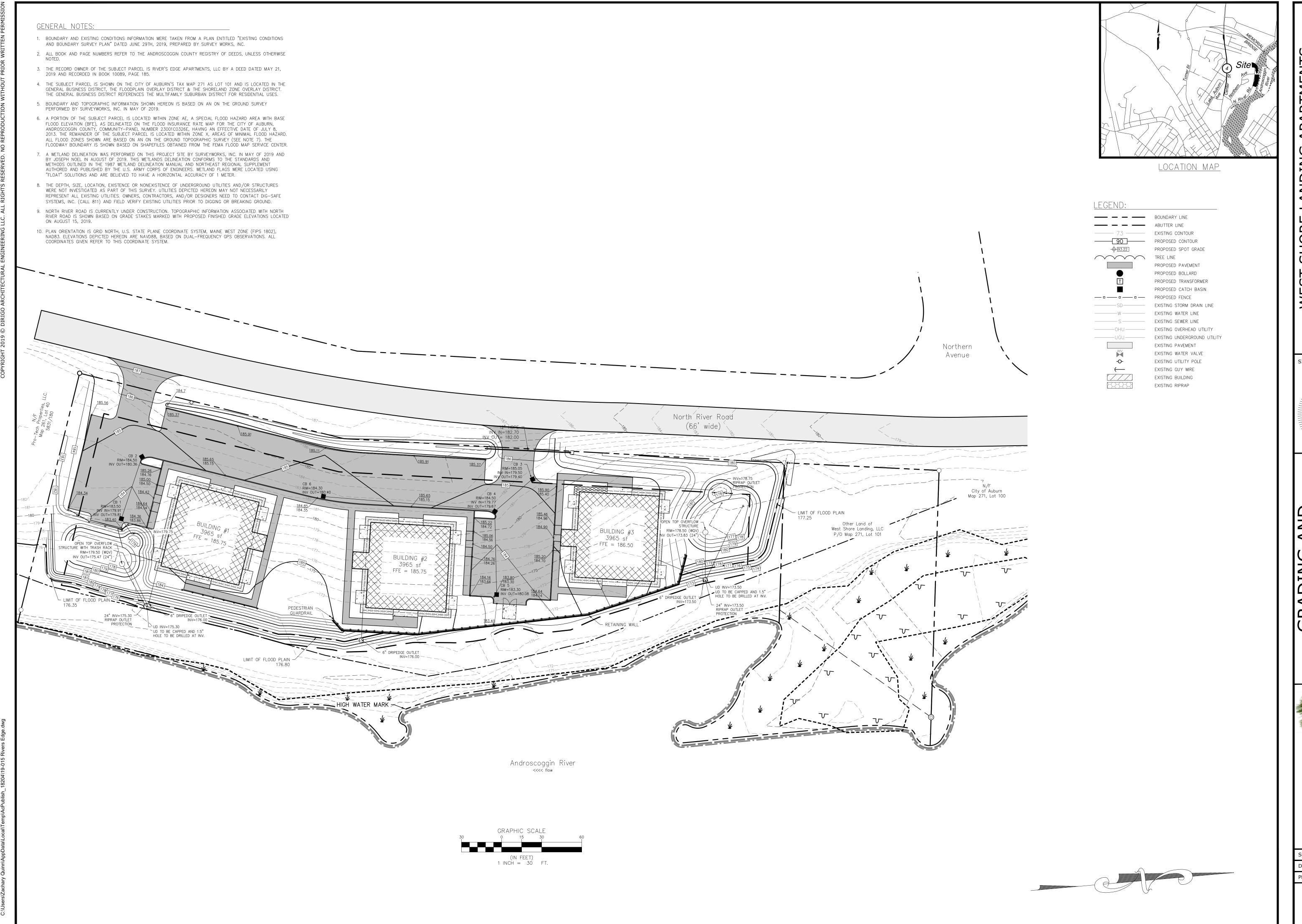


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OFFICE

THOMAS W. NOETHIOR

09/04/2019



HORE LANDING APARTMENT
TH RIVER ROAD, AUBURN, MAINE 04210
FOR RECORD OWNER
WEST SHORE LANDING, LLC

SIGNED COPY OF DRAWING ON FILE AT DIRIGO A/E OFFICE

THOMAS W.
NOERHOR
CONSTRUCTION
CENSES
ONAL

GRADING AND
DRAINAGE PLAN

DESCRIPTION
ISSUED FOR REVIEW
PRELIMINARY PLAN REVIEW

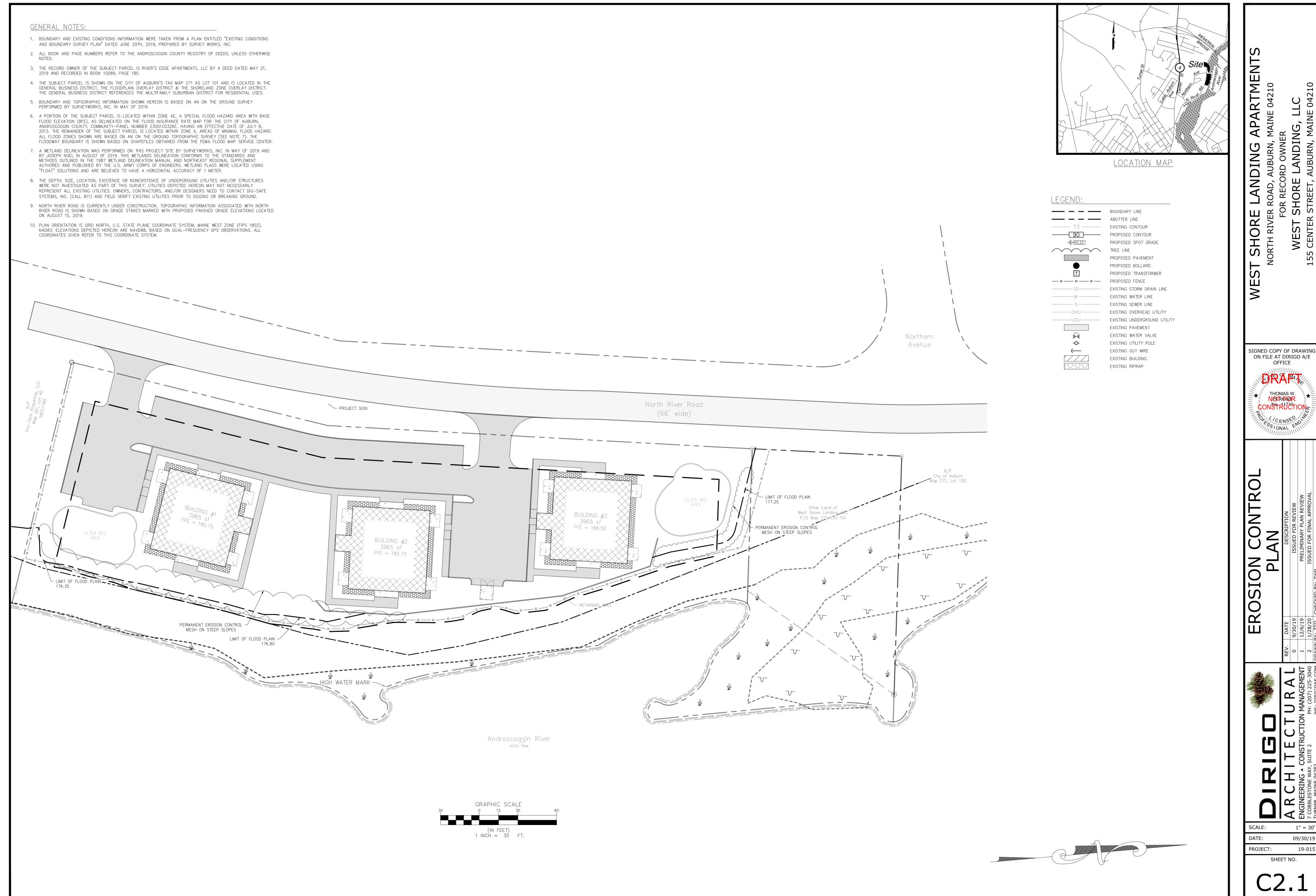
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PH: (207) 225-3040
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CHITECTURE MANAGE TO THE CHITES PH: (207)

ECT: 19-015

CT: 19-SHEET NO.

C2.0



THOMAS W. NOETHIOR CENSE I SO ONAL

OFFICE

09/30/19

IHE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL STRUCTURES ARE SHOWN ON THE SITE PLAN.

- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMP'S", DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST REVISION.
- THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE TURBANCE IS WITHIN 75 FEET OF A WETLAND OR WATERBODY, THE AREA SHALL BE STABILIZED WITHIN 2 DAYS OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
- EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRES OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- . EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY.
- CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO MORE THAN ONE ACRE OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION.
- SEDIMENT BARRIERS (EROSION CONTROL MIX, STONE CHACK DAMS, STABILIZED CONSTRUCTION ENTRANCE, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE
- INSTALL EROSION CONTROL MIX AT TOE OF SLOPES TO FILTER SILT FROM RUNOFF. SEE E.C. MIX DETAIL FOR PROPER INSTALLATION. EROSION CONTROL MIX WILL REMAIN IN PLACE PER NOTE #5. THE USE OF AN EROSION CONTROL MIX BERM IS PROHIBITED AT THE BASE OF SLOPES STEEPER THAN 8% OR WHERE THERE IS FLOWING WATER.
- ALL FRSOION CONTROL STRUCTUREES WILL BE INSPECTED, REPLACED, AND OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY BEFORE AND FOLLOWING ANY SIGNIFICANT RAINFALL (ONE INCH OR MORE IN A 24-HOUR PERIOD) OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSURE. IF AN INSPECTION DETERMINES THAT A CORRECTIVE ACTION IS REQUIRED. THE ACTION OR REPAIR SHALL BE STARTED BY THE END OF THE NEXT WORKDAY AND COMPLETED WITHIN SEVEN DAYS OR BEFORE THE NEXT STORM EVENT SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF. EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION. PERMANENT STABILIZATION IS 90% GRASS CATCH IN VEGETATED AREAS.
- a. ALL CONSTRUCTION INSPECTIONS SHALL BE CONDUCTED BY SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS THE PERMIT.
- b. CONSTRUCTION INSPECTIONS SHOULD INCLUDE ALL DISTURBED AND IMPERVIOUS AREAS, VEHICLE ACCESS POINTS IN ADDITION TO ESC MEASURES.
- c. ALL INSPECTION FORMS AND DOCUMENTATION OF CORRECTIVE ACTIONS DURING CONSTRUCTION SHALL BE MAINTAINED FOR AT LEAST 3 YEARS.
- NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN ONE TO ONE (1 TO 1).
- a. FOR SLOPES OF UP TO THREE TO ONE (3 TO 1) STABILIZE WITH TEMPORARY VEGETATION. b. FOR SLOPES OF UP TO TWO TO ONE (2 TO 1) STABILIZE WITH EROSION CONTROL MIX OR EROSION CONTROL BLANKET.
- c. FOR SLOPES OF UP TO ONE TO ONE (1 TO 1) STABILIZE WITH RIP-RAP AS SHOWN IN DETAILS. 10. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCHING (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY
- TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED BY AUG. 15 OR
- DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED
- ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER. S. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE.
- ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL
- a. FOUR INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM
- b. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 POUNDS PER ACRE OR 18.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P205-K20) OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER 1,000 SQ. FT.).
- FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUEGRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS: SEEDING RATE IS 1.03 LBS PER 1000 SQ. FT. LAWN QUALITY SOD MAY BE SUBSTITUTED FOR SEED. SEED MIX SHALL CONTAIN 10% ANNUAL RYE GRASS.
- d. HAY MULCH AT THE RATE OF 70-90 LBS PER 1000 SQUARE FEET OR A HYDRO-APPLICATION OF ASPHALT, WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS WILL BE USED ON HAY MULCH FOR WIND CONTROL.
- 14. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS ONCE THE SITE IS STABILIZED WITH 90% GRASS CATCH IN VEGETATED AREAS. TEMPORARY EROSION AND SEDIMENT CONTROL BLANKET SHALL BE USED IN ALL DITCHES AND SWALES AS SHOWN IN DETAILS.
- 5. WETLANDS WILL BE PROTECTED WITH EROSION CONTROL MIX OR SILT FENCE INSTALLED AT THE EDGE FOR THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS DURING WINTER CONSTRUCTION.
- 6. ALL STORMWATER WILL BE PREVENTED FROM RUNNING ONTO STOCKPILES. SADIMENT BARRIERS WILL BE INSTALLED
- 7. PERMANENT POST-CONSTRUCTION BMP'S (VEGETATED SWALES, WET PONDS, ETC.) WILL NOT BE USED TO MANAGE FLOWS DURING CONSTRUCTION WITHOUT SPECIAL PROTECTION AND/OR RESTORATION MULCH AND MULCH ANCHORING

LOCATION	MULCH	RATE (1000 S.F.
PROTECTED AREA	STRAW OR HAY *	100 POUNDS
WINDY AREAS	SHREDDED OR CHOPPED CORNSTALKS STRAW OR HAY (ANCHORED) *	185-275 POUNE 100 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES	JUTE MESH OR EXCELSIOR MAT	AS REQUIRED AS REQUIRED

(GREATER THAN OR EQUAL TO 3:1) A HYDRO—APPLICATION OF WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON HAY MULCH FOR WIND CONTROL.

ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD./BLOCK); MULCH NETTING (AS PER MANUFACTURED; WOOD CELLULOSE FIBER (750 LBS/ACRE); USE OF A SERRATED STRAIGHT DISK. WETTING FOR SMALL AREAS AND ROAD DITCHES MAY

Additional temporary seed mixture (for periods less than 12 months). 40 lbs/acre Summer (5/15 - 8/15) Sudangrass 80 lbs/acre Late Summer/Early Fall Prennial Ryegrass 40 lbs/acre Winter Rve Winter (11/1 - 4/1)Mulch w/ Dormant Seed 80 lbs/acre\* 80 lbs/acre Spring (4/1 - 7/1)Annual Ryegrass 40 lbs/acre \*Seed Rate Only

IF AN INSPECTION DETERMINES THAT A CORRECTIVE ACTION IS REQUIRED, THE ACTION OR REPAIR SHALL BE STARTED BY THE END OF THE NEXT WORKDAY AND COMPLETED WITHIN SEVEN DAYS OR BEFORE THE NEXT STORM EVENT. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. ONCE A WEEK AND BEFORE AND AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85 TO 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. STABILIZATION SCHEDULE BEFORE WINTER:

ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED. ALL SLOPES MUST BE STABILIZED, SEEDED AND MULCHED GRASS LINED DITCHES AND CHANNELS MUST BE STABILIZED WITH MULCH OR AN EROSION

IF THE SLOPE IS STABILIZED WITH AN EROSION CONTROL BLANKET AND SEEDED. ALL DISTURBED AREAS TO BE PROTECTED WITH AN ANNUAL GRASS MUST BE SEEDED AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND MULCHED.

ALL STONE LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED SLOPES THAT ARE COVERED WITH RIPRAP MUST BE CONSTRUCTED BY THAT DATE.

EROSION CONTROL DURING CONSTRUCTION

WINTER CONSTRUCTION 1. WINTER CONSTRUCTION PERIOD: OCTOBER 1 THROUGH APRIL 15

ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL S NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE

INSTALL A SOD LINING IN THE DITCH:
A DITCH MUST BE LINED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES: PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED AND ANCHORING SOD AT THE BASE OF THE DITCH WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD FROM SLOUGHING DURING FLOW CONDITIONS. SEE THE PERMANENT VEGETATION BMP SECTION.

INSTALL A STONE LINING IN THE DITCH:
A DITCH MUST BE LINED WITH STONE RIPRAP BY NOVEMBER 15. A REGISTERED PROFESSIONAL ENGINEER
MUST BE HIRED TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE
ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

3. OVERWINTER STABILIZATION OF DISTURBED SLOPES:

ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. THE DEPARTMENT WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1
THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER. STABILIZE THE SOIL WITH TEMPORARY VEGATATION AND EROSION CONTROL MATS. BY OCTOBER 1 THE DISTURBED SLOPE MUST BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET 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, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP AS DESCRIBED IN THE FOLLOWING

STABILIZE THE SOIL WITH SOD: THE DISTURBED SLOPE MUST BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. 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 WILL NOT USE LATE SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V) OR HAVING

STABILIZE THE SOIL WITH EROSION CONTROL MIX: EROSION CONTROL MIX MUST BE PROPERLY INSTALLED BY NOVEMBER 15. THE CONTRACTOR WILL NOT USF FROSION CONTROL MIX TO STABILIZE SLOPES HAVING GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE. SEE THE TEMPORARY MULCHING BMP SECTION.

STABILIZE THE SOIL WITH STONE RIPRAP:
PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE DEVELOPMENT'S OWNER WILL
HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP. SEE THE RIPRAP SLOPE

4. OVERWINTER STABILIZATION OF DISTURBED SOILS: BY SEPTEMBER 15, ALL DISTURBED SOILS.

MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION: BY OCTOBER 1, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, 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 LEAS 75% OF THE DISTURBED SOILD BEFORE NOVEMBER 1, THEN MULCH THE AREA FOR OVER-WINTER PROTECTION

STABILIZE THE SOIL WITH SOD: STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WRE PINS, ROLLINIG THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE

STABILIZE THE SOIL WITH MULCH: BY NOVEMBER 15, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET 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.

5. DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR

6. AREAS WITHIN 100 FEET OF STREAMS THAT ARE NOT STABILIZED WITH VEGETATION BY DEC. 1 SHALL BE MULCHED AND ANCHORED WITH NETTING. IF WORK CONTINUES IN THIS AREA DURING THE WINTER, A DOUBLE LINE OF SEDIMENT BARRIERS MUST BE USED. **HOUSEKEEPING** 

<u>SPILL PREVENTION.</u> CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.

GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY, AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF

FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MY NOT BE USED FOR DUST CONTROL. ANY OFFSITE TRACKING OF MUD OR SEDIMENT SHALL BE VACUUMED IMMEDIATELY AND PRIOR TO THE NEXT

4. <u>DEBRIS AND OTHER MATERIALS.</u> LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. TRENCH OR FOUNDATION DE-WATERING, TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

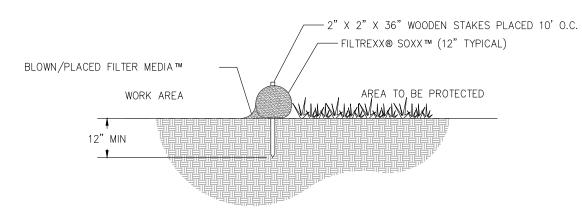
NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

- DISCHARGES FROM FIREFIGHTING ACTIVITY; - FIRE HYDRANT FLUSHINGS; - VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED); - DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
- ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS; PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
- UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;

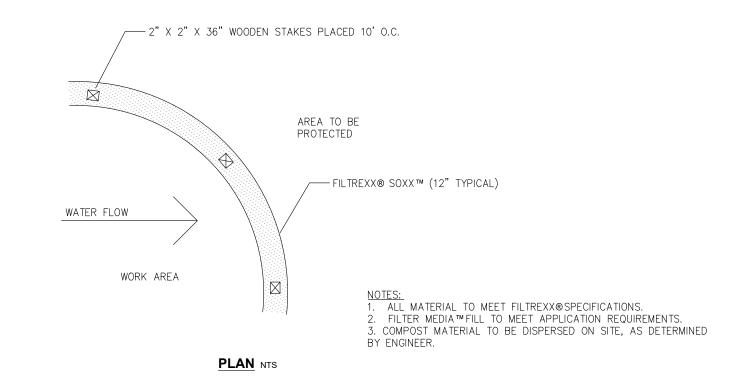
UNCONTAMINATED GROUNDWATER OR SPRING WATER; - FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
- UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5)); POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND

<u>UNAUTHORIZED NON-STORMWATER DISCHARGES.</u> THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT?S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING: - WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS; FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

8. <u>ADDITIONAL REQUIREMENTS.</u> ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.



**SECTION** NTS

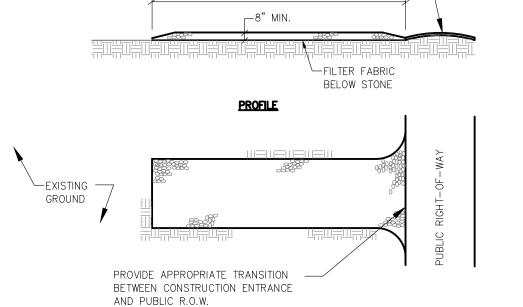


PUBLIC -

RIGHT-OF-WAY

COMPOST SOCK FOR SEDIMENT CONTROL

NOT TO SCALE



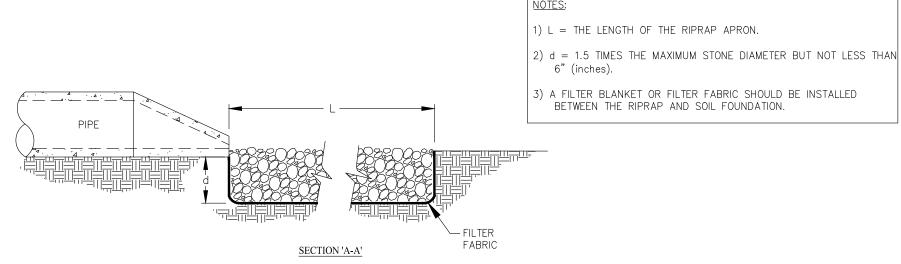
PIPE OUTLET PROTECTION

1. STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO

- 1 1/2"). USE CRUSHED STONE. 2. LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET.
- 3. THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
- 4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.

5. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE 3 TIMES INNER DIAMETER (I.D.) PIPE -RIP RAP APRON PLAN VIEW



BACKFILI SECTION A SECTION B NATIVE SOIL **INSTALLATION:** 1. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER. 2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.

COUPLER

TOP VIEW

FABRIC

3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM. 4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH,

BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.

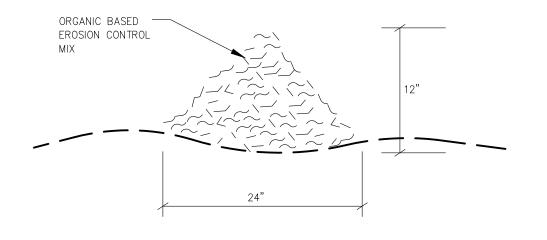
5. JOIN SECTION AS SHOWN ABOVE.

6. BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL

SILTATION FENCE

6' MAX

SPACING



# COMPOSITION

EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

# INSTALLATION:

1. THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR. 2. EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER 3. THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UPHILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF. 4. EROSION CONTROL MIX CAN BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLANS IN AREAS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM.

EROSION CONTROL MIX BERM

1. BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.

2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP B OVER A. 3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON

4. STAPLE OUTSIDE LATERAL EDGE 2" ON CENTER. 5. WIRE STAPLES TO BE MIN OF #11 WIRE 6" LONG AND 1-1/2" WIDE. 6. USE NORTH AMERICAN GREEN DS 150 OR APPROVED EQUÁL.

EROSION CONTROL BLANKET

NOT TO SCALE

AP AN

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ON FILE AT DIRIGO A/E

OFFICE

THOMAS W

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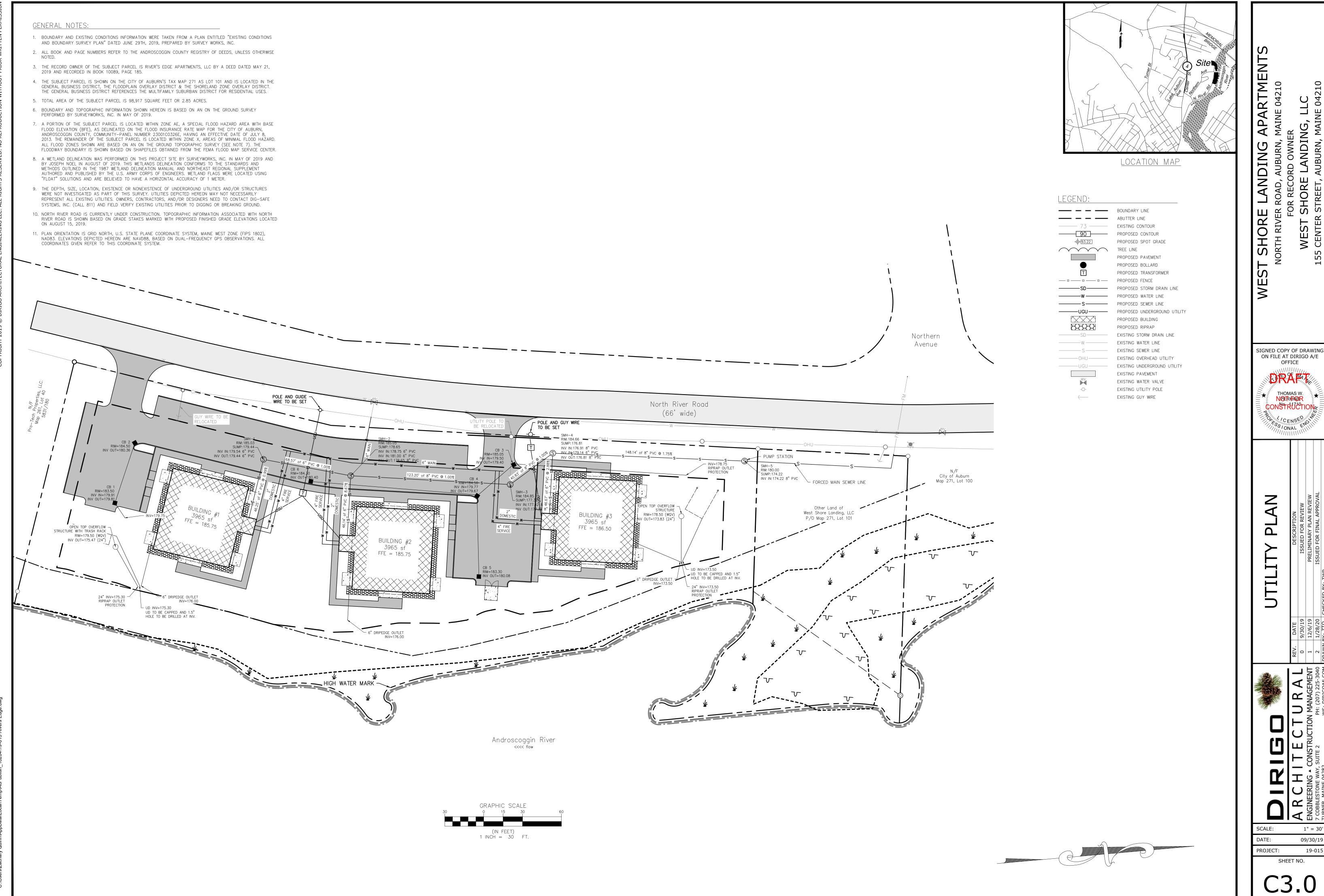
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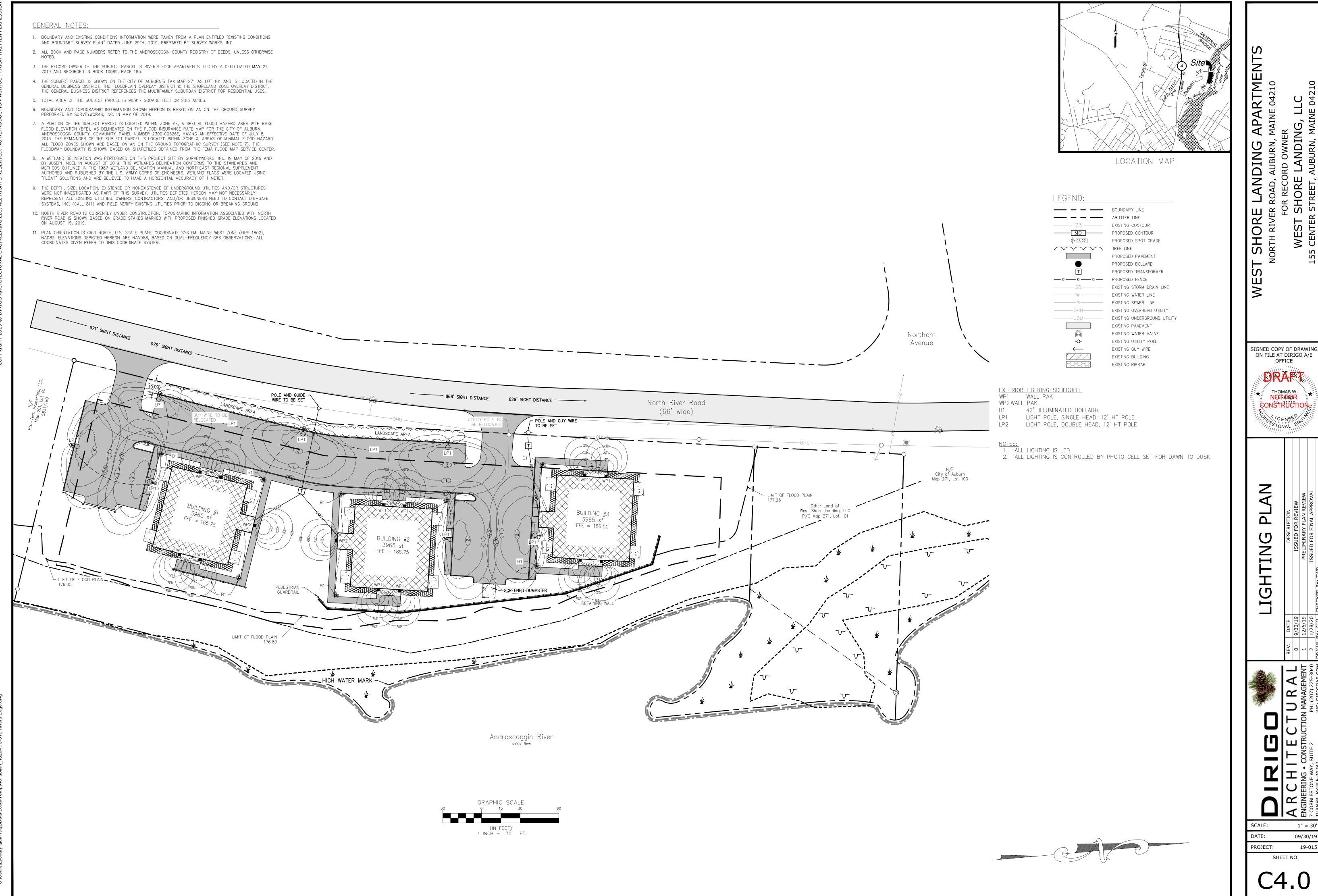
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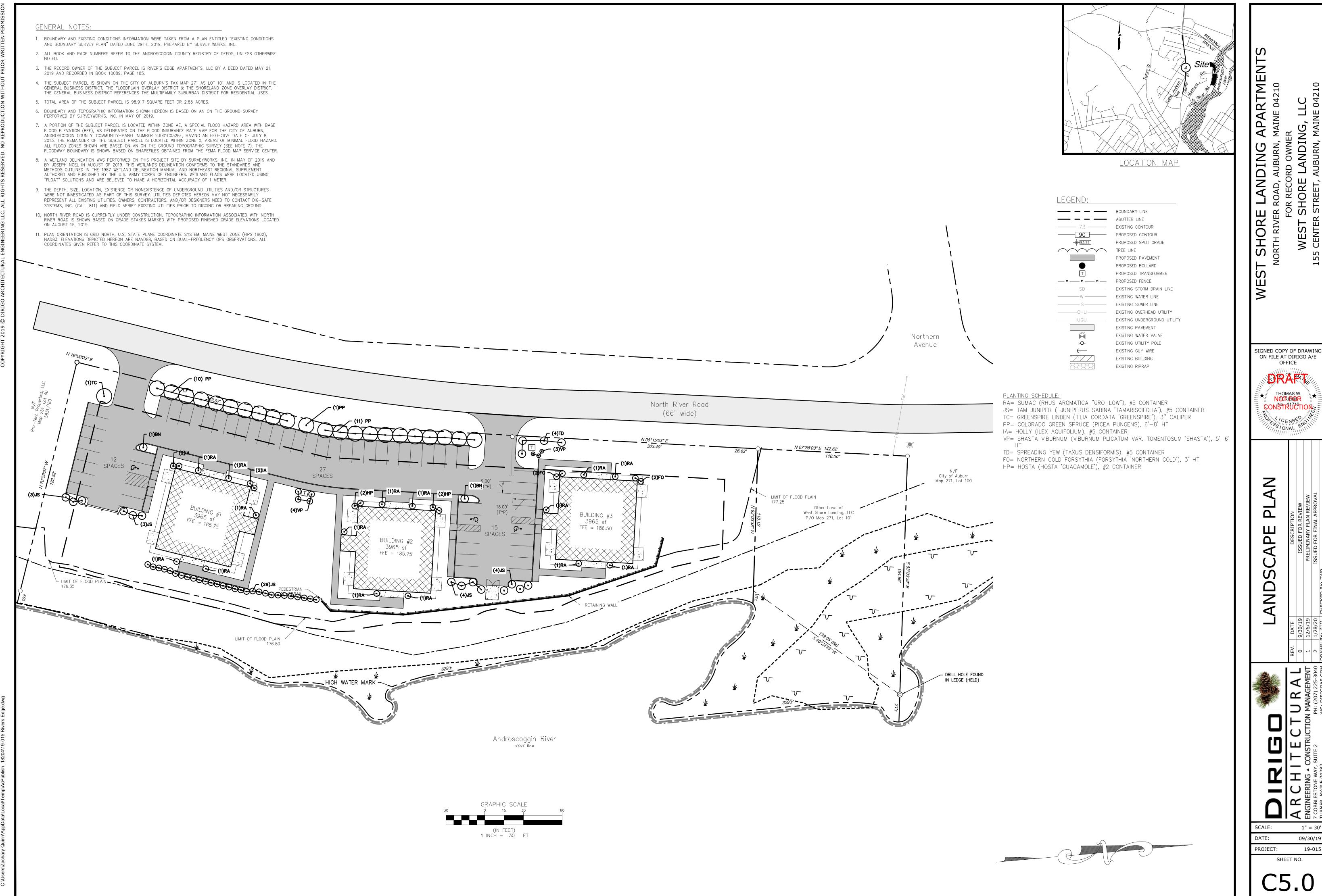


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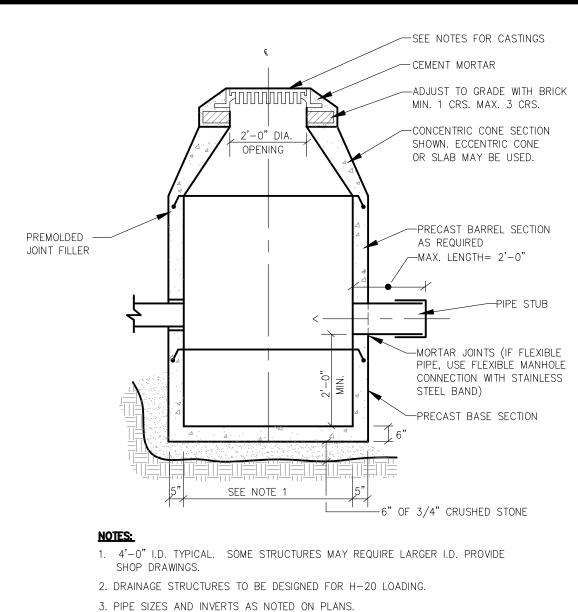


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OFFICE

THOMAS W. NOETHIOR

09/30/19



— FRAME AND COVER TO BE NEENAH FOUNDRY R-1496 FRAME & COVER TO HAVE

- ADJUST TO GRADE WITH 2

TO 5 COURSES OF BRICK

- PRECAST CONCRETE CONE

— ALUMINUM OR HIGH IMPACT

PLASTIC MANHOLE STEPS

SLOPE 1/2" PER FOOT

— 2 STRIPS BUTYL RUBBER

SEALANT (1 IN. SQ.) TYP. ALL

JOINTS INSURES JOÍNTS ARE

PRECAST CONCRETE BASE

----MASONRY FILL WITH BRICK

NOT TO SCALE

CHANNEL AT THE PIPE

- CRUSHED STONE

-CLEAN BACKFILL

LARGER THAN 5"

IN DIAMETER

- 2" HOT BITUMINOUS PAVEMENT

M.D.O.T. SPEC. 703.06 (c) TYPE D

— 10" AGGREGATE SUBBASE

1" LIFTS, 9.5mm (MDOT HOT MIX ASPHALT 403)

NOT TO SCALE

CONTAINING NO ROCKS

TELEPHONE CABLE

- PRIMARY OR SECONDARY

IN CONDUIT

BEDDING OF SAND

-- PRECAST CONCRETE

BARREL SECTION

@ 12" O.C.

SEALED

SECTION

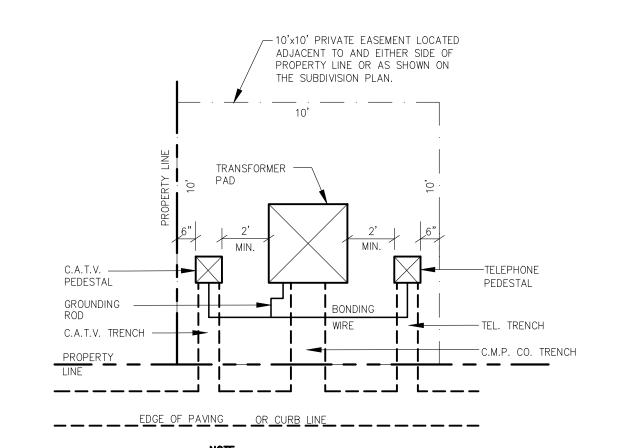
RAISED LETTERING,

"SANITARY SEWER",

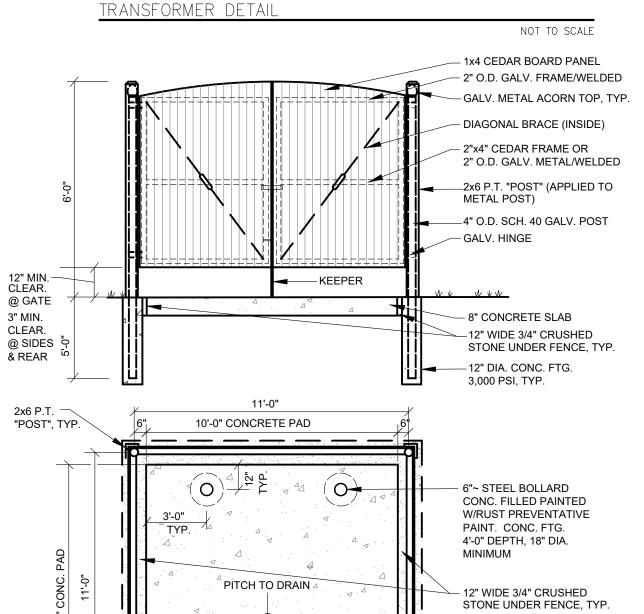
OR APPROVED EQUAL.

TYPICAL CATCH BASIN NOT TO SCALE

4. CATCH BASIN FRAME AND GRATE TO BE NEENAH FOUNDRY R-2554,



TRANSFORMER PAD AND COVER TO BE FIBERGLASS MEETING CENTRAL MAINE POWER SPECIFICATIONS.



- 4" O.D. SCH. 40

GALV., TYP.

TYPICAL DUMPSTER ENCLOSURE

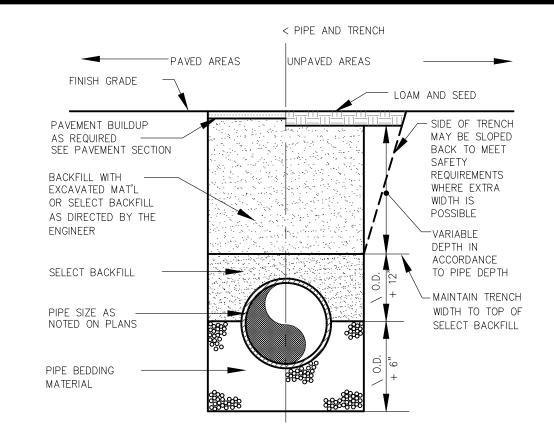
POST SET IN CONC., TYP. ROUND POST HINGE

CEDAR FENCE PANEL

– P.T. RAIL ATTACHED

— 2" O.D. FRAME WITH CEDAR BOARD PANEL

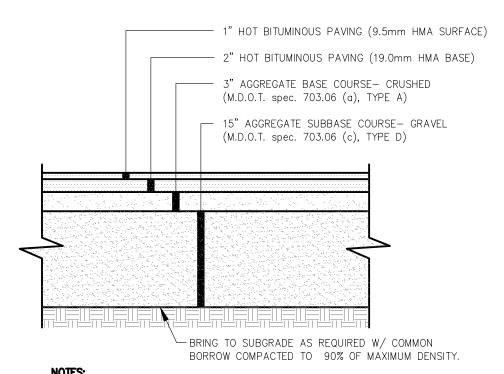
NOT TO SCALE



TYPICAL TRENCH SECTION

TRENCH BACKFILL SCHEDULE		
PIPE	PIPE BEDDING	SELECT
TYPE	MATERIAL	BACKFILL
CORRUGATED METAL	MDOT 703.22	MDOT 703.22
DUCTILE IRON	TYPE B	TYPE B
REINFORCED CONCRETE	UD BACKFILL	UD BACKFILL
PVC-SDR 35 HDPE	MDOT 703.22 TYPE C 3/4 " CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL
PERFORATED	MDOT 703.22	MDOT 703.22
PVC-SDR 35	TYPE C	TYPE C
HDPE	3/4 " CRUSHED STONE	3/4 " CRUSHED STONE

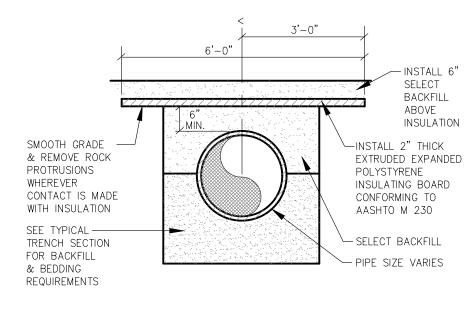
1. ALL BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL MEET ALL STATE AND O.S.H.A. SAFETY STANDARDS.



 COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION. 2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

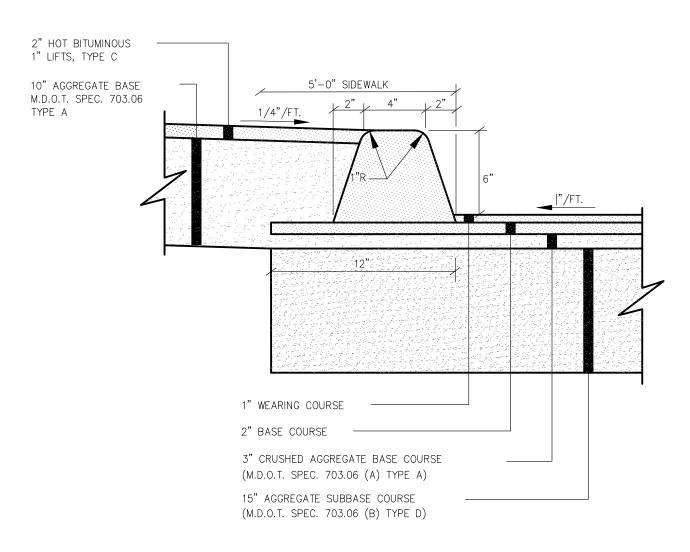
TYPICAL PAVED PARKING LOT SECTION

NOT TO SCALE



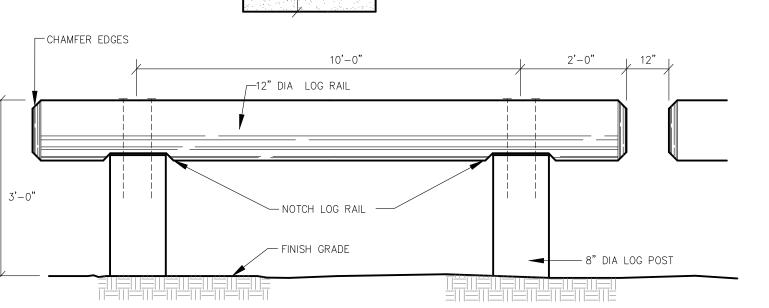
NOT TO SCALE

PIPE INSULATION DETAIL



BITUMINOUS CURB / SIDEWALK SECTION

—(2) GALVANIZED LAG BOLTS 12" DIA PEELED WOOD LOG RAIL PRESSURE TREATED (NOTCH LOG TO SIT ON POST) -8" DIA PEELED WOOD LOG POST CAPE COD CURB -PRESSURE TREATED SET 4' BELOW FINISH GRADE. -FINISH GRADE -COMPACTED AGGREGATE BASE M.D.O.T. 703.06 (B)



PEDESTRIAN WOOD GUARDRAIL

NOT TO SCALE

NOT TO SCALE

PROJECT: SHEET NO.

APARTME, MAINE 04210

LANDING

SHORE ORTH RIVER

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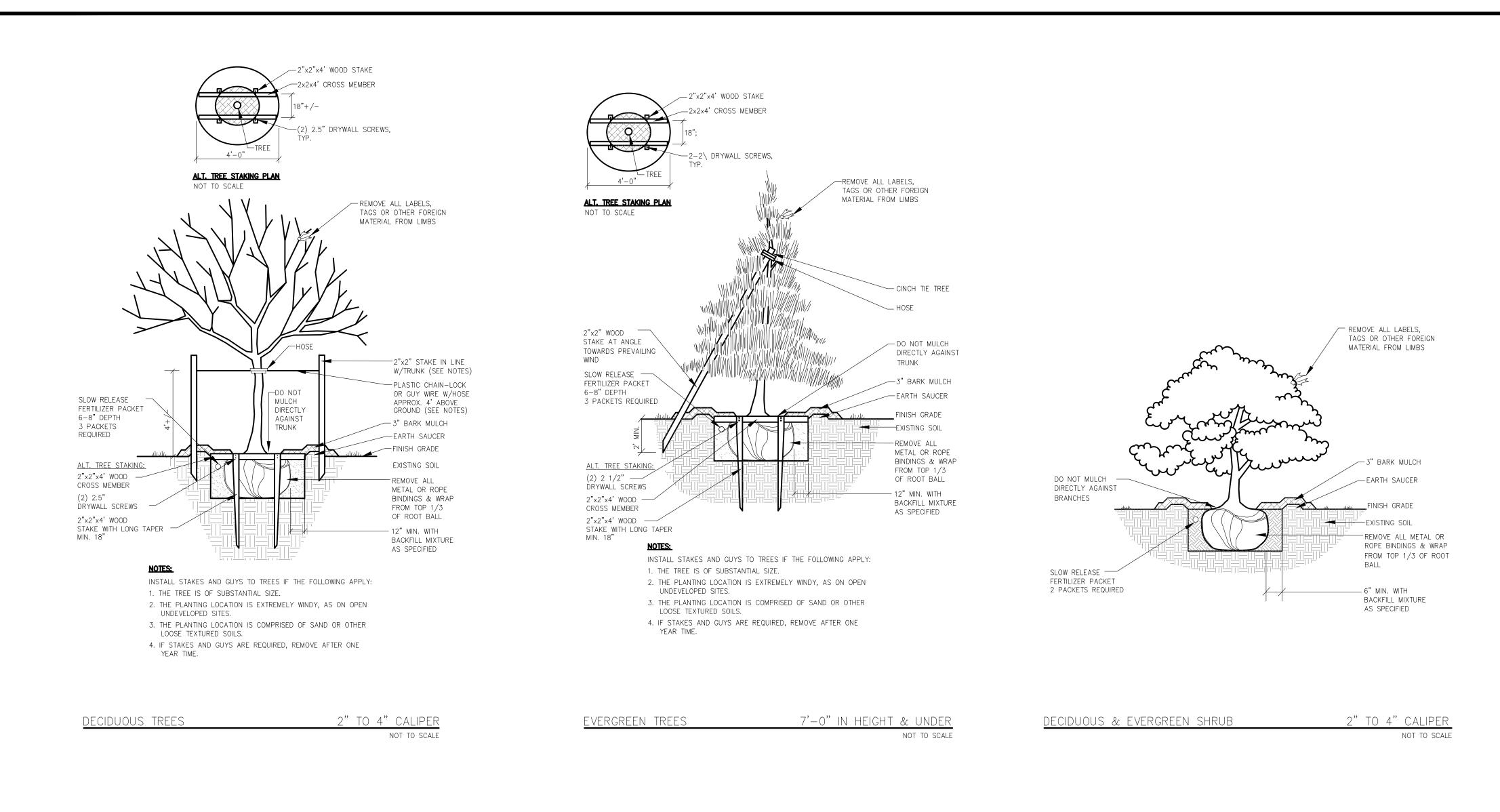
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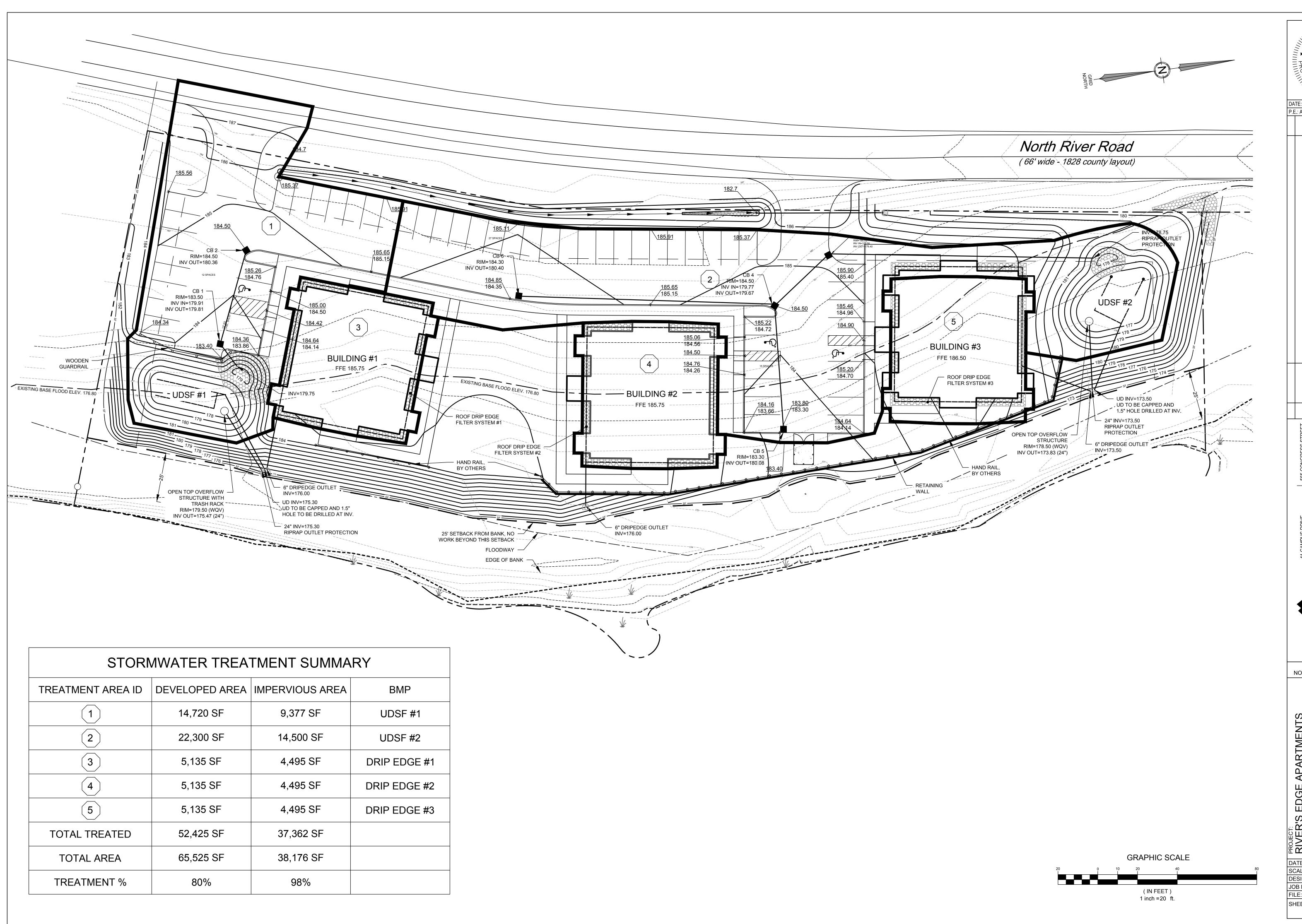


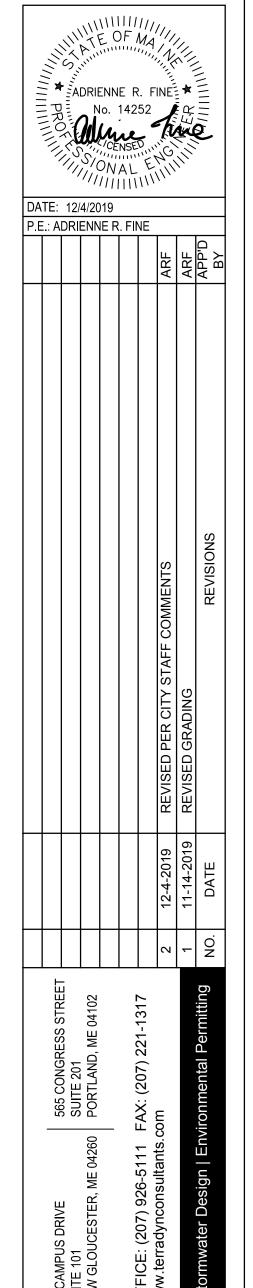
SHORE ORTH RIVER SIGNED COPY OF DRAWING ON FILE AT DIRIGO A/E OFFICE THOMAS W. I SS I ONAL

APARTMENTS

A MAINE 04210

**DETAILS** 

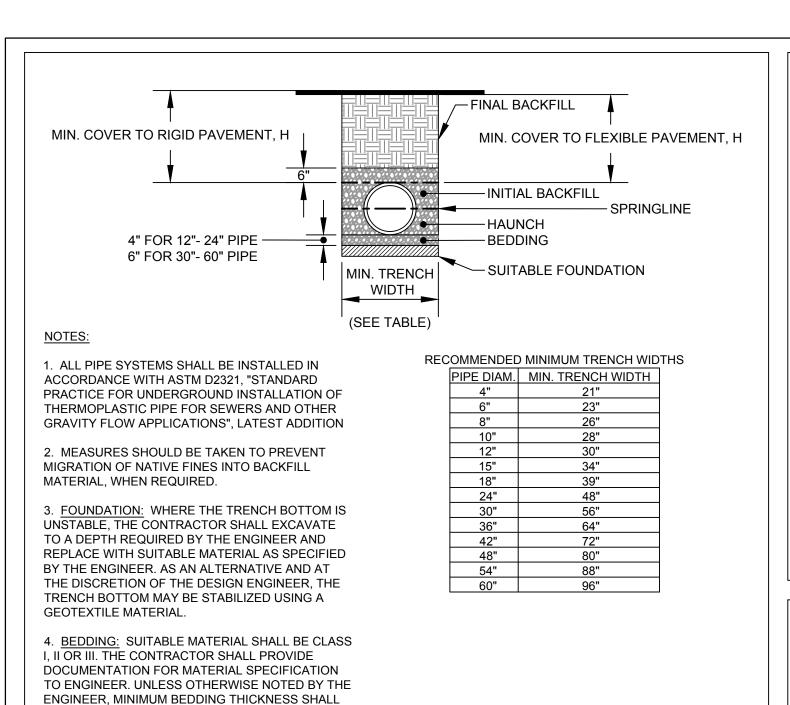




PERMIT DRAWING NOT FOR CONSTRUCTION

PROJECT:
RIVER'S EDGE APARTMENTS
NORTH RIVER ROAD, AUBURN, ME 04210

SCALE: AS SHOWN DESIGNED: ARF JOB NO: 1931 FILE: 1931 B SW-0



MINIMUM RECOMMENDED COVER BASED ON

VECHICLE LOADING CONDITIONS

\* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

PIPE DIAM. H-25

SURFACE LIVE LOADING CONDITION

HEAVY CONSTRUCTION

(75T AXLE LOAD) \*

BE 4" (100mm) FOR 4"-24" (100mm-600mm): 6"

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL

BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING

NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE

CONTRACTOR SHALL PROVIDE DOCUMENTATION

MATERIAL SHALL BE INSTALLED AS REQUIRED IN

LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE

TO GROUND SURFACE. ADDITIONAL COVER MAY

TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR

54"-60" DIAMETER PIPE, MEASURED FROM TOP OF

PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO

FOR MATERIAL SPECIFICATION TO ENGINEER.

6. MINIMUM COVER: MINIMUM COVER, H, IN

BE REQUIRED TO PREVENT FLOATION. FOR

ASTM-C478 SPECIFICATIONS.

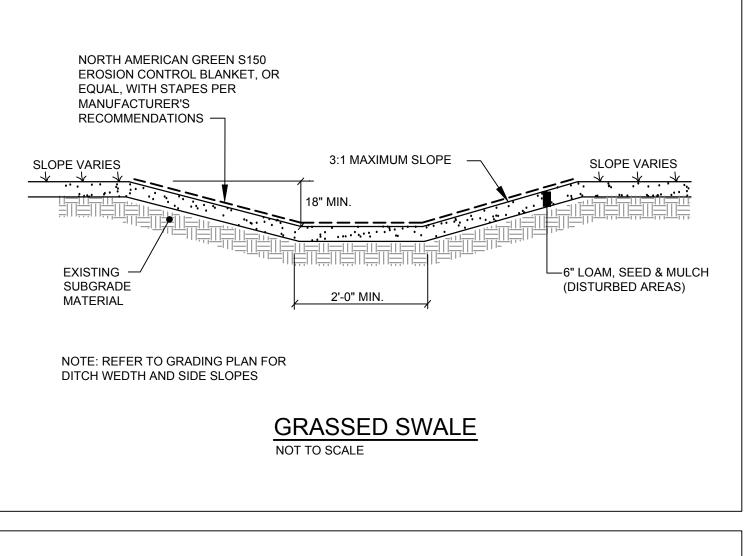
4. REINFORCE TO 0.12 IN SQ./LF.

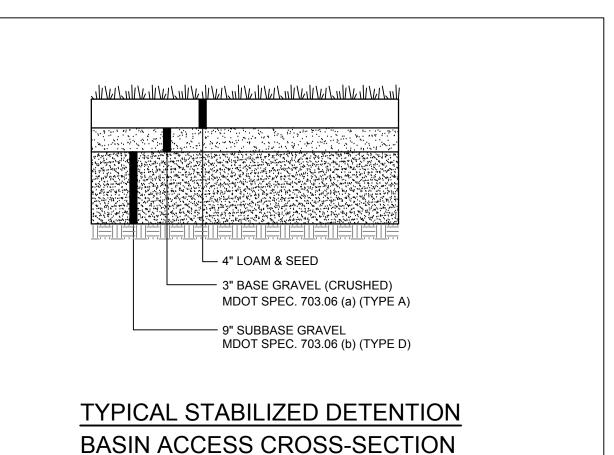
NON-TRAFFIC APPLICATIONS (GRASS OR

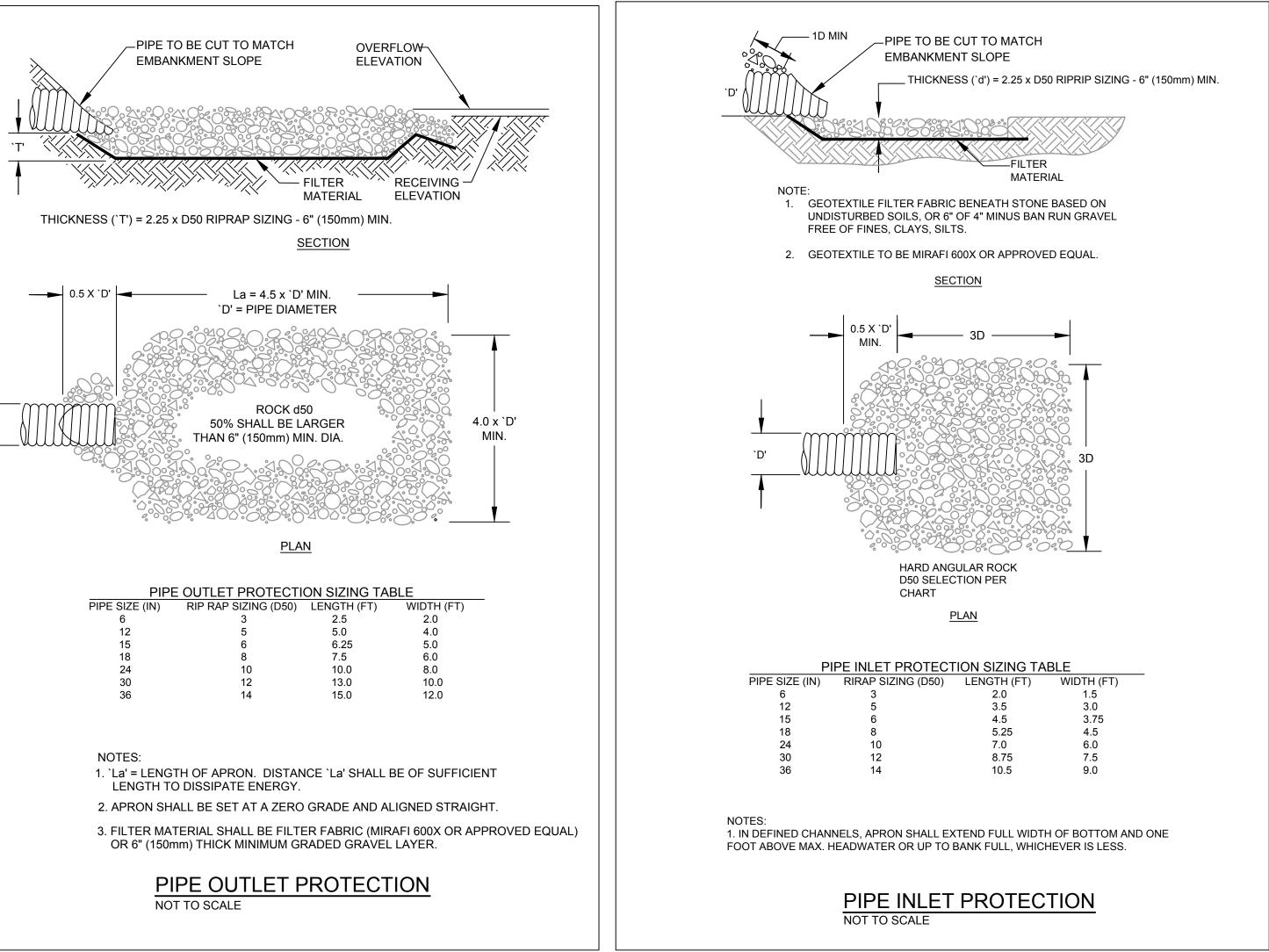
(150mm) FOR 30"-60" (750mm-900mm).

ASTM D2321, LATEST EDITION.

TOP OF RIGID PAVEMENT.







EADRIENNE R. FINE

PERMIT DRAWING

NOT FOR CONSTRUCTION

EDGE ROAD, AUBL

S

SCALE:

JOB NO:

SHEET

DESIGNED:

FILE: 1931 D

11/1/2019

AS SHOWN

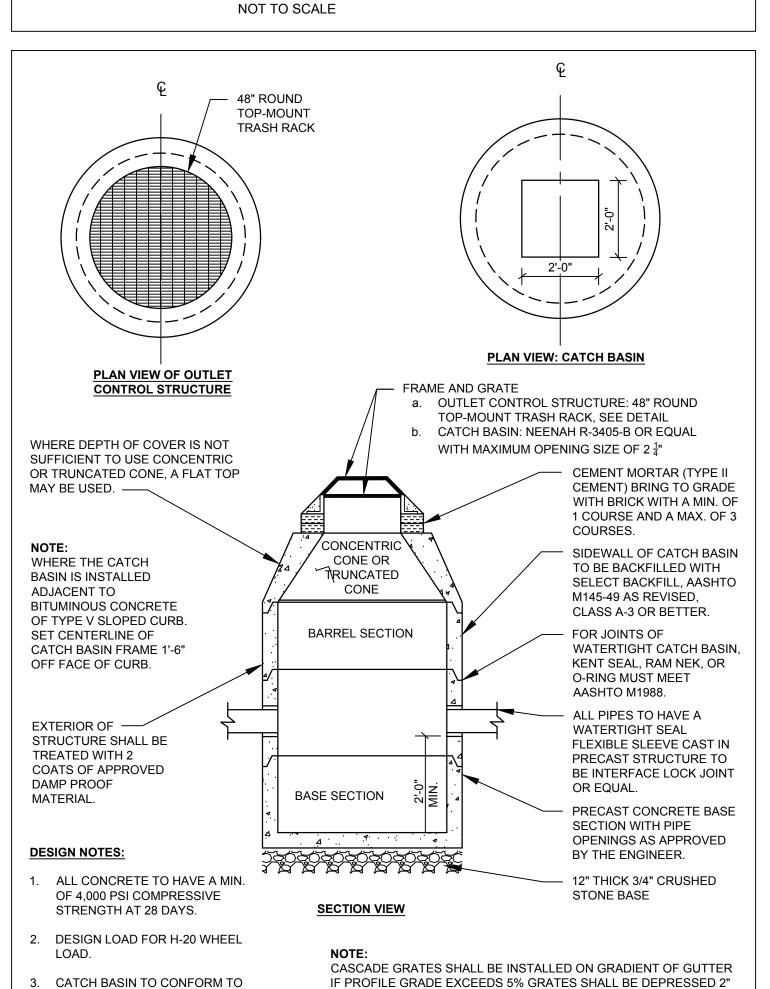
ARF

SW-1

1931

DATE: 12/4/2019

P.E.: ADRIENNE R. FINE



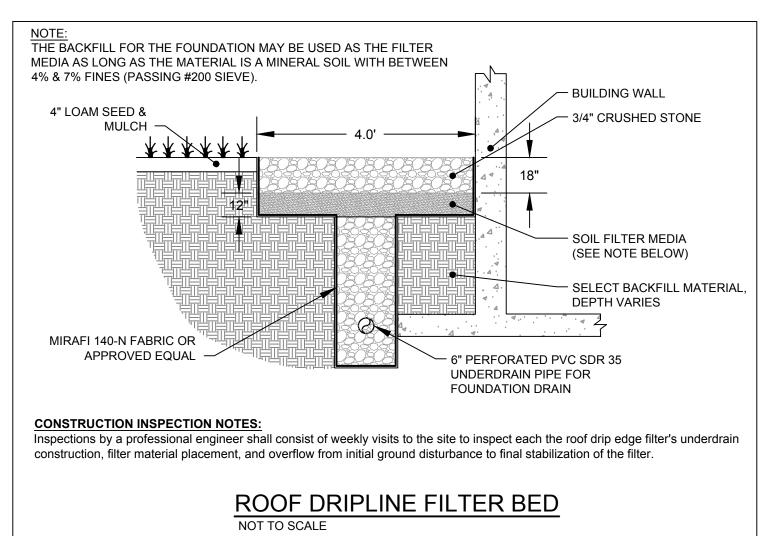
BELOW NORMAL GUTTER GRADE UNLESS THIS DEPRESSION

INSTALLED ON A LEVEL GRADIENT.

CATCH BASIN / OUTLET CONTROL STRUCTURE

INTERFERES WITH TRAFFIC. PARALLEL BAR GRATES SHALL BE

TYPICAL TRENCH DETAIL



NOT TO SCALE

